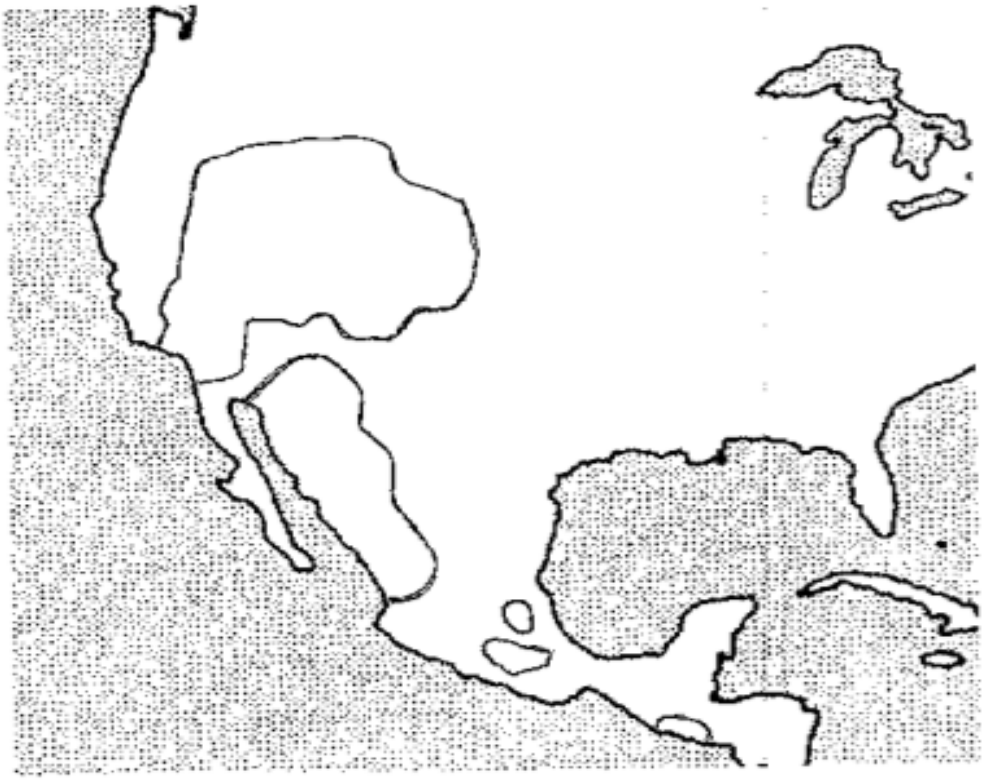
Exploring the Explanatory Power of



Semitic and Egyptian in Uto-Aztecan

Brian D. Stubbs

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Abbreviations (many Uto-Aztecan abbreviations are also conveniently on pp. 39, and 44-46; Egyptian and Semitic language source abbreviations are also in the bibliography, pp. 418-420):

acc accusative
adj adjective
adv adverb
AMR Alexis Manaster Ramer, a prominent Uto-Aztecanist
anim animate

Aramaic(J) Jastrow's Aramaic dictionary
Aramaic(S) Sokoloff's Aramaic dictionary
AYq Arizona Yaqui
Azt Aztecan branch (dialects of Nahuatl)
bec become
BH.Cup Bright and Hill 1967 comparative Cupan
B.Tep Bascom's 1965 comparative Tepiman cognate sets
C any consonant or an unknown consonant
Ca Cahuilla
Cah Cahitan, a UA sub-branch of TaraCahitan in Mexico
CAL Comprehensive Aramaic Dictionary, online
CDD Chicago Demotic Dictionary, online
cf. compare
Ch Chemehuevi, a Southern Numic language in southern Nevada
CL.Azt Campbell and Langacker 1978, on comparative Aztecan
Cm Comanche
CN Classical Nahuatl, also known as Aztec
CNum Central Numic, a sub-branch of UA
coll collective, the plural of the whole group is singular
comb combining form
Cp Cupeño, a UA language in southern California
Cr Cora, a UA language of the Corachol branch
CrC Corachol branch of UA
CU Colorado Ute
d dual
ESA Epigraphic South Arabic, an ancient language of numerous inscriptions in western Arabia
esp especially
Eu Eudeve or Dohema, a UA language in the TaraCahitan branch
f / fem feminine
fob father's older brother fos father's older sister
F83 Fowler 1983
freq frequentive
fyb father's younger brother fys father's younger sister
Gb Gabrielino
gen genitive
Hebrew(KB) Koehler and Baumgartner's Hebrew/Aramaic lexicon
Hebrew(BDB) Brown, Drivers, and Brigg's Hebrew/Aramaic lexicon
HH.Cup Hill and Hill 1968 on comparative Cupan
HN Huastec Nahuatl,
Hp Hopi
iddddua if desired, delay differing definitions until acceptance (explanation on p. 12)
IJAL International Journal of American Linguistics
impfv imperfective or uncompleted aspect (often present or future in Semitic);
inan inanimate
I.Num Iannucci's Numic cognate sets
e.o. each other
KCH Kenneth C. Hill, a prominent Uto-Aztecanist
KH/M88 Kenneth C. Hill's 2006 revision of Miller's 1988 draft of Uto-Aztecan cognate sets
KH.NUA Kenneth C. Hill's NUA comparative data in his Serrano dictionary
KT Kiowa-Tanoan language family, mostly in New Mexico
Kw Kawaiisu
lit literally
LP Lower Pima
Ls Luiseño
L.Son Lionnet's 1985 Sonoran cognate sets
m / masc masculine
M67 Wick Miller's *Uto-Aztecan Cognate Sets*, 1967
M88 Miller's unpublished additional work on UA cognate sets;

MHebrew = Middle Hebrew, post-Biblical Hebrew

Mn	Mono				
mob	mother's older brother	mos	mom's older sister	ms	mother's sister
Munro.Cup	Munro 1990 on comparative Cupan				
MT	Masoretic Text (Hebrew Old Testament)				
My	Mayo				
myb	mother's younger brother	mys	mom's younger sister		
MZ	Mixe-Zoquean language family, mostly in Mexico				
N	nasal consonant, whether n, m, or ŋ often unknown				
n	noun;	n.f.	noun feminine;	n.m.	noun masculine
nom	nominative;			NP	Northern Paiute
NT	Northern Tepehuan			NU	Northern Ute or Uintah Ute
NUA	Northern Uto-Aztecan			Num	Numic branch of UA
Nv	Nevome			obj	object
Op	Opata, a UA language of TrC branch;			OT	Old Testament
p.c.	personal communication			pfv	perfective, completed action (usually past)
Pl	Pipil, Aztecan dialect				
pl	plural			Po	Pochutec, Aztecan dialect
poss'd	possessed			postp	postposition
pret	preterite				
prog	progressive				
ptcpl	participle				
PUA	Proto Uto-Aztecan				
PYc	Pima de Yecora				
PYp	Pima de Yepachic				
recprcl	reciprocal				
redupl	reduplication				
refl	reflexive				
RJC	R. Joe Campbell				
Sapir	Sapir's 1913-15 establishment of Uto-Aztecan as a language family				
Sem-kw	Semitic-kw				
Sem-p	Semitic-p				
sg	singular				
Sh	Shoshoni				
SNum	Southern Numic sub-branch of UA;				
s.o.	someone			SP	Southern Paiute
sp	species			Sr	Serrano
ST	Southern Tepehuan			s.th.	something
SUA	Southern Uto-Aztecan			subj	subject
T	Tetelcingo, Aztecan dialect			Tak	Takic branch of UA
Tb	Tübatülabal			Tbr	Tubar
Tep	Tepiman branch of UA				
TO	Tohono O'odham, formerly called Papago, UA language in Arizona, of the Tepiman branch				
Tr	Tarahumara			TrC	Tara-Cahitan branch of UA
TSh	Tümpisha Shoshoni, formerly called Panamint			UA	Uto-Aztecan
UACV	Stubbs 2011 *Uto-Aztecan: A Comparative Vocabulary*				
UP	Upper Pima, the Pima in Arizona and near the O'odham.				
V	vowel, no particular vowel, but any vowel generally, a place where a vowel occurs				
vi	verb intranstivie;			vt	verb transitive;
VVH	Voegelin, Voegelin, and Hale, 1962, a collection of 170 UA cognate sets;				
Wc	Huichol				
WMU	White Mesa Ute				
WNum	Western Numic, a sub-branch of Numic, bordering California and Nevada				
Wr	Guarijio			WSh	Western Shoshone
Yq	Yaqui			Z	Zacapoaxtla
>	changed to, became;			<	changed from, derived from
*	a reconstructed proto-, early or original form, often in the parent language.				

Introduction

Explanatory power is the ability of a hypothesis to explain what is otherwise not explainable. Explanatory power is what linguists look for to identify the best among competing theories to explain what happens in language. For a century, the answers to many unresolved questions in Uto-Aztecan linguistics eluded Uto-Aztecan (UA) specialists. While the language ties in this title may seem unseemly to some, they provide more explanatory power to the unknowns of UA than many might be comfortable with initially. So take your time. This study is exploratory, a work in progress toward answers, not yet having them all. Nevertheless, if the ties are valid, then ignoring them is like finding written records of Proto-Indo-European (PIE) and then ignoring those PIE records in comparative Indo-European studies. A valid key can provide instant progress to what would otherwise take decades or be impossible.

Uto-Aztecan is a Native American language family of some 30 related languages, mostly in the western United States and Mexico, from the Utes in the north to the Aztecs in the south, with Hopi, Pima, and others between (map on page 41). Some 1500 correlations between UA and three Near-Eastern languages, consistent with the linguistic comparative method (pages 9, 16), create a case at least as viable as the first accepted treatise establishing each Native American language family.

Knowing how unwelcome such a proposal would be in the linguistic community and being a peace-loving recluse by nature, I have been in no hurry to invite the avalanche of controversy upon me. However, equally risky is pressing my luck in postponing a presentation that should reside on this side of the mortal divide. So as youth becomes a more distant memory, I end the four-decade delay to share these findings, which, as both a Semiticist and a Uto-Aztecanist, I could not help but notice during three decades of writing the reference book *Uto-Aztecan: A Comparative Vocabulary* (UACV, Stubbs 2011), favorably received by Uto-Aztecanists, though no two UA specialists will agree on all aspects and reconstructions, as Kenneth Hill notes in a favorable review in the *International Journal of American Linguistics* (Hill 2012). After any comparative work, adjustments follow, and this work has a few adjustments to that 2011 work. A case not valid unravels with scrutiny, while truth is further substantiated with time, accumulating more and more support. So this work is not the final word, but an introductory offering. Let each consider all the data, then decide for oneself. Anything less is not a fair assessment. The strength of a case for language ties lies in the quantity and quality of the similarities, so to short either disqualifies a partial review as a fair judgement.

While this study is intended for linguists, Semiticists, and Egyptologists—and therefore includes the linguistic rigor demanded by the comparative method—it is also designed to be accessible to the astute and interested lay person by including explanations and (1.1) an introduction to linguistics (language science), which linguists can skip; (1.2) a brief outline of Semitic languages, which Semiticists can skip; (1.3) an even briefer word about Egyptian, which Egyptologists can skip; (1.4) and an introduction to UA, which even UA specialists should not skip. As the number who are specialists in all those areas approaches zero, most would benefit by perusing some of them. Of course, those lightly interested can skip them all, simply look at the pronunciation table, the Near-Eastern forms in bold, the associated UA forms, and get out of it what they may. However, for a better understanding, one is encouraged to read and refer to the introductions not within one's specialties. Sections 2, 3, 4, and 5 focus mainly on consonant correspondences of the 1500+ parallels; section 7.1 addresses vowel correspondences; section 7.3 treats grammatical and morphological parallels.

After Sapir (1913, 1915) established Uto-Aztecan as a viable family of related languages, Voegelin, Voegelin, and Hale (1962) produced the first numbered list of 171 cognate sets (groups of related words, page 13). Klar (1977) brought the Chumash languages to clarity with 168 sets. Taylor (1963) established Caddoan (a language family of the central plains), assembling 107 cognate sets. Hale (1962, 1967) did the definitive study for Kiowa-Tanoan with 99 sets. This work's proposal may better compare to tying two distant language families, as did Haas (1958) by ending four decades of controversy in uniting Algonkian-Ritwan, an eastern U.S. family with a west coast family, by means of 93 sets. Chamberlain (1888) began the union of Catawba with Siouan via 17 comparisons, and Siebert (1945) secured it with mostly morphological correlations, as not enough clear cognate sets were known at the time to establish correspondences (Campbell 1997, 140). Thus, the going rate is between 50 and 200 sets to establish most Native American language families. So this case of 1500 sets merits proportionate consideration.

Some characteristics of UA are different or not at all like Egyptian or Semitic, but reflect influences rather typical of Amerindian language families, which we would expect of a transplant from the outside into the Americas. One example is suppletion in singular vs. plural verb forms. That is, one verb is used for

singular subjects and an entirely different word is used when the subject is plural, while suppletion is nearly non-existent in Semitic or Egyptian. A score of such pairs in UA show such influences on UA. Semitic conjugation morphology (patterns of how verbs are conjugated) is not productive in UA, but hundreds of fossilized forms of both the suffixed/perfective conjugation and the prefixed/imperfective conjugation are found in UA. (See Introduction to Semitic 1.3, for Semitic conjugation morphology; see 1.12, for productive vs. fossilized, still producing forms vs. fixed and no longer producing forms.)

In contrast to differences, other grammatical features align and substantial amounts of Uto-Aztecan vocabulary produce consistent sets of sound correspondences (1.11, p. 13) between UA and the Near-Eastern languages, with each treated as a separate entity. For example, among the consistent patterns of sound correspondences, some 40 examples show Hebrew b corresponding to p of Proto-Uto-Aztecan (PUA); i.e., Hebrew / Phoenician b > PUA *p (> means 'became' or 'changed to'; < means 'changed from'; * marks a proto-form or original sound or word as reconstructed by linguists. So Hebrew b > PUA *p means Hebrew b changed to what linguists see as originally *p in UA). The following matches are a few from among many more examples of each sound change, and, of course, are naturally abbreviated from the fuller data and explanations found in the numbered paragraph sets. Non-linguists may want to read at this point the introduction to linguistics (1.1, p. 13) and the introduction to Semitic (1.2, p. 27). Verbs in Semitic consist of three consonants (bṣq, for example) subject to a variety of vowelings for different aspects, conjugations, adjectives, and nouns (C = any consonant, an unknown consonant):

Semitic b	> Uto-Aztecan *p
(527) baraq 'lightning'	> UA *pïrok / berok 'lightning'
(528) byt / bayit / beet 'spend the night, house'	> UA *pïtï; Tr bete 'house'
(528) byt / bayit / beet 'spend the night, house'	> UA *pïtï 'lie down, spend night'; Num *payïC 'go home'
(528) bytu 'spend the night, plural'	> UA *pïtu 'lie down, spend the night, plural'
(531) Hebrew boo' 'coming (used as 'way to')	> UA *pooC 'road, way, path'
(534) Hebrew batt 'daughter'	> UA *pattï 'daughter'
(550) Aramaic bəsár 'flesh, penis'	> UA *pisa 'penis'
(559) Semitic *bakay; Syriac baka' 'cry'	> UA *paka' 'cry'
(532) Arabic bṣr 'see'; baaṣirat 'eye'; Hebrew *booṣer(et)	> UA *pusi 'eye'
(535) Aramaic bəquuraa 'livestock'	> UA *pukuN 'domestic animals'
(540) Hebrew bṭḫ / *baṭiiḫ 'trust(ed)'	> UA *piciwa 'believe' (ṭ > c (=ts))
(552) bṭn 'be pregnant'	> UA *puca 'pregnant' (ṭ > c (=ts))
(553) bṣq 'swell'	> UA *posa 'swell'
(556) bayṣa(t) / beeṣa(t), pl: beeṣoot 'egg, testicle'	> UA *pïyso 'testicle'
(558) bwṣ / byḍ 'be white'; buuṣ 'white linen'	> UA *pos 'white': Tb poosït~'opoos 'be white'
(562) -bbiiṭ 'look'	> UA *pici / *pica 'look, see' (ṭ > c (=ts))

The other voiced stops also devoice, that is, Semitic b, d, g > UA p, t, k; also Semitic q > k:

(606) dubur 'buttocks, rear'	> UA *tupur 'hip, buttocks'	
(607) dobɛr 'pasture, vegetation'	> UA *tupi 'grass, vegetation'	
(1484) dwr / duur 'go round, turn, revolve'	> UA *tur 'whirl, roll, twist'	
(1103) dakka 'make flat, stamp, crush'	> UA *takka 'flat'	
(1279) *yagar 'hill, heap of stones'	> UA *yakaC / *yakaR (AMR) 'nose, point, ridge'	
(608) gdʕ 'cut off'	> UA *katu' 'cut, wound'	
(1014) qədaal 'neck, nape of neck'	> UA *kutaC 'neck'	(*q > k)
(1023) tqn 'make straight, set, lay down'	> UA *tïkaC 'put lying down, stretched/spread flat'	(*q > k)
(1089) Hebrew qippod 'hedgehog'; Arabic *qunpuð 'hedgehog'	> UA *kïNpa 'prairie dog'	(*q > k)
(864) *quuppoot 'baskets, pl'	> UA *koppo 'basket'	(*q > k)
(74) Hebrew təbuu'at 'produce from the land'	> UA *tïpï'at / *tïpat (AMR) 'pinion nut'	

Proto-Semitic đ (> Arabic đ, Aramaic d), corresponds to UA *t:

(616) Aramaic dakar 'male'	> UA *taka 'man, person'
(617) Aramaic diqn-aa 'beard / chin-the'	> UA *tï'na 'mouth'
(618) Aramaic di'b-aa 'wolf-the'	> UA *tï'pa 'wolf'
(620) unattested f. pl: *đabboot(ee^{y}) 'flies'	> UA *tïpputi 'flea'

Semitic ’aleph or glottal stop ’ > w in UA (which change also occurs in Arabic), or other times both a glottal stop and adjacent round vowels occur, perhaps ’ causing vowels to round (o, u):

(566) ’ariy / ’arii ‘lion’ > UA *wari ‘mountain lion’
(567) Hebrew ya’amiin-o ‘he believes him/it’ > UA *yawamin-(o) ‘believe (him/it)’
(569) Hebrew ’egooz ‘nut tree’ > UA *wokoC ‘pine tree’ (C = unknown consonant)
(571) ya’ya’ / yaa’ayaa’ ‘(be) beautiful’ > Ls yawáywa, Sr yï’aayï’a’n ‘be pretty, beautiful’
(572) Hebrew ’iiš ‘man, person’ > UA *wïsi ‘person’
(574) Hebrew ’išaa / ’ešɛt / **’išt-** ‘woman, wife of’ > UA *wïCti ‘woman, wife’ (C = unknown consonant)
(577) Semitic ’aas- ‘myrtle willow’ > UA *wasV ‘willow’
(579) Arabic pa’r- ‘mouse’ > UA *pu’wi(N) ‘mouse’
(581) Hebrew ’arṣ-aa ‘earth-ward, down’ > UA *wïcï ‘fall’
(575) kama’- ‘truffle(s)’ > UA *kamo’- ‘sweet potato’
(truffles are also edible fleshy appendages to a root system, as are potatoes)
(596) ’arnab ‘hare’ > UA *wa’na ‘rabbit net’
(576) ’ata^{y}, *’atii-; Syriac ’ita / ’ɛta ‘come’ > UA *wic ‘come’ (t > c(ts) by high vowels like i, u)
(871) ’pl / *tu’pal ‘be dark, go down (sun), f’ > UA *tu’pa > *cuppa ‘be dark, (fire) go out’ (t > c, by u)
(872) ’pl / *yu’pal ‘be dark, go down, m’ > UA *yu’pa > *yuppa ‘be dark, black, (fire) go out’
(873) ’pl / *yu’pal ‘be dark, go down, m’ > UA *yu’pa(l) > Aztecan *yowal, CN yowal-li ‘night, n’
Aztecan branch regularly loses a single -p-
(1110) Aramaic ’ard-aa’ ‘mushroom-the’ > UA *witto’oC ‘mushroom’
(1331) ’ikkaar ‘plowman, tiller of ground’ > UA *wika 'digging stick'
(1333) Hebrew m’n / *me’’an ‘refuse’ > Hp meewan- ‘forbid, warn’

Semitic initial r- > t- in UA:

(600) r’y / raa’aa ‘see, v’ > UA *tïwa ‘find, see’
(603) Aramaic rima / rimə-taa ‘large stone-the’ > UA *tïmï-ta ‘rock’
(604) Aramaic rə’emaan-aa / reemaan-aa ‘antelope-the’ > UA *tïmïna 'antelope’
(99) rakb-u ‘they mounted, climbed’ > UA *tï’pu / *tïppu ‘climb up’
(889) Aramaic rakbaa / rikbaa ‘upper millstone’ > UA *tïppa ‘mortar (and/or) pestle’

Loss of Semitic final -r, without effect on the preceding vowel:

(565) makar ‘sell’ > UA *maka ‘give, sell’
(616) dakar ‘male’ > UA *taka ‘man, person’
(550) Aramaic bəsár ‘flesh, penis’ > UA *pisa ‘penis’
(1331) ’ikkaar ‘plowman, tiller of ground’ > UA *wika 'digging stick'

Semitic initial voiceless pharyngeal ħ > UA *hu, or w/o/u, and non-initially ħ > w/o/u:

(672) ħbq ‘pass air, break wind’ > UA *hupak- ‘stink’ (*q > k)
(673) ħnk ‘train, dedicate’; ħanukkaa ‘dedication, consecration’ > Ca huneke ‘to take an Indian bath’;
Yq húnak-te ‘show, direct, raise (young)’
(671) ħmm ‘heat, bathe, wash’ > UA *huma ‘wash, bathe’
(1040) ħml ‘carry, lift, pick up’ > UA *homa ‘take, carry, pick up’

The Semitic voiced pharyngeal ʕ > UA w/o/u, that is, some form of rounding:

(677) ʕagol ‘round’ > UA *wakol 'round(ed)’
(676) paqʕ- ‘whiteness, species of fungus’ > UA *pakuwa ‘mushroom, fungus’ (*q > k)
(683) ʕmṭ ‘cloud over, become dark’ > UA *(w)umaC / *(w)ïmaC ‘rain, be cloudy / overcast’
(686) ʕɛrwaa ‘nakedness, genitals’ > UA *wowa ‘vulva, vagina’
(1197) Hebrew ʕaaqeeb ‘heel, footprint’ > UA *woki ‘track, footprint’ (*q > k)
(747) Aramaic / Syriac ṣibʕ- ‘finger’ > UA *sipwa ‘finger’
(876) dʕk, impfv: -dʕok (< *-dʕuku) ‘(fire) go out’ > UA *tuka / *tuku / *tuki 'fire go out, dark, black, night’
(900) nʕm ‘be lovely, good, beautiful’ > UA *numa / *noma ‘good, well, pretty’
(1289) šgʕ, Hebrew məšuggaʕ ‘raging, mad’ > Nahuatl šiikoaa ‘be jealous, angry’
(94)ršʕ ‘act wickedly, be guilty’ > UA *tasawa ‘be/do bad’

Many phonemes (sounds) remain much the same, such as t, k, p, m, n, etcetera:
(52) Hebrew mukkɛ ‘smitten’ > UA *mukki ‘die, be sick, smitten’
(769) *taqipa (sg), *taqipuu (pl) ‘overpower’ > UA *takipu ‘push’
(750) tmh ‘in awe, fear, speechless’, Syriac təmah > UA tuma’ / tu’mï / tehmat / tïhmï ‘be silent, afraid’
(755) Hebrew kutónet ‘shirt-like tunic’ > UA *kutun ‘shirt’
(754) Hebrew participle pone ‘turn to, look’ > UA *puni ‘turn, look, see’
(851) Hebrew panaa-w ‘face-his’ > UA *pana ‘cheek, face’
(852) pl construct paneeʸ- (< *panii) ‘face, surface of’ > UA *pani 'on, on surface of'
(1339) šippaa ‘make smooth’ > UA *sipa / *sippa ‘scrape, shave’
(56) šɛkɛm / šikm-, Samaritan šekam ‘shoulder’ > UA *sïka ‘shoulder, arm’, Numic *sikum ‘shoulder’
(57) *siggoob ‘squirrel’ > UA *sikkuC ‘squirrel’
(563) sapat ‘lip’ > UA *sapal ‘lip’
(879) šwy / šawaa ‘broil, roast’ > UA *sawa ‘boil, apply heat, melt'
(1138) Hebrew šor ‘navel’; Arabic surr ‘navel cord’ > Sr ṣuur ‘navel’
(13) snw ‘shine, be beautiful’ > Hopi soniwa ‘be beautiful, bright, brilliant, handsome’
(890) kann ‘shelter, house, nest’ > UA *kanni (NUA) ‘house’ > *kali (SUA) ‘house’
(903) khh, kehah ‘be inexpressive, disheartened’ > UA -kïhahï- ‘sad’
(1045) Hebrew *moškat ‘bracelet, fetter, belt’ > Tb mohkat-t ‘belt’
(1105) kali / kulyaa ‘kidney’ > UA *kali ‘kidney’
(1409) Aramaic kuuky-aa’ ‘spider-the’ > UA *kuukyaŋw ‘spider’; Hopi kòokyaŋw ‘spider’

Semitic emphatic or pharyngealized ṣ > s in UA:
(892) ṣanawbar ‘type of pine tree’ > UA Sh sanawap-pin ‘pine tree’
(901) ṣb’ / ṣby / ṣəbee ‘wish, want, seek, delight in’ > UA *supiC ‘like, want’
(1173) mwṣ ‘suck’ > UA *mos ‘suck’
(1350) ṣd’ / ṣdi ‘grow rusty’ > UA *sïta / *sïti ‘red’

Semitic emphatic or pharyngealized ṭ > c (ts):
(770) ṭwy / ṭawaa ‘spin (thread)’ > Nahuatl cawa ‘spin’
(771) ṭʕm ‘taste, eat’ (plural participle ṭoʕmiim) > UA *cu’mi 'suck, sip, kiss'
(772) ṭame’ ‘(be) unclean’, ṭum’a(t) ‘uncleanness, filthy mass’ > UA *co’ma ‘mucus, have a cold’
(832) *sarṭoon ‘scratcher, crab’ > UA *saCtun >*sicu/*suttu ‘claw, fingernail, crab, scratch’

Sometimes the c lenites (weakens) one more step to s:
(778) ṭibbuur ‘navel’ > NP sibudu; Cr sipu; Hp sipna / sivon- ‘navel’

Semitic-p distinguishes x from ḫ, as in pre-exilic Hebrew, thus Semitic *x > UA k:
(1088) *xld ‘burrow’, xuld / *xild-aa’ ‘mole-the’ > UA *kita ‘groundhog’
(630) *xole ‘be sick, hurting’ > > UA *koli ‘to hurt, be sick’
(631) xmr ‘to ferment’; *xamar ‘wine’; Arabic ximiir ‘drunkard’ > UA *kamaC 'drunk'
(632) *xnk ‘put around the neck’ > UA konaka ‘necklace, string of beads’
(634) *xaṣr- > xaṣṣ ‘hip, haunch, loins’ > UA kaca ‘hip’

Clusters like -m’-, -’m-, -qm-, that is, m with either ’ or q > ŋ in NUA:
(1246) Old Canaanite sim’al ‘left’, *ha-sim’al ‘the-left’ > Tb aašiŋan ‘left side’ (l > n in NUA)
(1012) šeqma(t) / šiqma(t) ‘sycamore tree’ > UA *sïŋŋa(C) 'cottonwood or aspen tree'
(1144) ’lm ‘be grieved’ > Hebrew ’almaanaa ‘widow’ > UA *o’mana / *oŋani ‘sad, suffering’

Clusters with -r- as 2nd consonant show -Cr- > -Cy-, especially -gr-, -qr- > -ky-, or -gra / -qra > Hopi -kya:
(1130) Aramaic pagr-aa ‘corpse-the’ > Hopi pïïkya ‘skin, fur’
(1403) Syriac šigr-aa ‘drain, ditch, gutter-the’ > Hopi sikya ‘small valley, ravine, canyon with sloped sides’
(1405) šqr ‘fair, yellow to red’, Arabic šuqra ‘fair complexion, blondness, redness’ > Hopi sikyà ‘yellow’
(743) *tamar; Aramaic tuumr-aa ‘palm tree-the’ > UA *tu’ya ‘palm tree, sp’

Proto-Semitic *z > c(ts) in UA:
(1116) Hebrew zépɛt (< *zipt-) / zaapet ‘pitch’ > UA *copï ‘pitch, resin’
(87) Arabic ʕgz / ʕagaza ‘to age, grow old (of women)’ > Tr wegaca- 'grow old (of women)’

Egyptian terms in UA exceed 400 and have the same sound correspondences as the above Semitic. Egyptian did not include written vowels, only the consonants. Sometimes the vowels are hinted at in transcriptions from other languages, or from Egyptian’s later forms in Demotic and Coptic, but generally only the consonants are certain. Sometimes the Coptic term is listed along with the Egyptian term, but do not regard Coptic as involved in the Egyptian-to-UA tie, because the Egyptian-to-UA sound correspondences differ from the Egyptian-to-Coptic correspondences. In fact, UA preserves the Egyptian phonology better than Coptic usually does, though UA is two more millennia removed. Coptic is simply listed for hints at vowels or to show Uto-Aztecan’s better preservation (7.6, p. 347):

Egyptian	Uto-Aztecan
(115) sbk / *subak ‘crocodile’	> UA *supak / *sipak ‘crocodile’ (b > p)
(116) -i ‘old perfective/stative verb suffix’	> UA -i ‘intransitive / past / passive/ stative verb suffix’
(117) -w / -iw ‘passive verb suffix’	> UA -wa / -iwa ‘passive verb suffix’
(124) tks ‘pierce’	> UA *tïkso ‘pierce, poke’
(125) km ‘black’	> UA *koma ‘dark, gray, brown, black’
(126) nmi ‘travel, traverse’	> UA *nïmi ‘walk around’
(129) wnš, pl wnšiw ‘jackal’	> UA *wancio / woncia ‘fox’
(131) šm ‘go, walk, set out, leave’	> UA *sima ‘go, leave’
(219) iqr ‘skillful, excellent, capable, intelligent’	> UA *yikar ‘knowing, intelligent, able, good’
(221) wr ‘great (in size/importance), wrw ‘greatest’	> UA *wïru ‘big’
(222) wnx ‘be clothed, roll of cloth’	> UA *wanaC ‘cloth, clothing’
(136) win ‘thrust aside, push away, set aside’	> UA *wina 'throw down/out, spill, empty'
(253) spd ‘sharp, be sharp pointed’	> UA *sipaC 'point'
(255) sqd ‘slope (of pyramid)’	> UA *sikiC ‘slanted (terrain), side’ (q > k)
(210) twt ‘sandal(s)’	> UA *tuti ‘sandal(s)’
(339) t’-ħimat ‘the-wife’; Coptic hime	> UA *tïhima 'spouse'

Note again Egyptian b > UA p, as in Semitic-p above:

(132) sbq ‘calf of leg’	> UA *sipika ‘lower leg’	(b > p)
(133) sbty ‘enclosure’	> UA *sapti ‘fence of branches’	(b > p)
(134) qbb ‘cool; calm, quiet, cool breeze’	> UA *koppa ‘quiet, calm’	(b > p)
(137) bbyt ‘region of throat’	> UA *papi ‘larynx, throat, voice’	(b > p)
(138) bši ‘spit, vomit’, bšw ‘vomit, vomiting’	> UA *piso-(ta) ‘vomit’	(b > p)
(139) bnty ‘breast’	> UA *pitti / *piCti ‘breast’	(b > p)
(141) bit ‘bee’	> UA *pitV > *picV 'bee, wasp'	(b > p)
(142) bik ‘falcon’	> UA *pik ‘hawk species’	(b > p)
(154) sb’ ‘star’	> UA *sipo’ > *si’po ‘star’	(b > p)

Also Egyptian x > UA *k, as in Semitic-p above:

(170) txi ‘be drunk, drink deep’, txw ‘drunkard’	> UA *tïku 'drunk’
(294) xpš ‘foreleg, thigh’	> UA *kapsi ‘thigh’
(295) xpd ‘buttock’	> UA *kupta ‘buttocks’
(295) xpdw ‘buttocks’	> UA *kupitu ‘buttocks’
(171) sxn / zxn ‘kidney fat, pancreas’	> UA *sikun ‘kidney’
(174) sxt ‘field, country, pasture, willow’	> UA *sakat / *sakaC ‘grass, willow’
(178) x’yt / h’yt ‘disease, slaughter, corpse-heap’	> UA *ko’ya ‘die, pl subj; kill, pl obj’
(247) xr ‘fall’	> UA *kuri ‘fall’, UA *kara ‘fall’
(320) xpx ‘rob’	> UA *kïpïk ‘take, grasp’
(224) wxd ‘be painful, sick, suffer, endure’	> UA *okotï ‘be in pain, suffer, sorrow’
(452) xt ‘fire, heat’	> UA *kut ‘fire’

Egyptian initial pharyngeal ḫ > UA *hu, and non-initially ḫ > w/o/u:

(180) ḫbi ‘be / make festival’ > UA *hupiya ‘sing, song’
(181) ḫnqt ‘beer, drinkers’ > UA *hunaka ‘drunk, alcohol’
(182) ḫtp / hotpe ‘be gracious, peaceable, set (sun), bury’ > UA *huppi ‘peaceable, go down, sink, dive’
(187) ḫw’ ‘foul, putrid, stink, vi’ > UA *hu’a / *hu’i ‘break wind, stink’
(188) nḫbt ‘nape of the neck, yoke’ > UA *nohopi > nopi ‘hand, arm’
(189) nḫb ‘to harness, to yoke’ > UA *noopi ‘carry on back’
(397) ḫti ‘smoke, vapor’ > UA *uti 'dew, vapor, frost’
(415) ḫnn ‘penis’ > UA *huna ‘penis’

Egyptian glottal stop ’ > w, or glottal stop next to round vowels, ’ probably causing vowels to round (o, u):

(147) m’i ‘lion’; Coptic mui > UA *mawiya ‘mountain lion’
(148) t’yt ‘shroud’ > UA *tawayi ‘cape-like garment’
(198) ḏ’rt ‘bitter gourd’ > UA *sawara 'gourd'
(205) ṯ’y ‘male, man’ > UA *tawi > *tïwi ‘man, male’
(322) q’i ‘tall, high’; q’yt ‘high land, hill’ > UA *kawi ‘mountain, rock’
(515) ’xi ‘sweep together’ > UA *wak / *wok ‘sweep, comb, brush’
(150) t’ ‘earth, land’; Coptic to > UA *tïwa / *to’o ‘sand, dust’
(151) i’w ‘old man’; i’wi ‘be aged’ > UA *yo’o ‘old’
(153) s’ ‘son’ > UA *so’o ‘child, son’
(259) sṯ’ ‘jar, jug’ > UA *soto’i ‘jar’
(258) sṯ’ ‘drag, pull, pull out, draw’ > UA *(piC)-sutu’a ‘(behind)-pull, drag’
(154) sb’ ‘star’ > UA *sipo’ > *si’po ‘star’
(157) iṯ’ ‘take, carry, steal’ > UA *itu’i > i’tu ‘steal, take’
(370) ḫ’ ‘behind, around’ > UA *huwï ‘around’
(431) b’k / b’kt ‘document’ > UA *po’ok ‘mark, write, tattoo’ (b > p)

Egyptian ḏ corresponds to Semitic ṣ, and thus Egyptian ḏ > UA *s, like Semitic ṣ > UA *s also:

(200) ḏbt / *ḏubat ‘brick, adobe brick’ > UA *supa ‘adobe’
(199) ḏb’ ‘to clothe, garment, clothing’ > UA *sipu’ > *si’pu ‘slip, skirt, shirt, clothing’
(198) ḏ’rt ‘bitter gourd’ > UA *sawara 'gourd'
(197) ḏʕb ‘coal-black’, ḏʕbt ‘charcoal’ > UA *so’opa ‘black, dark’
(194) ḏ’i ‘pierce, transfix’ > UA *so’a/*so’i 'pierce, sew, shoot arrow'
(390) ḏwt ‘mosquito, gnat’ > UA *suti ‘mosquito, gnat’

Egyptian initial r- > UA t-, though Tarahumara retains r-:

(164) rn ‘young one, of animals’ > UA *tana ‘offspring’
(165) rwi ‘dance, v’ > UA *tawiya / *tuwiya > *tuya ‘dance’
(169) rmṯ ‘man, person’ > UA *tïmati ‘young man’: Tr ŕemarí, Eu temáci-
(167) rwḏ ‘cord, bow-string’ > UA *tïsa ‘rope’
(337) r’-ib ‘stomach’ > NUA *to’i ‘stomach’ / SUA *toCpa ‘stomach’

Egyptian pharyngeal ʕ > UA *w/o/u:

(163) rʕ / rʕw ‘sun’ > UA *tawa / *tawi ‘sun, day’
(162) šʕy ‘sand’; Coptic šoo > UA *siwa(l) ‘sand’
(262) ʕnt ‘nail, claw’ > UA *wati 'claw, fingernail'
(400) sʕr ‘thorn bush(es)’ > UA *sawaro ‘saguaro cactus'
(426) ʕnr(t) ‘flint’ > UA *wi’naC ‘flint’
(464) ʕq ‘enter’ > UA *waka/u ‘enter’
(475) sw ‘it, pronoun’ (is) p’ʕt ‘quail’ > UA *supa’awi ‘quail’

Like the devoicing of Egyptian b > UA *p, so also is the devoicing of Egyptian d > UA *t, and g > *k:
(268) dwn ‘stretch, straighten; Coptic town > UA *tuna ‘straight’
(269) dqr ‘fruit’ (> Coptic tiče / jiji) > UA *taka(C) ‘fruit’
(270) dbḫ ‘ask for’ (Coptic toobh) > UA *tïpiwa / *tïpiN 'ask'
(271) dm ‘be sharp, sharpen’; Coptic toom > UA *tama / *tomo ‘be sharp, sharpen’
(272) dmi (dmr) ‘touch’ > UA *tam ‘touch’
(273) dw’ ‘rise early’; dw’w / dw’yt ‘morning’; Coptic to’we > UA *to’i ‘rise, come up/out’
(395) ngg ‘gander/male goose’ > *nakï 'goose' (devoicing of g > k)

Egyptian cluster *-m’- > UA *-mw- > -ŋ- in three items widespread throughout Uto-Aztecan:
(280) ḫm’ / ḫm’t ‘salt’ (> Coptic hmu) > UA *omwa > *oŋwa / *oŋa ‘salt’
(281) sm’ ‘lung’; pl: sm’w ‘lungs’ > UA *somwo > *soŋo ‘lungs’
(284) qm’ ‘create, beget (of father)’ > UA *kumwa > *kuŋa ‘husband’ (q > k)

Other clusters and parallels:
(332) qrḫt ‘serpent, partner’ (*qarḫat >) > UA *koŋwa ‘snake, twin’ (q > k)
(384) inqt ‘net’ > UA *ikkaC / *iCkaC ‘carrying net’ (q > k)
(391) ishb ‘jackal, fox’ > UA *isap / *isa’apa ‘coyote’
(398) k’p ‘cover, close (eyebrows/eyelids) > UA *kuppa / *kuCpa 'close (eyes)’
(434) g’p ‘cut’ > UA *kappi 'break, cut' (devoicing g > k)
(381) wrt ḫq’w ‘buzzard’ > UA *wirhukuN 'buzzard, turkey vulture'
(404) ḫ’dt ‘basket’ > UA *huCta ‘basket’
(426) ʕnr(t) ‘flint’ > UA *wi’naC ‘flint’
(263) šwt ‘shade, shadow’ > Nahuatl seewal-li ‘shade’
(264) šmrt ‘large bow’, pl šmrwt > -samaaloo-t of Nahuatl koo-samaaloo-tl ‘rainbow’
(267) twr ‘reed’ > Nahuatl tool-in ‘cattails, reeds’;
(266) šnw / šni ‘hair, grass’; šni ‘encircle, cover’ > UA *soni / *sono ‘grass, blanket’
(331) qny ‘be yellow’; qnit ‘yellow(ness)’ > Cp kenekene’e- ‘yellow’ (q > k)
(333) qd ‘go round, turn, spin’ (> Coptic koote) > UA *koti / *kuri ‘turn, go around’ (q > k)
(446) qm’ ‘fight’; qm’tyw ‘enemies’ > UA *kïma’a / *kïmma(n)ci ‘different, enemy’ (q > k)
(409) nk ‘copulate’ > UA *naka ‘copulate, cover’
(468) ’wt ‘length’ > UA *otï / *utu / *uta ‘long, tall’
(470) t’-imnti ‘the west’ > UA *tïmïnïmïn ‘north, west’ (reduplicated)
(519) wpi ‘open, separate, divide’ > UA *wopa ‘divide’

The above 105 Egyptian-UA matches are but 25% of the 400+ listed in the Egyptian section.

The above Semitic and Egyptian parallels in UA both have the same sound correspondences, apparently spoken or used by the same group of people. However, in contrast to those two, a separate sizable set of data suggest another contributing Semitic element, with a different set of sound correspondences in which Semitic b > UA *kw, though the Tepiman branch of UA, and Eudeve, Opata and some Nahuatl dialects actually have b from Semitic b, all corresponding to presumed UA *kw. This Semitic-kw language is more Phoenician-like, while the Semitic-p language is more Aramaic-like, which differences are discussed periodically throughout the book. The data of the Semitic-kw language are what I noticed first, and because the Hebrew b > UA *p group were exceptions to the correspondences noticed first (Hebrew b > UA *kw), I ignored them for years, but kept them in the back of my mind (not a safe place), until I noticed Egyptian similarities (in UA) whose sound correspondences with UA aligned with those exceptions: that is, Egyptian b > UA *p also, as well as another 40 examples of Semitic b > UA *p. Not until then did it occur to me that we seem to have two separate Semitic entities that merged in UA—a Phoenician-like Semitic-kw (Sem-kw) wherein Semitic b > UA *kw, and an Aramaic-like Semitic-p (Sem-p) in which Semitic b > UA *p. Furthermore, the Sem-p speakers seemed to know some Egyptian as well; that is, the Sem-p and the Egyptian in UA have the same sound correspondences. The data show the two languages (Sem-kw and Sem-p) to have separate sets of correspondences for other phonemes (basic sounds) as well, the Sem-p being consistently parallel to the Egyptian correspondences.

Below are examples of data and sound correspondences from the Phoenician-like Semitic-kw wherein Semitic b > UA *kw:

(4) Hebrew baašel ‘boiled, cook, ripen’ > UA *kwasïC ‘cook, ripen’
(5) Hebrew bááśaar ‘flesh, penis’ > UA *kwasi ‘tail, penis, flesh’ (r > y/i)
(6) Hebrew baalaʕ ‘swallow’ > UA *kwïluC ‘swallow’
(7) Semitic *bahamat ‘back’ > UA *kwahami ‘back’
(24) bky / bakaa^{y} ‘cry’ > UA *kwïkï ‘cry’ (from Semitic-kw)
(19) barr- ‘land (as opposed to sea)’ > UA *kwiya / *kwira 'earth' (r > y/i)
(27) brm ‘worn out, weary, bored with’ > UA *kwiyam ‘be lazy, do lackadaisically’ (r > y/i)
(1457) Arabic ṣabba ‘pour, drip, overflow’ > UA *cikwa ‘rain
(11) Hebrew -dabber ‘speak’ > UA *tïkwi ‘say, talk, speak’ (r > y/i)
(26) Hebrew bɛn ‘son’; pl: bənee^{y} ‘children (of)’ > Nahuatl *konee 'child, offspring’:

As in the Egyptian and the Semitic-p contributions, so also in the Semitic-kw, ħ > hu or w/o/u:

(78) Hebrew ħeṣ ‘arrow’ > UA *huc ‘arrow’
(79) Hebrew ħmr ‘cover with, smear on’ > UA *humay ‘smear, spread, rub, paint’ (r > y/i)
(80) Hebrew ħbb ‘rub off, wash’ > UA *uppa ‘bathe, wash, rub’
(81) Hebrew ħabéret ‘wife’ > UA *hupi 'woman, wife' (r > y/i)
(82) Hebrew ħzy / ħazaa ‘see, behold, look’ > UA *husi / *h^{w}asi ‘look, peek at’
(658) ħbl ‘bind’, *-ħabbil ‘bind’ > NUA *wïkkwiN- ‘wrap around, coil’
(853) Aramaic ħippušit-aa ‘beetle-the’; Arabic *xunpusaa’ / xunpus > UA *wippusi ‘beetle’
In the next section are three more examples (83, 84, 85).

Semitic-kw ṣ > UA c (ts):

(83) Hebrew ṣrħ ‘cry, roar’ > UA *cayaw ‘yell’
(84) Hebrew ṣmħ, imperfective: yi-ṣmaħ ‘sprout’ > UA *icmo ‘sprout’
(85) Hebrew ṣlħ ‘rush, v’ > UA *coloa ‘flee, run’
(899) ṣinw-, pl aṣnaa’ ‘twin, one twin’ > UA *cono’o 'twin(s)'
(29) ṣəbii > ṣəvii ‘gazelle’ > Hopi cöövi- ‘antelope’
(86) ṣʕq ‘shout, call out, cry (out)’, ṣəʕaaqaa ‘yell, call, n’ > UA *coaka ‘cry’
(28) ṣurṣur ‘cricket’ > UA *corcor ‘cricket’
(78) ħeṣ ‘arrow’ > UA *huc ‘arrow’

As in all three languages, the voiced pharyngeal ʕ > w/o/u:

(88) ʕlq ‘stick, adhere’, ʕalaqat ‘leech’ > UA *walaka ‘snail’ (of similar slimy adhering texture)
(89) śeeʕaar ‘hair’; Arabic šaʕr / šaʕar ‘hair’ > UA *suwi ‘body hair’ (r > y/i)
(92) yáʕar ‘wood, forest, thicket’ > UA *yuwi / yuyi ‘evergreen species’ (r > y/i)

Unlike its associated rounding in Semitic-p, the Semitic-kw glottal stop ’ is not rounded and often lost:

(991) Hebrew ni-qra’ ‘he/it is called/named’ > UA *nihya ‘call, name’
(587) ’argaamaan ‘purple, red-purple’ > UA *aNkaC ‘red’
(1214) Hebrew mee-’ayn ‘from where?’ > Tb maa’ayn ‘where from’
(1055) ’aamaqqət-aa ‘lizard-the, n.f.’ > UA *makkaCta(Nka) ‘horned toad’
(591) ’adaamaa / ’^{a}daamaa ‘earth’ > UA *tïma ‘earth’
(592) Hebrew ’abneṭ, pl: ’abneṭ-iim ‘sash, girdle’ > UA *natti ‘belt’
(1054) raqbubit ‘moth, decayed, moth-eaten’ > UA *…kupïpika / *(C)Vkupïpika 'butterfly'

Non-initial -r- > Semitic-kw -y-, and tends to raise and front the preceding vowel (V > i):

(62) srq / saraq ‘to comb’ > UA *siyuk / *ciyuk ‘to comb’ (r > y/i)
(65) mrr ‘pass, go, walk’ > UA *miya ‘go’ (r > y/i)
(64) Semitic krr / krkr ‘go in circles, dance’ > SP kiya ‘have a round dance’ (r > y/i)
(19) barr- ‘land (as opposed to sea)’ > UA *kwiya / *kwira 'earth' (r > y/i)
(27) brm / baram ‘worn out, weary, bored with’ > UA *kwiyam ‘be lazy, do lackadaisically’ (r > y/i)
(79) Hebrew ħmr ‘cover with, smear on’ > UA *humay ‘smear, spread, rub, paint’ (r > y/i)
(81) Hebrew ħabéret ‘wife’ > UA *hupi 'woman, wife' (r > y/i)

Final or non-initial -l in Semitic-kw tends to raise and front vowels (V > e, i):
(1225) Hebrew ’abaal ‘truly, indeed’ > Tr abe ‘yes, an emphatic’
(54) Hebrew taapel ‘whitewash’; Aramaic ṭəpel ‘plaster’ > UA *tïpi ‘white clay’
(1321) Hebrew ħargol, Arabic *ħargal / *ħurgul ‘locust’ > Tr urugi-pari ‘type of grasshopper’
(798) Hebrew ’akal ‘(he/it) ate’ (perfective) > UA *’aki ‘open mouth, eat, take/put into one’s mouth’
(797) Hebrew *yo’kal ‘(he/it) eats’ (imperfective) > UA *yï’ïki 'swallow, taste, finish'
Number 797 (-l raising -a- > -i-) is in contrast to Semitic-p *tukkaC wherein final -l has no raising effect.
(796) Hebrew *to’kal ‘(she/it) eats’ > UA *tukkaC > Num *tïkkaC 'eat'

Such a tripartite combination I first considered suspect until the quantity for each grew to more than sufficient to allow each to stand on its own strength, as each dimension has 400-700 sets. Should we ignore the strength of a case of 1500 similarities? Or should we be fair and consider the data when a few hundred items support each dimension of the tripartite scenario? If one simply cannot bear the thought of the three, then pick only one of the groups, any one of which yields 400 to 700 items. Ought a correlation of 400 sets be ignored? Even 400 sets is three times what most Native American language families were founded on.

Admittedly, this may sound incredible at this point, as truth often does at first, but working through the data will diminish doubt. So read with an open mind and consider the quantity and quality of the evidence. Perhaps this first edition contains enough loose ends to serve as some consolation for those who do not like the idea of such possibilities. In fact, **several words of caution** are in order:

(1) First of all, linguists would look dimly on a tripartite collection of languages to propose an Old World tie with a Native American language family. Linguistically, each of those three has to stand on its own merit, independent of the other two. Yet the numbers of similarities for each are enough data for each one of the three to do exactly that—serve as a valid case each in and of itself (400 to 700 similarities for each).

(2) Anthropologists and linguists are wary and weary of hearing about proposed ties between Semitic or Egyptian and New World languages—about 300 years’ worth of weary. Most such claims have been bogus to borderline or amateurish at best, somewhat justifying linguists’ wariness in light of claims void of sound methodology, that is, lacking what linguists have found to be established principles and patterns for verifying language relatedness: rules of sound change that create consistent sound correspondences, hundreds of vocabulary matches consistent with those sound correspondences, and some grammatical and morphological alignments, which sum constitutes **the comparative method**. Thus, the language similarities in this work are presented within such a framework of sound correspondences, etc. In fact, the Semitic or Egyptian forms proposed to underlie the UA forms often answer questions and explain puzzles in UA that Uto-Aztecanists have not yet been able to explain; and explanatory power is a cherished quest among linguists. While the finds do seem significant, some details remain to be worked out.

(3) Given the amount of Egyptian vocabulary in UA, we might expect to find and may yet identify more Egyptian grammatical patterns in UA. However, if the Egyptian phrasing in UA is reduced as much as many Egyptian phrases are reduced in Coptic (a late form of Egyptian dating to 2,000 years ago), then such identifications would be a challenge (if even possible), requiring time, not to mention requiring a greater depth of familiarity with UA languages and Egyptian than yet exists in any single mind. Many living languages reduce as drastically. In American English, one often hears ‘hwəjədu?’ for ‘what did you do?’ Therein -j- is the phonological reduction of the final -t of ‘what’, the whole of ‘did’, and the y- of ‘you’—some of three words (-t did y-) reduced to one consonant (-j-).

Often as drastic was the change from Egyptian to Coptic: Egyptian *iwr-ti* became Coptic εετ (eet) ‘pregnant’ (Loprieno 1995, 78); the i/y is not obvious, nor anything w- or r-like; so practically nothing of the stem ‘pregnant’ (iwr) is left, only a long vowel and the t of the stative suffix. Egyptian *r-di.t iri.f sḏm* became Coptic *e-t-ref sotem* ‘to cause that he may do hearing’—a reduction of eight consonants (*r-di.t iri.f*) to (*etref*) three consonants and two vowels (Cerny and Groll 1993, 155), though three of the original eight consonants are vowel-like or semi-vowels. Egyptian *tw.i m nʕy r sḏm* ‘I am in going to hear’ (= I shall hear) became Coptic *tinasotm*, or *tw.i m nʕy r > tina* (Cerny 1976, 104), eight segments (sounds) to four. Adding to the challenge is that the time depth between Late Egyptian and Coptic is half the probable time depth in this problem: if UA is partially from Egyptian, the Egyptian in the UA languages is now being recorded at a time depth a millennium or two greater than the time depth between Late Egyptian and Coptic. Yet UA preserves many vowels and details better than Coptic does (see 7.6).

On the other hand, **these data explain many things previously unexplained in UA:**

(1) The phonology of medial (middle) consonant clusters is a huge problem in UA itself, and Semitic and Egyptian shed light on many of those clusters and help explain the mutual effect of adjacent consonants on each other. See 7.2 on consonant clusters.

(2) Regarding PUA *p, Uto-Aztecanists agree on each UA language's reflex that corresponds to PUA *p. (A language's reflex is its corresponding sound which the proto-sound changed to.) However, five UA languages—Tarahumara, Mayo, Yaqui, Arizona Yaqui, and Eudeve—show both initial b and p corresponding to PUA *p. This split is usually ignored as an inconvenient inconsistency in these languages. However, the initial b forms in these languages correspond to Egyptian b or Semitic b of Semitic-p, and the initial p forms in these languages to Semitic/Egyptian p. How can such an alignment be coincidental? For the various UA forms of b vs. p to match Semitic/Egyptian b vs. p is significant. (See 6.2)

(3) PUA initial *t (at the beginning of words) corresponds to the initial t of most UA languages, except for Tarahumara initial r. So if PUA *t became Tarahumara r, then where does Tarahumara initial t come from? The data in this work suggest that Semitic/Egyptian initial r became t, so in most UA languages initial r and initial t merged to look like PUA *t, but Tarahumara kept them separate. Thus, 6.1 clarifies the Tarahumara r vs. t puzzle, which see.

(4) Other matters in 6.3, 6.4, 6.5, 6.6, and 6.7 are also explained by these language ties.

Significant is the language parallel of Yiddish, the language of the Jewish peoples of Central Europe. Uto-Aztecan and Yiddish are both Semitic infusions into non-Semitic areas, where each (as a minority people) borrowed heavily from the languages of the larger surrounding peoples. Originally coming out of Palestine, many Jews sojourned in Greece, Rome, and elsewhere along the northern Mediterranean, then some among them expanded into central Europe, where their original Hebrew-and-Aramaic idiom borrowed mostly from German, but also from Slavic and other languages of their successive environments through which they traveled and periodically settled (Kriwaczek 2006, 40-48; Harshaw 1990, 5-7). Thus, Yiddish is a transplant and very much a language mix (like English and many languages are). Estimates generally have 15-20% of Yiddish being from the original Hebrew-Aramaic vocabulary, and 80-85% borrowed from German, etc. Similarly, only 15% of Old English continued into modern English; the other 85% was lost, being replaced by words from French, Latin, and other languages from which we English speakers borrowed (Baugh and Cable 55). While the details of Uto-Aztecan's prehistory may yet require lifetimes to unlock, Uto-Aztecan seems to have a higher percentage of its basic vocabulary from Near-Eastern languages than Yiddish has. For example, Yiddish pronouns are all from German, whereas most UA pronouns match Semitic (see section 3 on pronouns). Most Yiddish body-part terms are from German—kop (head), oig (eye), oi'er (ear), hant (hand), hartz (heart), k'nee (knee), fus (foot), etcetera—while a higher percentage of UA body-part terms, animal terms, and basic nouns of nature match Semitic or Egyptian (see section 7.4).

The two forms of Semitic are both Northwest Semitic, though often quite distinguishable, but not always. Two separate sets of sound correspondences distinguish most of the vocabulary as noted previously, but not all. The exact nature of each remains to be clarified. While Semitic-kw exhibits Phoenician-Hebrew like features and Semitic-p has Aramaic-like features and vocabulary, it also has Hebrew-like features. These kinds of unique sets of features are typical of related languages. For example, the language of the Book of Job is unique: though labeled Hebrew, it contains features more Arabic-like and Aramaic-like than the Hebrew of the other authors. The language of the Nabateans, though primarily an Aramaic dialect, was also more Arabic-like than other Aramaic dialects. So any diffused offshoot can be expected to be a unique combination of features.

Regarding the Aramaic leaning of the Semitic-p, some scholars (Young 1993, 54-62, 85-86) note that Aramaic did influence the dialects of ancient Israel, especially northern Israel. What is not known is the degree or extent, though it may have been more significant or pervasive than presently known. These data may be relevant to that void in present knowledge. Marsha White (1997), in a review of Young 1993, summarizes Young's substance more clearly and concisely than either I or Young could: "Young … suggests that Biblical Hebrew goes back to the adaptation of the pre-Israelite Canaanite prestige language…. Thus, from the beginning of Israelite history there were two linguistic strata: literary/formal and dialectical/colloquial. This situation of diglossia persisted throughout pre-exilic Israelite history…. The best explanation for … so many Aramaisms in the early literary language is that they were in the lower (i.e., spoken) form of the language, and that Archaic Biblical Hebrew was open to elements from the underlying

dialects. The strong presence of Aramaisms in the oldest Biblical Hebrew undermines the theory that Aramaisms equals late" (White 1997).

This all aligns well with the likelihood of Aramaic substrata serving as underlying dialects to the literary language of Canaanite/Hebrew, perhaps throughout the Northern Kingdom's centuries. What language did the mothers of the Israelites (Leah and Rachel) speak? Aramaic! In addition, Aramaic was somewhat a lingua franca throughout most of the area through most centuries. So did the Israelites really set aside Aramaic upon entering Canaan? Or did they adopt degrees of bilingualism while adding the Phoenician/Canaanite literary language? The latter is likely nearer the case in some areas, if not most. Yet many UA features match reconstructable Hebrew/Phoenician better than they match other Semitic languages:

	Uto-Aztecan		Hebrew	Arabic	Aramaic	Akkadian
(1)	***-ima** (pl suffix)	Semitic masc pl:	***-iima**	-uuna/-iina	-iin	-uu
(904)	***-te** (pl suffix)	Semitic fem pl:	***-ooteey**	-aat	-aat	-aat
(2)	***na-**	reciprocal/passive:	***na-**	in-	--	
(3)	***yasipa**	'sit / dwell'	***yašiba**	waθaba	yəθeb	

The UA basic vocabulary in this work are numerous: body parts, plant and animal terms, nouns of nature (sun, moon, star, sky, rock, water, etc (see 7.4). A considerable amount of Semitic morphology or fossilized parts of Semitic verb conjugations are found in UA. Below are three groups.

(1420) Semitic nwr 'to make/become light' with infinitive and imperfective: -nuur(u), and perfective naar: UA has both in Eu nurú 'to dawn, become light' and Tbr nare 'to dawn, become light'.

Uto-Aztecan has four separate forms from the verb bky /bakaa 'to cry, weep':
(559) Semitic-p bky/ bakaa 'he cried, wept'; Syriac bakaa / baka' > UA *paka' 'cry'
(24) Semitic-kw bky/ bakaa 'he cried, wept'; Hebrew baakaa > UA *kwïkï / *o'kï 'cry'
Because bilabials as first segment in a cluster disappear (-bk- > -k-), the imperfective 3rd person masculine singular *ya-bkV 'he/it weeps' with imperfective prefix originally *ya- (later yi-) also matches UA *yakka
(560) Semitic *ya-bka^{y} 'he/it weeps, cries, m.sg.' > UA *yaCkaC > *yakka / *yaka 'cry'
(561) Semitic *ta-bka^{y} 'she/it weeps, cries, f.sg.' > UA *takka > NP taka 'cry'.

So Northern Paiute has both the masculine 3rd sg of *ya-bka > yakka and the feminine 3rd singular *ta-bka > UA *takka 'cry' (and geminates/doubles the middle consonant in both as well), and also has the perfective stem in UA *paka' of Semitic-p and also *kwïkï/*o'kï of Semitic-kw.

Uto-Aztecan also has three separate forms from the Semitic root ktš 'grind': the imperfective verb stem in most languages, a perfective qittel in Yaqui, and a noun 'grindstone' in most languages:

	Hebrew root ktš 'grind'	UA
(1094)	impfv -ktoš (< *-ktusu) 'pound, grind'	*tusu 'grind' with loss of 1st C in a cluster
(615)	*kitteš (< *kittaš) 'grind'	Yq kitte / kittasu 'grind'
(614)	makteš 'mortar, grinding stone'	*ma'ta 'mortar, grinding stone' and Ca mataš

Of interest is the denominalized verb Ca mataš 'crush, squash, vt' showing final -š and a medial cluster or geminated *-tt-.

In addition, many unusual semantic combinations in Semitic and Egyptian are preserved in the corresponding UA sets. Besides the examples below, many more are at 7.5.

(283) Eg qm' 'create' and 'mourn' > UA 'make, create' and 'mourn'
(332) Egyptian qrḫt 'serpent', Egyptian qrḫ 'friend, partner' > UA/Nahuatl koŋwa 'snake, twin'
(406) Egyptian b' 'ram, soul' > UA *pa'a 'mountain sheep, all living beings'
(98) Hebrew rqʕ 'stamp, beat out (metal), spread out'; Hebrew raaqii^{a}ʕ 'extended surface, expanse, sky'
> UA *tukuN- in * tukuN-pa 'sky' and 'metal' in the Takic languages.
(994) Ls qáya/i- 'blow down (a tree)' (which is the same result as 'uproot')
and Ls qáya/i- 'heal' are listed as separate verbs in the Luiseño dictionary, though phonologically identical, yet the corresponding Syriac verb ʕqr also means both 'uproot' and 'heal' (ʕəqar or -ʕqar > qayV).

Stress in UA prehistory is a complex issue, which the data in this work may have some potential to help clarify. In *Uto-Aztecan: A Comparative Vocabulary*, I wrote "In the reconstructions I do not deal with vowel length, only vowel quality and consonants. Figuring out PUA vowel length may fill another lifetime, but not mine. Reduced consonant clusters with compensatory vowel lengthening underlie some long vowels in UA, raising doubts about vowel length until the medial clusters are clarified. That and changing stress patterns—causing vowel lengthening with stress, or shortening or syncope without stress, in the various branches and languages through the layers of time—make the puzzle of PUA vowel-length quite unappealing to me, if not presently impractical" (page 1). Likewise in this work, only vowel quality, but not vowel length, is represented in the UA reconstructions, though I will say the following about stress.

Proto-Semitic *bas$_2$ar 'flesh' > Hebrew bááśaar 'flesh, penis'; Aramaic bəśár 'flesh'; Arabic bašar. Note that in UA the originally stressed vowels retain their quality, while the unstressed vowels do their typical unstressed schwa-like behavior, which in UA is V > ï or i. Hebrew's stress on the first syllable shows Semitic-kw (Hebrew/Phoenician) bááśaar 'flesh, penis' > UA *kwasi 'tail, penis' (5); and Aramaic's stress on the 2nd syllable has Semitic-p (Aramaic-like) bəśár > UA pisa 'penis' (550). In both cases the originally stressed á remains a, but unstressed a > i in both cases, regardless the present or intervening stress patterns of the various languages' reflexes. See also Hopi in 174, and stress-related details in 611, 933, 1015, 1056.

Works establishing language relationships often include only matches of reconstructible forms with *identical* meanings and later are added matches of probable, but less than identical meanings. However, (1) I cannot assume the luxury of such a lifespan; and (2) am tired of writing huge, detailed reference works after 30 years of doing so; and (3) I care not to exclude probabilities to be added later in yet another huge detailed reference work. So, if the reader prefers, (s)he can toss the 100 or so of less than identical meanings, and consider only the other 1400 matches. However, I include from the start what I consider reasonable, and will leave it to coming generations to do whatever debating and sorting they think best. Nevertheless, I do identify those sets with [iddddua] meaning 'if desired, delay differing definitions until acceptance'.

Nevertheless, the less-than-identical semantic inclusions have changed meaning in understandable ways:
(734) Hebrew mə-ṣuudat 'net, prey' i.e., game > UA *masat / *masot 'deer';
(720) Hebrew nebɛl 'skin-bottle, skin' in the common phrase of Hebrew nebɛl yayin 'skin of wine';
Syriac nbl / nʼbl > Classical Nahuatl noʼpal-li 'prickly pear' often used to make alcoholic beverage;
(675) Hebrew ɧnp 'limp'; Arabic ɧnp 'have distorted foot, be curved, pigeon-toed, walk bow-legged with toes inward' (like turtles, badgers, and bears) > UA *hunap- 'badger, bear'; Arabic uses this stem for 'tortoise' and 'chameleon' while the UA match is 'badger' and 'bear' all having similar turned-in feet;
(724) Semitic parʕoš 'flea (jumper)' (< Semitic verb prʕš 'jump') > UA *parʼosi / *paroʼosi 'jackrabbit'; the jackrabbit, like the flea, is also a jumper, and in UA *paroʼosi 'jackrabbit' we see all 4 consonants and 2 identical vowels in two of the most extraordinary jumpers of the animal kingdom.

I express thanks and admiration for many fellow Uto-Aztecanists. Beyond founders of comparative UA, like Edward Sapir, Kroeber, Whorf, Hale, the Voegelins, and Wick Miller, several contemporaries continue. Alexis Manaster-Ramer (AMR) through the 1980s and 1990s published several illuminating insights that I am not sure anyone else would have figured out. Manaster-Ramer (and Bright 1993) noticed consonant clusters, like the -p- in *kapsi 'thigh' (294 Egyptian xpš 'thigh') that everyone else had missed for a half century of reconstructing *kasi. He noticed many final consonants, like -R- in *yakaR 'nose, ridge' (1279 Aramaic *yagar 'hill'). His figuring out *tw > kw (1991d, 1992d, 1993a) is also impressive, and *-c- > NUA -y- (1992a), etc. As Serrano (Sr) may best preserve PUA phonology, we are indebted to Kenneth C. Hill (KCH) for his founding works in Sr (grammar and dictionary); his noticing Sr's "pharyngealized and retroflex" vowels is impressive. White Mesa Ute (WMU) also has strong pharyngealization. His noting the pharyngealized vowels or rounding with retroflex in Sr (not as apparent in other UA languages) is regularly significant to Semitic pharyngealization. Ken Hill also revised and added to Miller's huge 1988 work. Other major contributors to comparative UA include Jane Hill, Pamela Munro, Jeffrey Heath, David Shaul, Jason Haugen, William Merrill, Karen Dakin, Zarina Estrada Fernández, Lyle Campbell, Ronald Langacker, Andrés Lionnet, Terrence Kaufman, Jose Luis Moctezuma Zamarron, and Catherine Fowler. Ronald Langacker (1976b, 1977a) and Jason Haugen (2008) have also authored excellent books on UA grammar. The above and other linguists, too many to mention, have contributed dictionaries, grammars, and articles on individual UA languages. Many linguists in Mexico continue to add valuable documentation to UA languages in Mexico. Knowing the arduous load of life-long linguistic labors, I laud all the above and many other researchers (see bibliography) with deepest respect for their many valuable contributions.

1.1 Some Basics of Linguistics (Language Science)

1.11 Language Families and Similarities by Coincidence, Contact, or Descent

A language family is a group of related languages, descended from the same parent language. The parent language may be a well known language like Latin whose descendants are Spanish, Portuguese, French, Italian, and others, or it may be an ancient proto-language, unknown except as reconstructed by linguists. Knowing how languages and sounds typically change, linguists can examine a group of related languages descended from a common parent language and reconstruct many words and features of that ancient parent language, though unknown and unwritten. Such a hypothesized parent language is called a proto-language. Thus, Proto-Uto-Aztecan (PUA) is the hypothesized ancient parent language of the approximately 30 Uto-Aztecan languages. Likewise, the parent language of most European languages and of several Asian languages that have been demonstrated to be related is called Proto-Indo-European. The first step is to demonstrate relatedness, thoroughly treated in Campbell and Poser, 2008.

When two languages have similar words with similar meanings, those similarities can be due to (1) chance / coincidence, (2) contact—that is, neighboring languages usually borrow words from each other, which borrowings are called loanwords—or (3) common descent from a common source or parent language.

Coincidence: When randomly comparing any two languages, chances are that 1% or even 3% of their vocabularies can yield chance similarities. The shorter the words and the fewer the number of sounds, the higher is the probability of chance similarities. For example, 15 consonants (C) and 5 vowels (V) may yield 75 CV patterns (15 x 5; C = any consonant; V = any vowel) or 1,125 CVC patterns (15 x 5 x 15) or 5,625 CVCV patterns. When comparing the basic vocabularies of say 2000 words in two languages with short morphemes (parts with meaning) of CVC length and limited phonological inventories (number of sounds), two matches by coincidence are likely. When adding those with "kind of similar" sounds, like b and p, or d, t, and r to count as matches, then 20 or so (1%) are likely. Languages with longer words and more sounds provide lower percentages of probability for chance similarities; nevertheless, any two languages can and usually do have some similarities by coincidence.

Contact: the number of loanwords between neighboring languages depends on how long they are neighbors, the people's attitudes toward their neighbors and their languages, political dominance, and such things. For example, even though English belongs to the Germanic branch (sub-language family) of Indo-European (the larger language family), the words on a page of written English are typically about half loans—many from Latin, when Latin was the Medieval language of academia and English was not allowed in the schools, and even more from French, when the Norman French ruled England for three centuries, and some from Greek and other languages.

Cognates are the related words in related languages, as those words descended from the same proto-form or original ancient word. Related languages yield several of these descended sets of related words, and each set of related words is called a **cognate set**, a set of related words descended from the same proto-word.

All living (spoken) languages are always changing. Though slow, the change is inevitable. After a population separates, the languages of the separated groups gradually change. Some meanings change, some features of grammar change, and some words lose sounds and/or change other sounds, and some words are replaced. In spite of the inevitable change, linguists have found that in related words the sounds change in consistent ways. For example, Proto-Indo-European (IE) *p remained p in Latin and Greek, but consistently changed to f in Germanic. When a number of words or cognate sets exemplify each sound change with a consistent pattern of sound change, with few exceptions, that pattern sets up what is called a **sound correspondence**: that is, Germanic f corresponds to Greek p, or IE *p > Greek p (> means 'became' or 'changed to'), also IE *p > Latin p, and IE *p > Germanic f. Likewise, IE *k > Greek k, > Latin k, > Germanic h. That is, because sounds do not change randomly, but in consistent patterns, the same sound will change the same way in the same language in the same phonological environment (environment of surrounding sounds). When two languages exhibit a decent percentage (say 10% or more) or a sizable number (say 100 or more) of their respective vocabularies to be similar in meaning and to establish a consistent system of **sound correspondences**, usually amounting to dozens or hundreds of relatable words, then the chance of such a sizable correlation of similarities happening by chance is zero, and the two languages or that group of those languages' similarities are deemed due to descent from a common origin.

Another way of saying "correspond to" is that Germanic f **reflects** (corresponds to) IE *p, or that f is the Germanic **reflex** of IE *p. A **reflex** can be a corresponding sound or a corresponding word: so father is the English **reflex** (cognate) of IE *pater, and f is the English **reflex** (sound correspondence) of IE *p.

Some Indo-European Cognate Sets and Sound Correspondences

English	hound	water	thou	daughter	tooth	heart	foot	father	knee	two	three
German	hund	wasser	du	tochter	zahn	herz	fuss	vater	knee	zwei	drei
Greek	kuon	hudor	su	thugater	dont-	kardia	pod	pater	gonu	duo	treis
Latin	kanis		tu		dent-	kord-	ped-	pater	genu	duo	tres
Sanskrit	śvan	udakam	tuvam	duhitar	dant-		pad	pitar	janu	duva	trayas
Hittite	--	watar	tuk	--		kart	pata		kenu	twi	tri

(Cambell 1999, 137-41; Beekes 1995, 208)

An asterisk (*) marks a hypothetical original or earlier form as reconstructed by linguists, an unattested form that the attested descendant forms derived from. One can see above in the cognate sets for 'foot' and 'father' that an original Indo-European *p consistently changed to f in English; and an original *t changed to th, as in 'thou,' 'tooth,' and 'three'; and Indo-European *k > h in the Germanic languages as is apparent in words for 'hound' and 'heart'. However, Indo-European *p, *t, *k remained p, t, and k in Latin; so the results of those sound changes provides a set of sound corredpondences between Latin and English:

Proto-Indo-European	*p	*t	*k
Latin	p	t	k
English	f	th	h

Similarly, for every pair or group of related languages, a system or set of sound correspondences will emerge. One might also notice a larger pattern—that the stops (p, t, k) generally became their corresponding fricatives (f, th, h)—such that all three patterns or systems constitute a larger pattern or system: stops > fricatives (for stops and fricatives, see pp. 18-19). Such multi-tiered patterns and systems of systems are typical of language change. And because linguists have found sound correspondences or consistent sound change to be a principle between related languages, they require that in order to prove a genetic or common-descent relationship between languages, one must establish the sound correspondences, as well as some grammatical or morphological similarities.

The lexical (word) comparisons between Semitic and Uto-Aztecan, as well as between Egyptian and UA, yield a consistent set of sound correspondences, as consistent as has been established for many other language families and a little more consistent than occurs within UA itself, as these ties explain many of the medial consonant clusters that have remained mostly mysterious to Uto-Aztecanists to date. Nevertheless, all language families yield a few apparent exceptions, though for some, an explanation is found later.

Glottochronology is the study of the **rates of language change**, or more specifically, rates of word retention (words kept) vs. replacement (words lost by substitution) over time. Two languages recently separated would still have a great majority of their words in common. For example, the recent separation (ca. 700 years ago) of the Apachean branch of Athapaskan has Navajo and the Apache languages generally retaining 93% or more of their vocabulary in common. In contrast, the Indo-European languages separated several millennia ago and share much smaller percentages of vocabulary, though enough to assure their relatedness. However, linguists find that **rates of language change** are subject to many variables, most of all the **type and intensity of contact** with other languages. For example, Icelandic, isolated in the Atlantic, did not change from its Old Norse ancestor as fast as Norwegian did in being more subject to other close and neighboring European languages.

Comparative size of neighboring languages matters. The Native American languages in the U.S. are tremendously outnumbered; thus, many became moribund (nearly dead) in two or three generations. Consider languages spoken by immigrant families: German, Dutch, and Italian immigrants to the United States may or may not learn English; their children are often bilingual, knowing their parents' language and the more prevalent language English; however, their grandchildren are often monolingual speakers of English, who may or may not understand what their immigrant grandparents say. **Political or cultural dominance** of a language may allow the language of a minority to have more influence than expected. The Norman French conquered England in 1066; though fewer in number, their political dominance in Middle English brought more French into English than the 15% of Old English that survived into modern English.

1.12 Morphology (Word Formation) and Syntax (Word Order)

A **morpheme** is a unit of meaning, and **morphology** is the study of how morphemes combine to form words or larger units of meaning. Just as a phoneme is a segment of sound or the smallest unit of sound (consonant or vowel), a **morpheme** is the smallest unit of meaning. For example, typical morphemes in English are cat, mouse, -ness, -ful, -less, un-, dis-, and -er, in words such as use-ful, use-less, use-ful-ness, dis-heart-en-ed, un-settle-ed, un-fruit-ful, and wash-er. Morphemes can be undividable words, prefixes, or suffixes. Prefixes and suffixes are both affixes that can be combined to the front or back of a stem respectively. Irresistable contains four morphemes. Re-sist literally means 'stand back' or in order of occurrence 'back-stand'. With the suffix -able added, re-sist-able means one is 'able to stand back or stay away from something'. The Latin prefix in- (meaning not) **assimilates** or changes to **ir-** before words beginning with r. So ir-re-sist-able breaks down to not-back-stand-able. Likewise, irrevocable means not-back-call-able or not able to call back.

Some morphemes or rules for morpheme combining are **productive** and some are not. A process or phenomenon in language that still happens readily is said to be **productive**, that is, it still produces new forms. If a previous language rule is no longer in effect, but the results of the once existent rule are apparent, then those resultant forms are **fossilized** forms. For example, prefixing *with-* 'against' to verb forms was once a productive rule in older English, but no longer is; nevertheless, we have a number of fossilized forms resulting from that once existent rule: withstand; withhold; withdraw.

By '**rule**' linguists mean a mechanism of language usage that native speakers use to structure their language, whether consciously aware of it or not. In fact, most of what native speakers know about how they create language is subconscious knowledge. They are not even aware of most of the rules that they use to create language. For example, consider the following misuses:

*Her saw he.
*After them beat we in tennis, us treated they to dinner.
*The tracks were hard for I to see, but me followed they until him appeared and scared I to death.

These are simple reversals of subject vs. object pronoun forms, yet most five-year-old preschoolers do not make such mistakes. At the very beginnings of learning a language, a two or three-year-old toddler may say something like "me want a cookie," but usually by four or five, their subconscious minds have figured out what the subject forms are, what the object forms are, where the subject slots are, and where the object slots are, and get it all 95% right without any formal education. About 4th grade the formal instruction begins and is repeated for eight consecutive years until they arrive in college, where I ask them what the grammatical subject is of a sentence on the board, and a handful know consciously. So by age 20, their conscious minds cannot remember how to identify the subject after several years of teaching their conscious minds, yet their subconscious minds knew by age five before they even started school and never forgot. For several other examples of subconscious language knowledge see "The Subconscious Mind's Role in Language Acquisition" in *Morsels for the Mind* (Stubbs 2009) and "The Language Instinct" (Steven Pinker 1995).

Besides common vocabulary revealing consistent systems of sound correspondences, related languages normally have some similar patterns of morphology or share morphological correspondences as well. A Germanic characteristic that disappeared from English shortly after the Middle English period was **conjugated verb forms**. These were still productive ('alive and well') in the early seventeenth century when the King James scholars translated the Bible. Note how similar the conjugated verb forms of earlier English are to those of German:

I	bind	ich	binde
thou	bindest	du	bindest
he	bindeth	er	bindet

Verb conjugation patterns are part of a language's morphology, but sometimes tend to be simplified over time and often eliminated, as they were in English. Something similar might be expected to happen to Navajo over the coming decades. The conjugation patterns of Navajo verbs are more complex than any Indo-European language. That complexity and Navajo's extensive contact with English combine to make

such a simplification likely. In fact, I have heard that in some areas or among some younger speakers, such simplifications are already underway. The Semitic languages also have specific verb conjugation morphology, which is no longer productive in UA, but have left hundreds of fossilized forms in UA.

For another example of shared morphology in the larger Indo-European language family, note the similarity of the primary verb endings in Sanskrit, Hittite, Greek, Latin, and Gothic, an East Germanic dialect of about A.D. 900 (Beekes 1995, 232):

	Sanskrit	Hittite	Greek	Latin	Gothic (Germanic)
I (verb)	-mi	-mi	-mi	-m	-m
You (verb)	-si	-si	-si	-s	-s
He (verbs)	-ti	-ci-	-ti	-t	-t

The conjugation of the IE verb *be* also shows morphological correspondences (Campbell 1995, 318):

	Sanskrit	Hittite	Greek	Latin	Gothic	Enlgish
I am	asmi	—	eimés	sum	im	am
He is	ásti	estsi	estí	est	ist	is
They are	sánti	asantsi	eisí	sunt	sind	Spanish: son

The second row (he is) is the source of English *is* (from Germanic *ist*) and Spanish *es* (from Latin *est*). We can also see in that same line of forms that final sounds are progressively left off over time. The older languages have the longer forms.

Syntax refers to the order of words and morphemes. An example is the **basic word order** of main parts of a sentence. The basic word order of English is subject-verb-object (SVO). Other languages have very different word orders. Consider these parallel sentences in five languages:

English: The tall man ate a red apple with a knife.
Spanish: El hombre alto comió una mansana roja con (un) cuchillo.
Navajo: hastiin néz bilasáana łichí'igii beesh yee yiyíiyáá'
man tall apple red knife with it-he-ate
White Mesa Ute: pa'átïm ta'wáč aká-ġar apïs tïkkái wiíč-Im
tall man red apple ate knife-with
Hebrew: 'akal ha-'iiš hag-gaboah 'et hat-tappuax ha-'adom bə-sakkiin
ate the-man the-tall the-apple the-red with-knife

In contrast to the word order of English (SVO), the word order of Navajo is subject-object-verb (SOV), and Hebrew is usually (VSO), but can be any order, and Aramaic is often verb-final (SOV). Besides basic order of verbs, subjects and objects (SVO, SOV, VSO), some languages put adjectives before nouns, like English and Ute, while others put adjectives after nouns, like Spanish, Navajo, and Hebrew.

Interestingly, VO languages generally have **prepositions**, as do English, Spanish, German, Hebrew, Arabic, and Samoan, while verb-final languages (OV) generally have **postpositions** as do Navajo, Ute, and many Native American languages. The preposition vs. postposition phenomenon relates to OV vs. VO word order, in that these relating words often connect verbs and their objects, thus coming between them. So we frequently see verb-preposition-object in SVO languages, and object-postposition-verb in SOV languages.

Like Old English, German, Navajo, Semitic, Spanish, and many Indo-European languages, conjugated verbs are part of the morphology of many languages. In UA we see many fossilized remnants of the Semitic verb conjugations, though not any full or productive systems of Semitic conjugations. For example, from the Hebrew root ktš 'pound (in a mortar), grind' are three very differently shaped items:

Hebrew	UA
impfv -ktoš (< *ktusu) 'pound, grind'	*tusu 'grind' with loss of 1st C in a cluster (1094)
unattested *kitteš (< *kittaš) 'grind'	Yq kitte / kittasu 'grind' (615)
makteš 'mortar, grinding stone'	*ma'ta 'mortar, grinding stone' (614)
	especially *mattas > Ca mataš 'to crush, squash, vt'

1.13 Historical Linguistics and the Comparative Method

The science of linguistics has various branches. Applied linguistics applies linguistic insights to facilitate second language learning; theoretical linguistics deals with competing theories of grammar and explores how the mind creates language; socio linguistics focuses on how language usage varies in various social contexts. Historical linguistics deals with the histories of languages or how languages change over time. Thus, language relatedness and studies in language families and how the related languages have changed from the original or proto-language all belong to the realm of historical linguistics, also called diachronic linguistics. **Synchronic** has to do with one-time (syn 'one' + chron 'time'); so a synchronic view of a language is a snapshot of it as a cohesive entity at one point in time. **Diachronic** refers to two different times on a spectrum, or comparing the changes in a language from this time to that time. Some features of language can be explained synchronically as the language exists at any given point; other features are better understood diachronically wherein some history of the language clarifies matters. As historical linguists compare related languages and map the changes of the various languages over time, their work is necessarily diachronic in nature. Their systematic comparisons that establish languages as related in a language family are called **the comparative method**.

The comparative method consists of (1) establishing a system of sound correspondences for (2) a sizable quantity of vocabulary; (3) identifying morphological parallels, and to lesser degrees, (4) similarities in syntax and (5) unusual semantic combinations. Syntax is limited in possible options—OV vs. VO, noun-adjective vs. adjective-noun, etc—and syntax can change quickly. Thus, categories (4) and (5) are less applicable than the first three. Yet the Egyptian and Semitic in UA provide numerous examples in all categories except (4) as syntactic options are simply not numerous, whatever the language.

The strength of the comparative method was impressively demonstrated in the discovery of Hittite. Based on evidences in the IE languages known at the time, a Swiss linguist named Ferdinand de Saussure in 1879 **reconstructed** certain laryngeals (guttural-like consonants) in the proto-forms of some IE words. (A **reconstruction** of a **proto form** is what linguists theorize the original form of a word to have been in the **proto-language** or the ancient parent language from which the later known languages are descended.) In other words, he theorized that those laryngeal consonants had existed in some original IE words even though those sounds did not clearly exist in any of the daughter languages known at the time. In 1906, the capital of the ancient Hittite Empire was discovered. In 1915, Hrozny, a Polish linguist, deciphered the Hittite language inscribed on thousands of clay tablets, and Hittite was found to be an IE language. (The Hittite word for water is watar and knee is kenu.) Not only was Hittite found to be an IE language, but Hittite contained the laryngeals that Saussure, by the comparative method, had predicted decades earlier as being in the original Proto-Indo-European language (Beekes 1995, 101-2; The New Encyclopedia Britannica 1997, 608).

Besides establishing language families, the comparative method helps to discern branches within a language family and to trace details of language change. One can imagine that an ancient unified people did not separate into 30 different groups at once, but at first there may have been a two- or three-way split, then some time later additional split-offs occurred, and so forth—thus, the creation of **branches** within a language family. For example, the Germanic branch of IE consists of English, German, Dutch, Icelandic, and most Scandinavian languages, except Finnish. The Germanic languages are more closely related to each other than they are to the other IE languages. The Italic or Latin branch of IE consists of Spanish, French, Italian, Portuguese, and others. Many languages of India are descendants of Sanskrit as the Indic branch.

Branches are often identified by **shared innovations** or shared retentions. A shared innovation is a new change that a branch shares among the branch languages, but not with the other languages of the family. For example, an innovation of the Germanic branch is that the voiceless stop series (p, t, k) became fricatives (f, θ, h). Shared innovations in UA are that O'odham, Pima, and the Tepehuan languages of the Tepiman branch all have **g** corresponding to ***w** of the rest of UA, and **d** corresponding to ***y** of the rest of the family. When a branch of languages all share a feature or qualtiy that the rest of the language family does not have, then it follows that that group of languages developed that feature after leaving the main body of the language family, but before splitting into the various languages of that branch.

Along with all the niceties and usual consistencies revealed by the comparative method, a few inconsistencies, exceptions, and unresolved difficulties plague most languge families. As Salmons (2012, 111) notes in *A History of German*, "we expect, as we saw earlier, for sound change to be regular, but we find messiness in real historic data." Sometimes a subset of irregularities are later explained by a special

phonological environment or some other explanation that moves them from the "exception" pile to the "explained" pile, but such discoveries take time and only if a mind sufficiently insightful to see what no one has seen before happens along to reduce what remains mysterious. For example, after Jacob Grimm (1822) published the first Germanic sound shift, a group of unsettling exceptions continued ruining the aspired order, until Karl Verner (1877) figured out the explanation for some of the exceptions … but more than a *half century* later! May the progress of this work be granted equally spacious leniency! Yet an army of linguists works on Indo-European versus the sole soul in the proposed language tie of this work.

1.14 Phonology: Sounds, Sound Change, and Sound Correspondences

Phonology is **the study of sounds in language, their changes and effects on each other**. An understanding of phonology clarifies many mysteries about language. Our mouths produce consonant sounds by affecting the airflow in primarily three ways: the voicing vs. voiceless option, the manner of restricting the airflow, and the place in the mouth where that restriction happens. Thus, consonants are categorized by three features: voicing, place of articulation (contact in mouth parts), and manner of articulation:

Voicing can be perceived by putting fingers on both sides of the "Adam's apple" and saying a slow elongated *aaasssaaa*. Because all English vowels are voiced, one can feel the vocal cords vibrate while saying the voiced vowels *aaa….aaa*, but the vibration or voicing stops in the middle while saying the long voiceless …*sss*…; in contrast, when saying *aaazzzaaa*, the vibration never stops, because z is voiced. One can feel the vibration while saying **voiced** consonants (z, j, b, v, d, g, m, n), but there is no vibration, that is, no voicing while saying **voiceless** consonants (s, š/sh, č/ch, f, p, t, k).

Sounds are also classified by the **place of articulation** or the place where the airflow is most restricted. **Bilabial**s (p, b, m, f, v) are pronounced with the two lips. English f and v are actually pronounced with the top teeth and lower lip, but are close to bilabials. **Dentals** touch the tip of the tongue at or between the teeth (θ as in think, đ as in there). For **alveolar**s the tongue touches the alveolar ridge—the hard ridge behind the upper teeth (t, d, s, z, n). To do **palatals**, the tongue curves close to the soft palate curving behind and up from the harder alveolar ridge (š, ž, č, j). **Velar**s put the back of the tongue against the back of the roof of the mouth (k, g). **Uvular**s (q) are further down the back of the throat from velars. We do not have uvulars in English, but Arabic uvular q vs. velar k are apparent in Arabic qalb 'heart' vs. kalb 'dog'. **Pharyngeal**s, such as the voiceless and voiced pharyngeal fricatives of Arabic are articulated at the pharynx, even further down the back of the throat than uvulars.

The **manner of articulation** is a third feature of consonant sounds. For **stops**, the airflow is stopped (p, b, t, d, k, g). For **fricative**s, the airflow is not stopped, but produces friction at the greatest restriction in the vocal tract (s, z, f, v). An **affricate** is a combination of stop plus fricative (c or ts = t + s; č/ch = t + š/sh as in kitchen), that is, it starts as a stop but quickly releases into a fricative: so t and ts(c) and s are the voiceless alveolar stop, affricate, and fricative. In contrast, d, dz, and z are the voiced alveolar stop, affricate, and fricative. For **nasal**s, the airflow passes through the nose while the oral tract is closed at the lips (m), the alveolar ridge (n), or at the velum for the velar nasal (ŋ as in sing) with the back of the tongue in a position for saying k. The **liquid**s are l and r in English. The **glides** are y and w, slight closures of the vocal tract in the same positions in which the vowels i and u are pronounced; thus, they are also called semi-vowels. A simplified consonant chart follows:

Consonants

		bilabial	dental	alveolar	palatal	velar	uvular	pharyngeal	glottal
stops	voiceless	p		t		k	q		'
	voiced	b		d		g			
fricatives	voiceless	f	θ	s	š(sh)	x		ħ	h
	voiced	v	đ	z	ž(zh)	ġ		ʕ	
affricates	voiceless			c(ts)	č(ch)				
	voiced				ǧ/j				
nasals		m		n	ñ	ŋ			
liquids				l, r					
glides		w			y				

The phonetic description of a consonant consists of voicing, place of articulation, and manner of articulation—in that order. Therefore, p is a voiceless bilabial stop; g is a voiced velar stop; s is a voiceless alveolar fricative; j is a voiced palatal affricate; etc. All nasals, vowels, liquids, and glides are voiced in English, but not necessarily in other languages. For example, Ute has some voiceless vowels and Navajo has both a voiced l and voiceless ɬ.

We mentioned earlier the larger pattern that the IE voiceless stops (p, t, k) became voiceless fricativces (f, θ, h) in Germanic. We also mentioned the sound changes in Tepiman of Proto-Uto-Aztecan (PUA) *y > d, and PUA *w > g. As a larger pattern, the UA glides (y, w) became voiced stops (d, g) in the Tepiman branch, doing contact at the roof of the mouth where the glides come closest (w has lip rounding in front, but like u, the back of the tongue comes close to the velum where g is pronounced).

In Semitic exists a series of pharyngealized consonants. Besides the actual pharyngeals ʕ and ħ, described below, Semitic also has the emphatics or pharyngealized ṭ and ṣ. In contrast to a regular t, the pharyngealized ṭ of Semitic is pronounced with the tongue sounding as if retroflex, mainly because the back of the tongue is approximating the pharyngeal position, which affects the vowels, darkly coloring them and drawing them to the back, as in Arabic.

Sounds not discussed below are pronounced (more or less) like English:

ṣ Biblical Hebrew pharyngealized or emphatic ṣ (ṣade) is here symbolized with ṣ. The Hebrew ṣ became c (ts) in the Hebrew Semitic-kw of UA and in modern Hebrew, but became s in Semitic-p. UA ṣ is said to be retroflex.

d Egyptian d corresponds to Hebrew ṣ, and both Egyptian d and Hebrew ṣ of Semitic-p became or correspond to UA *s, though often Coptic t.

š is the sh sound of English ‘shave’ and ‘dish’; the š of Hebrew also corresponds to UA s.

c represents ‘ts’ as in ‘hits’.

č is the ch sound of ‘chop’, an allophonic variant of PUA *c (ts) above.

’ represents the Semitic aleph or glottal stop, as in English ə’o (uh oh) ‘woops’ and ə’ə ‘no’; the glottal stop also became w/o/u in UA (and became w in Arabic sometimes as well), and sometimes both a glottal stop and w (-’w- or -w’-), or round vowels adjacent to ’: o’o/u’i.

ʕ represents the Semitic ʕ (called ʕayn), a voiced pharyngeal fricative, not in European languages; it occurs twice in SaʕudiʕArabia; it has become a form of rounding (w,o,u) in UA, which is a natural change. In fact, evidence suggests that the pharyngeal ʕ was associated with rounding in Phoenician also (see page 56)

ħ is a voiceless pharyngeal fricative, a very guttural h (often transcribed as ḥ) not found in European languages; at the beginning of a word it became hu/ho in UA. Like the other pharyngeal (ʕ), ħ also became w/o/u, a form of rounding, in non-initial positions. Interestingly, x and ħ merged and became the same sound in Hebrew between 300 BC and Christ’s time when they both became ħ, but were different before 300 B.C. (Kutscher 1982, 13-18; Sáenz-Badillos 1993, 81). They are still separate in Arabic. The Semitic-p in UA shows the pre-300 BC distinction: the pharyngeal ħ appears as rounded forms, while the velar x remains k-like.

x is a voiceless velar (or uvular in Semitic) fricative or soft k, as in German nacht; x became *k in UA generally.

r of both Hebrew and Egyptian changed to UA *t at the beginning of a word. When not beginning a word, r remained r in some UA languages, but changed to y/i more often in Sem-kw; r > y/i is also common in languages world wide. Interchanges between r and l are also common in the Near East and in UA. In fact, Egyptian had only r that represented both the l and r of Coptic.

b of Hebrew became UA *kw (in dageshed positions: word initial or geminated/doubled) in the Semitic-kw contribution, but became UA *p in Semitic-p’s contribution to UA.

b, d, g devoiced and became p, t, k generally, another common change in languages world wide, since p is the voiceless counter-part of b, t of d, and k of g.

ṭ of Semitic is a pharyngealized or emphatic t, in which the tongue is rather retroflex or the back of the tongue approximates a pharyngeal.

ŋ is a velar nasal, the ng sound in sing.

t of Egyptian, i.e., the underlined t was originally different from t, but not for very long, since even in Egyptian, and consistently in UA, Egyptian t merged with and became t in UA (and in Egyptian).

-C is an unknown consonant that causes gemination or doubling of the next consonant. In UA, -C means a final feature (an underyling consonant) that doubles the next consonant, another common feature in many languages: like coC/com ‘with/together’ + labor > collaborate; com ‘with’ + sonare ‘sound’ > consonant.

Vowels are defined by the tongue's relative position to the roof of the mouth in a high-to-low, front-to-back grid: one can feel the tongue's blade near the top and front of the mouth when saying high-front i.

	front	central	back
high	i	ï	u
	I		U
mid	e	ə	o
	ɛ		
low	æ	a	

Thus, *i* is a high front vowel; *o* is a mid back rounded vowel; *a* is the low central vowel; *u* is a high back rounded vowel; *ï* is a high central vowel not found in English, but is common in Ute, Hopi, and many Native American languages. The vowel symbols have the following values: the i in machine, I in sit, e in they, ɛ in set/pet, æ pat/sat (for each one the jaw drops lower though they are all pronounced in the front of the mouth. In the middle are *ə* in rut, *a* in saw. At the back are u in blue, U in book/hood, o in goal/bowl/sole/soul. For those knowing Spanish, pronounce the 5 main vowels like Spanish, which is the original Latin pronunciation.

Vowel shifts happen in many language families. English changed the original Latin vowel values, some of them in a **vowel shift**, shifting the vowels clockwise: o > a (as in top), a > æ/e (tap/tape), e > i (keep). Uto-Aztecan also does some vowel shifts. For example, Cora (Cr) and Huichol (Wc) shifted some Proto-Uto-Aztecan vowels counter-clockwise: PUA *u > ï, PUA *o > u. Classical Nahuatl (CN) shifted *u one more slot: PUA *u > ï > i. So in CN, PUA *u and PUA *i merged (became the same sound) to CN i, so that CN i can be from either PUA *i or *u.

It is also worth noting that i and y are largely equivalent, perhaps a difference in length and/or intensity, but produced with the tongue in the same position. Say aaaiiiaaa slowly, then aia faster each time, and soon it sounds like aya. Likewise, aauuaa speeded up to aua a few times begins to sound like awa. So w and u are essentially the same sound, just as i and y are.

The English **plural suffix** -s exhibits three forms: -s, -z, -əz. A subconscious rule predicts when each of the three occurs. The rule is that (1) final voiceless sounds take voiceless -s: tops, pots, cakes; (2) final voiced sounds take voiced -z: tabs, pods, rags, rams, cans, laws, seas; and (3) final sounds similar to the -s (alveolar and palatal fricatives and affricates) require the intervening schwa vowel ə to separate the two similar sounds; otherwise, how would we make kiss plural—by adding a third *s* and pronouncing the three s's (kisss) as a real long *sss* sound? Examples of -əz include kisses, wishes, witches, judges, quizzes. The reason that the last has the form -əz instead of -əs is because vowels are voiced in English, so the sound before the s/z is the vowel ə, a voiced sound which results in voiced z.

The same rule applies to **possessives** of the form **apostrophe plus s** (-'s): Kate's hair, the rope's strength, the cake's frosting (-s); but Bob's book, Brad's cat, the dog's house, Tom's house, the car's door, Celinda's sorrel (-z); and for the sibilants (s and č-like sounds): Mitch's cat, the mouse's hole (-əz). **Third person singular present** tense verb forms also require suffixed -s, which also abide by the same rules: he stops, licks, writes, and laughs (-s); but she sobs, swigs, hides, loves, runs, hurls, sees, and believes (-z); and he wishes, she kisses, he squeezes (-əz), and they live happily ever after.

This shows that systematic patterns govern most of what happens in language. All three suffixed -s morphemes in English obey the same phonological rules and are entirely predictable according to specific patterns known only subconsciously by most speakers. Indeed, every language is a system of systems.

A similar rule governs whether the -ed suffixed to past tense regular verbs takes on a sound like -d, -t, or -əd. When the end of the word is voiceless, the -ed becomes voiceless -t: hopped, baked, missed (mist). When the end of the word is voiced, the -ed remains voiced -d: grabbed, hugged, freed, judged, called, crammed, bulged. When the word ends with a sound articulated (pronounced) at the same place as d (-d or -t), it requires an intervening vowel to sound like -əd: roasted, plodded, plotted, and greeted.

1.15 Sound Changes and How Sounds Change

Assimilation is often the force encouraging sound change. Sounds change, but in natural ways, which are usually explainable and are seen repeatedly in language families around the world. Assimilation is when one sound becomes 'similar to' another in some way. In fact, the word *assimilation* itself is from Latin ad 'to' + similis 'like', but when combined, ad-simil…> assimilate, because the -d- when next to -s- becomes

-s- also, becoming similar-to the s by becoming another s. Very often doubled letters in English are from two different sounds next to each other wherein usually the first becomes like the second, precisely because it is next to it. For example, the Latin prefix *in-* 'not' remained *in-* for indecent, insufficient, and incomplete, but the alveolar nasal (n) of *in-* changed to a bilabial nasal (m) when next to bilabial p in imperfect and impossible (n > m/_p; that means n changes to m before p), becoming similar to the bilabial. The *in-* prefix was entirely assimilated before l and r, merely doubling the following consonants as in illegal, illegible (n > l/_l), irregular, and irreverent (n > r/_r). Similarly, Aramaic *'illaa* 'if not, except, unless' derives from Aramaic *'in* 'if' + *laa* 'not': 'in-laa > 'illaa 'if-not'.

Similarly, Latin com- 'with' assimilates the m to the point of articulation (place of pronunciation) of the next consonant when compounded (put together with another morpheme): a couple of examples are com 'with' + sonare 'sound' > consonant 'with sound' (m > n/_s, because n, like s, is an alveolar); and com 'with/together' + laborare 'work' > collaborate 'work with/together'.

Similarly in UA, a nasal as first consonant of a cluster often assimilates to the second consonant of that cluster (linguists use N to represent any nasal or a general nasal), so

*-Nk- > -ŋk- (the nasal N becomes velar nasal ŋ, assimilating to the velar stop k);
*-Np- > -mp- (the nasal becomes bilabial nasal m, assimilating to the bilabial stop p);
*-Nt- > -nt- (the nasal becomes alveolar nasal n, assimilating to the alveolar stop t);

The above examples show that adjacent sounds tend to affect each other, that is, assimilate to each other or become similar to each other in some way or in all ways. Another example occurs in Semitic. In Arabic qatala 'he killed' and Hebrew qaaṭal 'he killed', this cognate pair has a discrepancy in two different kinds of non-corresponding t's: a regular t and the emphatic or pharyngealized ṭ. Both languages have both, but what happened is that in certain conjugations, such as the prefix/imperfective conjugation the q and t are adjacent or next to each other: Arabic ya-qtulu, Hebrew yi-qṭol. The q and ṭ are similar in being pharyngealized deep-throated, more guttural sounds, so as they came into contact with each other, the original -qt- cluster (as we see in Arabic) assimilated to become -qṭ- in Hebrew, and thus Hebrew changed an original -t- > -ṭ- due to assimilation in the frequent clustering of -qt-.

In the above examples, we see that the environment surrounding a sound is what often triggers (causes) a sound to change. In linguistic lingo **C** means any consonant or an unknown consonant, and **V** is any or unknown vowel. Word and morpheme structures can thus be represented as CVC, CVCV, CVCCV, etc. When a consonant is between two vowels (VCV) it is said to be intervocalic, inter- 'between' vocal- 'vowel'. Two consonants together (VCCV) are called a consonant cluster (see more on clusters below).

Vowels may also assimilate or become similar to adjacent consonants—wa > wo—and similar to vowels on the other side of consonants: suka > saka. Vowels assimilate to consonants quite often in UA. For example, Semitic baraq 'lightning' > Mayo berok 'lightning' changes the 1st vowel from a > e, raising and fronting to the place of contact of r in anticipating r. Likewise, the 2nd vowel changes from a > o, moving to the mid-back vowel o, closer to where the uvular q is pronounced in anticipating it. Another instance of the uvular q changing a vowel to a back round vowel is Semitic daqal 'kind of palm tree' > UA *taku 'palm tree'. In Semitic-kw especially, liquids l and r tend to raise the vowels before them or the vowels which are anticipating them (Semitic basar > UA *kwasi 'tail'), whereas Semitic-p does not (Aramaic bəsar > UA *pisa 'penis'; Aramaic dakar > UA *taka 'man').

A vowel may also partially assimilate to preceding or following vowels: suka > soka. One may notice on the vowel chart that *o* (mid back round vowel) is halfway from *u* (high back round vowel) to *a* (low central vowel), so a change in a vowel sequence of u-a > o-a is partial assimilation. Or two vowels may level each other in a compromise—u-a > o-o; a-i > e-e—where both vowels assimilate toward each other, becoming the vowel between the two. (See the vowel chart on page 12 and notice that *o* is between *u* and *a*; and *e* is between *a* and *i*.)

Consonant harmony is when one consonant becomes like another, though separated by vowels. Consonant harmony happens often enough in Uto-Aztecan: for example, Hebrew 'ari 'lion' > UA *wari > Tubar wawi 'mountain lion'. Other examples of consonant harmony are the three Tr variants—Tr ɾata-góbutu/ ɾata-gógutu / ɾata-bobutu 'have a fever'—and (853) Arabic *xunpusaa' / xunpus 'beetle'; Aramaic ƀippuušiit 'beetle, n.f.' > UA ***wippusa > *pippusi** 'stink beetle': Ch wiposat '13-line beetle'; Mn pipóisi/piboisi 'stink beetle'; NP pipuzi 'stink beetle'; Sh pippusi 'stink beetle'. Ch reflects the original initial consonant (w), from which the others harmonized the 1st consonant to the 2nd consonant (w-p > p-p). In addition, the UA vowels too are identical to Aramaic *-i-u-i.

Palatalization is also very common in Uto-Aztecan and in languages worldwide. For example, the alveolar t often becomes palatalized to č (ch) or c (ts) before high vowels and especially high front vowels i or e, during which the tongue is close to the palate (t > č or t > c/_i). Latin *-nate* of innate keeps its *-t-* sound, but in nation, with a following *i*, it palatalizes to *-š-*. Similarly in irritate and irritation, rotate and rotation, dictate and dictation. In Uto-Aztecan, any high vowel—i, ï, u (see top line of vowel chart, p. 20)—causes palatalization of t > č or t > c in some UA languages.

Many sound changes, if not most, are due to what might be called laziness or changes toward easier pronunciation. Assimilations make differing sounds more similar and therefore easier to pronounce, so making pronunciation easier could be viewed as laziness. An example is a change from contact to approximation or near contact, but not quite. The flap r, which involves the tongue's contact with the alveolar ridge, sometimes changes to almost contact or to y/i. The liquids becoming y/i (r > y/i; l > y/i) happens often enough. In English creoles, Dickerton (1981, 61) lists three English creoles in which 'for' became fo, fi, and foe. In Italian, many l > i, as in blanco > bianco. Lyle Campbell (1977, 97-100) shows Proto-Mayan *r > y in several Mayan languages. Also Hebrew r > UA y/i in Semitic-kw. German -r and British English and some Northeast U.S. dialects say -r as a vowel approaching the place of -r contact in a high vowel, though not quite as front as y/i, almost the high-central vowel ï of UA: German hier [hiï]; English better [bettï]. Likewise, Semitic l became y in some Ethiopic languages due to Cushitic influence (Kapeliuk 2002, 311). Other examples of change from contact to approximation are the intervocalic stops becoming fricatives: -b- > -v-, -k- > -x-, -t- > -θ-.

Another frequent change toward the easier is the change of the low vowel *a* > *ə*, because the mid-central vowel (ə) does not require the mouth to open as wide as is necessary for the lower vowel (a). In fact, any vowel *V* > *ə*, as mid-central ə is probably the easiest vowel to pronounce, because it is in the middle both directions, between high and low, and between front and back (also called the schwa vowel, the schwa in dud, sun). A prolonged utterance of əəəəəəəə does not make one sound very smart because it approximates what might come out when one is asleep with the mouth slightly open during a voiced exhale: əəəəəəəə.

Vowel centralization is, in fact, common in many languages, and involves (usually) unstressed vowels becoming centralized. One can see in the vowel chart that the vowel ə, is the mid-central vowel, the most central of all vowels, and that is exactly the vowel that most unaccented vowels become in English words of 3 or more syllables. Consider photograph and photography.

phótográph > fotəgræf
photógraphy > fətagrəfi

In phótográph the 1st and 3rd vowels are stressed and thus keep their more-or-less original values o and æ, but the unstressed 2nd vowel changes from o > ə. However, adding another syllable (-y) changes the stress pattern so that the 2nd and 4th vowels are stressed and keep their values, while the 1st and 3rd vowels both become unstressed and both become ə. Similarly, some UA languages tend to centralize unaccented vowels to UA's most central vowel ï, or sometimes to i, as i also does the stressless schwa role in UA too.

A **hyphen** signifies that something else exists in the direction of the hyphen. The prefix in- 'not, opposite' has a hyphen where the other morpheme follows. The English plural suffix -s has a hyphen on the front side to show that it comes at the end of the noun, with the word in front of it. Intervocalic consonants (between-vowel consonants) may be depicted as -r- because vowels are on both sides of it.

Lenition is a weakening of a consonant or partial loss of its definite qualities. Lenition often affects consonants between vowels. The sequence apa > aba has voiceless p becoming voiced b, because the vowels on both sides are voiced, which helped the intervening voiceless p become voiced b; likewise, aka > aga and ata > ada. These kinds of changes happened in UA and happened in the participles' change from Latin -atus > Spanish -ado. These changes are also an assimilation: the voiceless stops became voiced stops similar to the voiced vowels around them. Another common intervocalic change is frication of a stop, changing a stop to a fricative. It happened to the intervocalic Hebrew stops: -b- > -v-, -d- > -đ- (as in the), -g- > -ġ-, -p- > -f-, -t- > -θ- (as in thin), -k- > -x-. In UA, the intervocalic environment caused changes that included both frication and voicing of the originally voiceless stops, that is, voiceless stop -p- > -v-, a voiced fricative, and *aka > aġa, and *ata > ara, changing t to a Spanish flap r. Between vowels, a natural pattern of sound change is for voiceless stops to become voiced, then the voiced stops become fricatives, then the voiced fricatives disappear. The last step happened in the change from Latin to Spanish: Latin credere > creer 'believe' of Spanish, Latin legere > leer 'read'. Also Latin ego > eo > yo 'I' because e is close to i/y.

Occasionally changes go the other way, from less intense to more intense. For example, while v > w is frequent enough, the change of w > v also occurs. In Hebrew, w came to be pronounced v in some Hebrew dialects and thus in Modern Hebrew also. The name of Adam's wife Eve was originally Hewa; thus, w > v. The English name Eva at least keeps the vowels, Eve even lost the pronunciation of the last vowel as well. I have also heard some Arabic speakers pronounce Arabic w as v. Also in UA is evidence for some *w > v, to be discussed later.

Loss of sounds over time is also frequent, especially at the beginnings and ends of words or morphemes, like the initial k and final silent e of knife, both of which used to be pronounced. All the silent e's when found at the ends of English words used to be pronounced, but they became silent or lost, though still written. Similarly, at the beginnings of words, the h in honor, hour, herb, and all initial-h words in Spanish, like hablar, hermano, etcetera, all became silent. Loss of final sounds happens in Semitic languages too. Arabic 'akala 'he ate' and Hebrew 'aakal 'he ate' show the loss of a final vowel in Hebrew. In fact, Hebrew lost most short final vowels of an earlier *-iima > -iim 'Hebrew plural suffix'; *ta-ktušu > ti-ktoš 'she pounds/grinds in a mortar'; etc. Hebrew also lost final consonants sometimes. Arabic 'akalat 'she ate' and Hebrew 'aklaa 'she ate' show loss of final t in Hebrew and loss of the middle vowel. Arabic reflects Proto-Semitic better than other Semitic languages in most ways.

Consonant clusters (groups of consonants clustered without vowels between them) may also tend to be reduced to one consonant, such as the loss of the gh sound in the cluster of -ght- in English daughter vs. German tochter (both pronounced) and Greek thugater (consonants separated, not clustered), and the loss of gh/k in night and Spanish noche vs. German nacht and Latin nokt-. We no longer pronounce the -gh- in night, but we still say the -k- in nocturnal, as an English loan from Latin. Examples of consonant loss in cluster reductions in UA include Hebrew makteš 'grinding stone' > UA *ma'ta 'grinding stone'. Many UA languages have intervocalic *-p- > -v-. That happens in Hopi, the Numic languages, and others. So when we see a -p- between vowels, it is due to an underlying consonant cluster being reduced to -p-, but showing -p- (instead of -v-) because of -Cp- or the cluster strengthening the -p-: Egyptian **ḫotpe** 'peace' > Hopi **hopi** 'peace, peaceable' at (183); otherwise, *hopi > hovi. Also Aramaic **ḫippušit** 'beetle, n.f.' > UA ***wippusi** 'stink beetle' (853). The Arabic cognate **xunpus** shows a consonant cluster *-np- which always doubles the 2nd consonant in Hebrew and Aramaic (-pp-): Proto-Semitic/Arabic *-nC- > -CC-; thus, Semitic *xunpus / ḫippušit > UA *wippusi is a lengthy (6-segment) match. The -p- in Ch means original *-pp- in UA, and the vowels are identical to Aramaic *-i-u-i (853).

Relative to consonant clusters, the phonology (patterns of pronunciation) of some languages do not allow clusters. For example, 'Merry Christmas' in traditional Hawaiian is 'meli kalikimaka' because Polynesian languages do not normally allow consonants to cluster, and so the kr- and -tm- clusters of **Chr**is**tm**as are separated by vowels in the Hawaiian expression. Spanish does allow clusters, but has limits on initial clustering possibilities. For example, Spanish 'creer' starts with a cluster kr-, but English 'study' and Spanish 'estudiar' show that English allows initial st- clusters, while Spanish traditionally has not. One may also hear native Spanish speakers say a helping vowel before an initial -st- cluster, like 'estreet'. In the English word 'strengths' [strɛŋθs], one vowel amidst six consonants separates two clusters of three consonants each, which shows that English has an unusual tolerance for almost intolerable clustering compared to many languages. However, the loss of initial k- in English 'knee', 'know', and 'knife' means that even cluster-tolerant English has difficulty with initial kn-. We have no trouble with the same cluster between vowels (sickness, blackness), but initial kn- is more problematic.

Some languages' phonology systems prevent speakers from ending a word with a consonant or with certain consonants. In the merger of the Semitic-p and the Semitic-kw in UA, one or both may have developed a phonology that had all or most words ending with a vowel, because UA adds a vowel to many Semitic forms that would otherwise be consonant final. Yet that is one among many matters for future study.

Consonant clusters often lose the first consonant, sometimes doubling the second. We have already seen examples in English in-legal > illegal, in-responsible > irresponsible. Originally and in written English, debt has a consonant cluster, but the first consonant became silent and only the 2nd is pronounced. Liquids (l and r) are very prone to be lost or absorbed thusly: e.g., Latin ursus 'bear' > Spanish oso. English 'walk' and 'talk' and 'salmon' all have silent l as first consonant in consonant clusters. Similarly, the -l- was often lost as first consonant in a cluster in the change from Semitic to Uto-Aztecan also: Hebrew śəlaaw 'quail', pl: salwiim; Syriac salway 'quail'; Arabic salwaa 'quail'; Samaritan šalwi > UA *solwi 'quail': CN sool-in 'quail'; Mn sowi' 'pigeon'. So Mn lost -l- as first segment in the cluster. Latin ex- 'out' in English loans

sometimes remains intact: ex-tract, ex-cept; but other times the -x- is absorbed in the cluster and only e- remains: e-mit, e-merge, e-lect, and e-radicate. Another example is English a/an. The original form is *an*, which remains *an* before a vowel (an apple, an iron), but before a consonant the pronunciation of the *n* over time became absorbed or assimilated to the following consonant, that is, -n- was lost as first consonant in the cluster; thus, (a dog (< *an dog), a cat (< *an cat). Another example is Hebrew qadqod 'head, skull' and Assyrian qaqqadu, the latter having assimilated the cluster *-dq- > -qq-. Also similar is Semitic qarqara > UA *qaqqara 'quail'. Such happens repeatedly in many languages throughout the world.

Compare the following Arabic and Hebrew forms:

	Arabic	Hebrew	Uto-Aztecan
daughter	bint	batt	(*pattï 'daughter' 534)
spike of grain	sunbul	šibbolet	(*suNkwu > suŋu 'corn' 828)
wheat	ħinṭat	ħiṭṭaa	--
beetle	xunpusaa'	ħippušit	(*wippusi 'beetle' 853; note Hebrew ħ > w)

One can see a pattern of *-nC- remaining - nC- in Arabic, but *-nC- > -CC- in Hebrew; thus, the 1st consonant of the cluster was absorbed to double the 2nd, or the 1st entirely assimilated to the 2nd. Similarly, in UA a cluster tended to obscure the 1st C and double the 2nd: *-Ct- > -tt-, *-Ck- > -kk-. Thus, Ca mataš 'crush, squash, vt' is from UA *mattas, because a single intervocalic -t- > -l- in Ca; and Hebrew makteš 'grindstone' matches very well what may have become a denominalized verb (1.17) in Ca mataš 'crush' with *-kt- > -tt-.

Another frequent result of consonant clusters is that the 1st C of the two may become a glottal stop, in a change between remaining and disappearing, but not completely disappearing by leaving a trace of its existence in the form of a glottal stop (ʾ). In English, for example, dictate has a cluster pronounced *-kt- when pronounced carefully, but in normal rapid speech, it is often pronounced as -ʾt-. Mountain is often said mau̲ʾn, the t > ʾ and the underlined vowels are nasalized. Similarly, 'written' is often pronounced rIʾn. In mountain > mau̲ʾn, the nasalized vowels are from the nasal n before the t, while rIʾn has no nasal before the t and does not have its 1st V nasalized. The first consonant becoming a glottal stop happens often in UA as well: we already mentioned Hebrew makteš > UA *maʾta 'grinding stone'.

Some consonants (like ʾ, nasals and liquids) in some langauges tend to be anticipated or fronted (put further in front from their original place). An English example is the biblical Aramaic name of ʕabed-nəgo, for which many English speakers say abindigo, with the n anticipated before the d from its original place after the d. Glottal stops are frequently anticipated in UA: e.g., Egyptian **sbʾ** 'star' > UA *siʾpo 'star': Wr soʾpóri; Tr seʾporí. UA anticipates the glottal stop, yet reflects all three consonants, whereas Coptic siu 'star' reflects only one, though it is also from Egyptian sbʾ 'star' (see 154).

Another route to vowel loss is **accent or stress** patterns. For example, Latin fábuláre stressed the 1st and 3rd vowels, and the lack of stress on the 2nd and 4th vowels helped them both become silent in the changes from Latin to Spanish and Portuguese:

Latin fábuláre > fablar > hablar > ablar (Spanish)

Latin fábuláre > fablar > falar (Portuguese)

Losing the 2nd V caused two originally separated consonants to become a consonant cluster (Latin fábuláre > fablar). Then in that cluster, the 1st consonant was lost or assimilated to the 2nd in Portuguese, similar to what we have talked about and seen in several other examples above. In Spanish, the cluster remained intact, but the initial f > h > ø (ø means zero or nothing, that is, f became h, then h became silent or disappeared). The current spelling of Spanish is hablar; however, h is silent in Spanish, so the first and last sounds of Latin fabulare were lost, as well as the middle unaccented vowel. Because *h* is a rather weak consonant, it often becomes silent or disappears in language change.

These kinds of changes happen in many to most languages. In Uto-Aztecan, stems of CVCVCV often lose the middle V, reducing to CVCCV, then the medial (middle) consonant cluster also reduces to one consonant. This phenomenon is common in Syriac and other Aramaic dialects as well. For example, Syriac kawkab 'star', when taking on the definite article suffix -aa 'the', loses the middle vowel in Syriac kawkb-aa 'star-the' because of stress patterns similar to what we have talked about.

1.16 Pronouns

Pronouns are often portrayed in paradigms like the following:

	Singular			Plural		
	subject	object	possessive	subject	object	possessive
1st person	I	me	my/mine	we	us	our(s)
2nd person	you/thou	you/thee	your(s)	you	you	your(s)
3rd person	he/she	him/her	his/her(s)	they	them	their(s)

Besides persons (1st person speaker, 2nd person spoken to, 3rd person spoken about), number can vary as well. Many languages have singular, dual, and plural, in which case plural is three or more, like Navajo and the Semitic languages (not related). Likewise, Old English had ik (I), wit (we two), and we (3 or more). Pronoun systems with three numbers often simplify to two numbers. Old English gave up its dual to make 'we' mean two or more. Navajo is in process of often having its dual cover for plural in some cases.

Many Amerindian languages, including a few Uto-Aztecan languages, have two 'we' pronouns: we-inclusive is I-and-you, to include the person(s) spoken to, and we-exclusive is I-and-he/they, to exclude the person(s) spoken to. Semitic langauges do not have the inclusive-exclusive distinction, nor does Egyptian, while many Amerindian language families do.

1.17 Nouns Become Denominalized Verbs

Most languages make nouns from verbs and make verbs from nouns, though some do so to a greater degree than others. In English we have 'hoof it' for 'walk'; and 'she mirrors her mother's behavior' for 'she behaves like her mother' from the noun 'mirror'; and 'he bicycled to Bluff' for 'he rode/pedaled a bicycle to Bluff'. These are called denominalized verbs because a nominal (noun) is made to serve as a verb. Even 'pedal' is a denominalized verb from the noun 'pedal'. The term de-nominal verb means 'from-noun verb'.

In the change from Semitic to Uto-Aztecan, many nouns were denominalized to become verbs. In fact, Uto-Aztecan *kuppa 'shine (as stars)' is a denominalized verb from the noun mentioned above: Syriac kawkb-aa 'star-the' > UA *kuppa 'shine (as stars)' wherein the consonant cluster *-kb- > *-pp- as we talked about above, and the vowel *a* assimilated to *w* in *-aw- > -u-.

1.18 Language Contact, Influence, Loanwords, and Mixing

Languages in contact influence each other. The type and intensity of the contact determines how they influence each other and how much. A few languages enjoy relative isolation, like Icelandic isolated in the Atlantic, though none escapes all outside influences. In fact, most languages are subject to various influences over time, and sometimes so intensely or suddenly that changes happen fast. For example, many Native American languages in the United States are dead or dying due to the overwhelming dominance of English. Sometimes the tribe survives, but as English is learned, a bilingual generation or two eventually raises a generation of monolingual English speakers, then as the older native speakers pass on, so does the language. The numbers of speakers of Native American languages in Latin America are generally more numerous, partially because in Latin America the mandatory requirements to attend school and learn Spanish are more lax or non-existent. Bilingual education in the U.S. can help provide some basics and an appreciation for the language and culture, but it does not produce native speakers.

One factor in language influence is numbers. When a small population dwells amidst a much larger population, the influence is usually proportionately imbalanced. As in our previous example, the nation of 300,000,000 English speakers contributed to the loss of some native languages, yet some of the native languages contributed loanwords to the much larger language despite the huge discrepancy in numbers/influence. Moccasin, tomato, and coyote are loanwords into English from Native American languages, the latter two from Nahuatl (Aztec), a Uto-Aztecan language.

A second factor in language influence is the relative perceived status of each language, that is, the relative cultural, political, or international superiority. The language of a people perceived to be culturally superior usually does more influencing than being influenced and is often called a superstratum to languages receiving their influence. For example, at one time, Latin was the language of learning and English was not

allowed in the schools; and during that time, many Latin loanwords were borrowed into English, most of our bigger, more academic words. The once pervasive status of Greek and Latin in academia are apparent in our medical terminology. We say cardiac arrest instead of heart-stop, five syllables instead of two, all due to previous perceptions of status. Greeks were once the dominant culture; thus, much Greek vocabulary was borrowed into Latin. Then the Romans became politically dominant, whether cultural or not, and so the rest of Europe borrowed much Latin, along with the Latin versions of their Greek loans already in Latin. While most borrowing between languages happens gradually, sometimes it is sudden and massive, more like a sudden mixing of languages.

Language mixes also exist. Spanglish or border Spanish are terms often applied to the frequent mixing of English and Spanish, but usually by those who know both languages and can speak either when needed. Sometimes the language mixing becomes fixed and becomes an actual language—English, for example. Modern English is a language mix of Old English and Norman French. Only 15% of Old English survived into modern English (Baugh and Cable 55), yet we still call it a Germanic language because most of the most basic words are Germanic, that is, from Old English, which was a Germanic language; e.g., body parts like head, hand, eye, and common nouns of nature like earth, water, etcetera, are Germanic. However, take almost any page of written English, look up the words to find their origin, and about half of any page or paragraph comes from French or Latin, if not more than half. In 1066 the Norman French conquered England and imposed their French as the language of the new rulers on their new land. For the next three centuries, the rate of French loans into English happened to such an extent that every generation of about 10 generations must have shaken their heads at the next generation's demolition of "proper" English, though the head-shakers did their share of damage, perceived by the generation preceding them. During this language mixing, English lost the case endings of nouns and the conjugation of verbs. Many irregularities of strong verbs in Germanic became "regular" verbs (with -ed past tense): shaved replaced shove as the past tense of shave; clomb became climbed; and hundreds more. In the Midwest, many are familiar with "clumb" as a past tense of climb—yesterday I clumb a tree. Most would count it as outback bad English, when in fact it is straight from Old English clomb (past tense) and is more original than the 'climbed' that we say today. In fact, those who first said 'climbed' were wrong until most were saying it, then 'clomb' became wrong. Nevertheless, the intensity of the contact during French rule in England caused English to change rapidly, and to end up as quite a language mix of Old English and French. Yet that kind of mixing of languages and peoples happens regularly. In fact, the Norman French themselves were a mixture of at least four peoples: the Viking (Germanic) Norseman (source of Norman) who settled their area of France, and they mixed with the French, who descend from the Celtic Gauls, the Germanic Franks, and the Romans who brought the Latin language which in that area became French. UA is also a language mix, as shall be seen later.

Such mixing happens often among Native Americans as well. In my classes, I ask my Navajo students how many of them have all four grandparents' being Navajo. Few raise their hands. Then I ask how many have one or two grandparents who are of another tribe or ethnic group. Most raise their hands. Most have one or two grandparents who are Ute or Hopi or Walapai or Sioux or Hispanic or Irish, etc.

Besides words being borrowed, language influences alter the grammar of a language as well. These grammatical changes are sometimes harder for native speakers to identify or even perceive, because, as we said previously, we mostly do grammar subconsciously, and so when bilingualism is prevalent in a border area between languages, the subconscious grammatical patterns of the two tongues can and do influence each other slowly enough that native speakers are hardly aware. For example, English *whom*, as accusative (object) form of *who*, is nearly dead as a last survivor of the Old English case system, yet most English speakers do not know how to use it and so do not, or if they do, they often use it incorrectly, because the case system in which it fits or which used to be part of the language, has all been lost for centuries.

This is all very applicable to a hypothesized arrival of Mediterranean speakers in ancient America, because the languages would differ enough that it is to be expected that such an arrival in a very different language environment would change very much. The derivational detail being lost would not be surprising, just as the Germanic case endings were lost in Middle English. The simplification or loss or fossilization of some verb conjugations would be expectable, just as English lost most of its verb conjugations.

1.2 A Brief Introduction to the Semitic Languages

Hoping to introduce Semitic in a few pages is rather presumptuous, since a 400-page book better suits such an effort. In fact, each Semitic language needs 400 pages. Good compact books on Semitic include Bennett (1998) and Rubin (2010), and more involved are Goldenberg (2013) and Lipinski (2001). Regardless, some basic features of Semitic warrant a few words in a work dealing extensively with Semitic.

The Semitic language family first divided into West and East Semitic. East Semitic is essentially Akkadian, which later developed into Assyrian (north) and Babylonian (south) in Mesopotamia. The Semitic family tree's branching thereafter may ever lack consensus, but mostly following Rubin (2010, 3-6), let us consider that West Semitic divided into Ethiopic (languages spoken in or near Ethiopia), Modern South Arabian (a different branch than Arabic) consisting of six languages spoken in Yemen and Oman, and Central Semitic. Central Semitic then divides into Arabic, Northwest Semitic, and Ṣayhadic, also called Old South Arabian or Epigraphic South Arabian, a group of dialects found in inscriptions in western Arabia from 1000 or 700 BC to AD 600 (Rubin 2010, 13-14; Goldenberg 2012, 15-16). Regarding Arabic, Classical Arabic is the language of the Qur'aan, and, though not an ancestor, is like a sister to the parent language(s) of the various Arabic dialects spoken today. The Northwest Semitic languages referred to in this study are Hebrew / Phoenician / Canaanite (different names or dialects of the same language), and Aramaic / Syriac, and Ugaritic. Aramaic periodically gained and waned as a frequently dominant language, lingua franca, or international language in the Fertile Crescent areas of the Near East. Aramaic developed into many dialects, Biblical Aramaic (books of Daniel and some of Ezra), Jewish Aramaic, Syriac, Samaritan, Mandaic, and several others, including many modern Aramaic dialects surviving to this day.

The Semitic languages have remained in relatively close contact with each other for millennia and thus retain many morphological similarities. The Semitic languages are very verbally based with only a few basic original nouns not easily associated with a verb root, as most nouns are derived from verbs. The tri-consonantal roots change shapes for various conjugations, participles, and nouns.

1.21 Semitic Verbs and Conjugations

Semitic verbs or verbal roots mainly consist of three-consonants. Four-consonant roots occur as well, such as Semitic prʕš 'jump'. Very often two-consonants seem to underlie related roots. Using 1 and 2 for those two consonants, related roots take forms like 12y (gly), 1w2 (gwl/gyl), 122 (gll), 1212 (glgl). Semiticists have also noticed that two consonants with whatever 3rd consonant often have related meanings; for example, many roots with pr… as the first two consonants generally have meanings like separate, part, divide: prd 'detach, separate, divide'; prṭ 'open wide, split'; prk 'crush, grind, break apart'; prm 'tear apart'; prs 'divide, separate, break bread'; prṣ 'split, make a breach, spread'; prq 'take away, split, part (ways), fork'; prś 'spread, stretch out'; pry 'produce/bear fruit/child (something separates from its producer, e.g., mother or tree)'. In Semitic roots, changing vowel patterns alter the shape of the root for a variety of structures and purposes, some also taking prefixes and suffixes for person and aspect.

Semitic verb conjugation patterns consist of two primary categories: one is a suffix conjugation or perfective (pfv) conjugation, because it usually expresses past tense or perfective (completed action or relative past) in Central Semitic and the persons doing the verb are revealed in the suffix (Arabic katab-ta 'wrote-you'); the other is a prefix conjugation or an imperfective (impfv) conjugation, because it usually expresses imperfect (not completed) aspect, i.e., usually present or future, and the subjects doing the verb are expressed in the prefix (Arabic ta-ktubu 'you-write/are writing).

The basic verb, in Hebrew, is called the qal (easy/light) conjugation. Arabic best reflects the Proto-Semitic form *CaCaCa (C = any consonant), while the other Semitic languages have lengthened, shortened, or lost a vowel or two:

Arabic kataba 'he wrote'

Aramaic/Syriac kətab 'he wrote' (shortened the 1st vowel and lost the 3rd)

Hebrew kaatab 'he wrote' (lengthened the 1st vowel and lost the 3rd)

Akkadian kataabu 'he wrote' (lengthened the 2nd vowel).

Uto-Aztecan also has many of these 3rd sg forms *CaCaC(a), the last consonant/syllable sometimes lost:
At (79) Hebrew **ḫmr** ‘to cover or smear’ (with s.th.) > UA ***humay** ‘smear, spread, rub, paint’ >
Ca húmay 'smear, paint, vt’; Cp hume- ‘spread a liquid or s.th. fine’. (ḫ > hu in UA, and r > y)
At (645) Semitic ḫabala ‘corrupt’; Hebrew -ḫabbel ‘ruin’ > Hopi hovala ‘waste s.th. of value, squander’.

For abbreviations of the UA languages, see the introduction to UA. The sound changes are covered in detail in the body of the sets, though we may here list some of the less obvious in parentheses. For example, both of the first two (79, 645) begin with the pharyngeal ḫ, which became UA *hu, or ho in Hopi. Also, when the 3rd consonant is y or ’ in Semitic (CCy/CC’), it is often not apparent in Semitic’s perfective *CaCay > CaCaa, but sometimes is in UA, as in the next example:
At (559) Hebrew **bky/ bakaaʸ** ‘cry, weep’ (perf stem); Syriac bakaa / **baka’** > Hopi pak- ‘cry’;
Tb pahaa’at / ’apahaa’ 'cry, bawl, howl' (Tb h < *k); Ktn paka’ ‘ceremonial yeller, clown who shouts all day to announce a fiesta’.
Of interest is that the Syriac form actually shows the glottal stop, often only used as a long vowel place holder; yet the glottal stop in Tb and Ktn show the glottal stop pronounced, aligning with Aramaic/Syriac more than with the Hebrew and Arabic terms lacking that glottal stop. Another pfv form is
At (565) Hebrew **mkr / maakar** ‘sell (he sold)’ > UA *makaC ‘give’ in all of UA; UA *na-maka ‘sell’

Hebrew’s first long vowel (kaatab) can be shortened when a suffix draws the stress/accent toward the end, as in Hebrew kətab-tem ‘wrote-you pl’. Many such vowel variations occur in Semitic, especially in Masoretic Hebrew (Old Testament Hebrew) which is a dialect of Hebrew not necessarily representative of all dialects in all centuries, to be discussed below. So Masoretic vowelings should not always be taken as absolute or as original. A more complete table of the pronoun suffixes to the verbs of Akkadian, Hebrew, Syriac, and Arabic is further below, but let us now continue our examples of Semitic with comparable fossilized forms in Uto-Aztecan.

In addition to the more common *CaCaCa, some Semitic verbs are voweled as *CaCiCa, as also in Arabic CaCiCa, sometimes Hebrew CaCeC and Aramaic CəCeC. Examples follow:
(3) Northwest Semitic *yašiba ‘sit, dwell’ > UA *yasipa ‘sit, dwell’ (yaašab in Masoretic Hebrew)
(769) Hebrew **tqp** ‘to overpower, v’; Aramaic(J) təqef ‘be strong’; the 2nd vowel of Aramaic shows Proto-Semitic *taqipa (sg), *taqipu (pl), exactly as UA *takipa and *takipu ‘push’.
Of interest is that while *yašiba reflects the 3rd person singular, the 3rd person plural *yašibuu is seen in the Tepiman branch of UA in ST daivu and TO dahivup, both pl forms (Tep d < *y, Tep h < *s, Tep w/v < *p).

All the above exemplify the perfective/suffix conjugation. The imperfective/prefix conjugation is
Arabic: ’a-ktubu ‘I-write’; ta-ktubu ‘you-write’; ya-ktubu ‘he-..’; na-ktubu ‘we-..’; ya-ktubuuna ‘they..’
Hebrew: ’e-ktob ‘I-write’; ti-ktob ‘you-write’; yi-ktob ‘he-…’; ni-ktob ‘we-…’; yi-ktəbuu ‘they…’

Again, the Arabic forms are more original, and note the last Hebrew (they) form loses the round vowel (o > ə) to shortening in Masoretic phonology, but is preserved in Arabic. One can also see that the 1st and 2nd consonants are clustered in the impfv stem (Arabic -CCuCu, Hebrew -CCoC, or -CCaC for some verbs). And since clusters often lose the 1st consonant in UA, the UA fossilizations of the imperfect often lack the 1st consonant. In Uto-Aztecan are many fossilized impfv qal forms, some with the prefix + impfv stem, others with only the impfv stem:
(1094) Hebrew **ktš** ‘pound, pound fine, grind’; impfv: -ktoš < ***-ktušu** with loss of 1st C in the cluster > UA ***tusu** ‘grind’ in most UA languages.

Besides impfv stems like Arabic ya-CCuCu / Hebrew yi-CCoC with the stem vowel *u/o* in the impfv stem, some verbs have a stem vowel of *a*, as in Hebrew yi-CCaC / Arabic ya-CCaCu. A prominent example of each is Hebrew ya-ʕ[a]qob ‘he grabs the heel, deceives’ (Jacob) and Hebrew yi-ṣḥaq ‘he laughs’ (Isaac).

Another example of that impfv stem vowel is Arabic labisa, impfv: (ya)-**lbasu** ‘put on, wear’ and Hebrew lbš, impfv pl: (yi)-lbašuu. In this Semitic-kw item, the cluster absorbs the 1st consonant to dagesh (double) the 2nd as if -bb- > kw:
(50) from Hebrew lbš, impfv: -lbaš- ‘put on (garment), clothe (oneself)’: impfv stem vowel is -a-, as in UA: -lbaš > kwasu; pl would be yi-lbašu > UA *kwasu ‘dress, shirt, put on clothes’ in most of Numic.
(749) also Hebrew tmh, impfv: **-tmah** ‘be astounded, dumbfounded, v’ > UA ***maha** ‘fear’:
Wr maha- ‘be afraid’; Yq máhhae; AYq mahai ‘scared’; Tr mahá; CN mawi ‘be frightened’.

Some fossilized imperfective forms in UA include the prefix. For example, the previously noted perfective of Semitic/Syriac baka' 'cry' > UA paka' 'cry' has as its impfv Arabic ya-bkiy, Hebrew yi-bke. Considering that bilabials disappear as first consonant in a cluster (see 294-300), then the imperfective stem with the 3rd sg prefix yi-bke / *ya-bka would look like UA *yaka 'cry' which is exactly what we find:

(560) Semitic *ya-bka^{y} 'he/it cries' > Hebrew yi-bke$^{(y)}$ > UA *yaka / *yaCka / *yakka 'to cry, sg'

(561) Semitic *ta-bka^{y} 'she/it cries' > Hebrew ti-bke$^{(y)}$ > NP taka (< *takka) 'cry, vi'.

The first (560 UA *yakka 'cry') appears in many UA languages; the second (561 *takka 'cry') appears in Northern Paiute; so NP has both the 3rd masculine sg impfv *yakka and the 3rd feminine sg impfv *takka.

Certain consonants cause variant vowelings in Semitic. For example, the initial aleph or glottal stop of Semitic 'kl 'eat' has the usual perfect *'akal (798), but the impfv with prefixes results in 3rd fem sg imperfective Hebrew to'kal 'she/it eats' (796).

(798) Hebrew **'akal** '(he) ate (perfect), *to'kal 'she/it eats'; *yo'kal 'he/it eats'
> UA *'**aki** 'open mouth, eat, take/put into one's mouth' (In Semitic-kw, final -l raises vowels)

(796) Hebrew 'akal '(he) ate', ***to'kal** 'she/it eats' > UA/Numic ***tïkkaC** 'eat'
(Numic ï < UA *u, which corresponds to Hebrew o; so all matches, the doubled medial consonant from the *-'k- cluster and a final underlying consonant from final -l:
Hebrew *to'kal > Numic *tïkkaC. (In Sem-p, final -l does not raise the preceding vowel)

The participle of the Hebrew qal conjugation is *CooCeC, which corresponds to UA *CuCiC. A number of such *CuCiC forms appear in UA:

(754) Hebrew pny / panaa^{y} 'turn, turn and look, look'; participle **pone** > UA ***puni** 'turn, look'

Besides the qal or basic verb, all Semitic languages also have an intensive conjugation, usually doubling the middle consonant: Arabic CaCCaCa; Hebrew CiCCeC, called the qittel form in Hebrew, whose original form and UA form are usually *CiCCaC. We saw Hebrew ktš in the impfv -ktuš above; below is an apparent intensive of the same ktš in the intensive *CiCCaC form:

(615) Hebrew **ktš** 'pound, pound fine, bray, v'; kaataš (perfect qal); unattested *kitteš < *kittaš would be the qittel form: Yq **kitte / kittasu** 'grind, mash'. Some suggest that the final -su of the Yq form is another morpheme; even if so, kitta is striking enough, since we seldom see 3rd consonants in UA.

The general meaning of the intensive in Semitic is intensification, continuative, causative, distributive, or repetitive action; interestingly a consonant doubling or syllabic reduplication in UA languages is also employed for intensification, continuative, distributive, or repetitive action. Moving on, the imperfect of this intensive is Arabic yu-CaCCiCu and Hebrew/Aramaic yə-CaCCeC. The imperfective intensives are also well represented in UA:

(11) Hebrew impfv -dabber (< *-dabbir) 'to speak' (qittel) > **UA *tïkwi** 'say' (*-bb- > -kw-)

(809) Hebrew qittel impfv stem **-hattel (< *-hattil**) 'to mock' > **UA *'ati / *ata** / ***aCti** 'laugh'

(907) Arabic ğassa 'touch, feel'; Hebrew gšš 'touch'; perfect qittel: giššeš 'grope';
Hebrew qittel impfv: *-gaššiš > Ls ŋési 'touch lightly, graze, vt'; Cp ŋíse 'scratch, vt'. It may be due to s.th. else, but interestingly the Ls and Cp forms align with the impfv and pfv qittel forms.

Most Semitic languages also have a causative: cause someone to do s.th. Hebrew forms are often represented with the consonants q-ṭ-l, which we simplify to q-t-l, which are more original anyway. These basic causative forms are as follows:

	perfective	imperfective	participle
Hebrew	hiqtiil / hiqtal-(ti), etc	ya-qtiil, ta-qtiil, etc	maqtiil
Arabic	'aqtala / 'aqtal-(tu)	yu-qtilu	muqtilu
Aramaic	'aqtel	y-aqtel	maqtel

From the root slm 'peace', the Arabic causative is 'aslama 'cause peace'; the verbal noun is Islaam, and the participle is muslim 'one who causes peace, peace-maker'. UA forms resemble the Hebrew causatives: hiCCiiC, hiCCaC. Examples of that causative in UA are
At (1354) Hebrew hi-kbad- > UA *hipaca 'sweep' (d > c(ts)),
At (810) Hebrew hikkiir 'recognize, know, know how to' > Tr iki- 'know, be aware of'

At (1293) Hebrew hiśkiil, hiskal- ‘to understand, comprehend, make wise’ > CN iskal ‘to train’;
CN iskal-ia ‘be discreet, prudent’
At (567) Hebrew ya’amiin ‘he believes/trusts/stands firm’ > UA *yawamin ‘believe’ (’ > w)

The passive of the causative—be caused to do s.th.—in Hebrew is called the huqtal or hoqtal (huCCaC / hoCCaC) with a participle of muqtal. If the 3rd consonant is -y, then the forms are huCCe and muCCe. An example from a common Hebrew stem of a muCCe form is UA *mukki ‘be sick, die’ aligning with the participle of Hebrew mukke ‘smitten’ (52) and furthermore, Tb hookii ‘deceased grand-relative after death’ aligns with the Hebrew pfv hukke, a slight vowel discrepancy o/u; yet even in Hebrew the form is called both huqtal and hoqtal because both vowels happen among huqtal / hoqtal forms.

Also frequent enough in UA are the passive/stative adjectives / nouns, such as CaCiiC (qariib 977); and a form denoting noun of occupation or habit, i.e., noun who does the verb CaCCaaC (śannaa’ 756).

The Semitic Cohortative/Volitive -a Verb Suffix in Uto-Aztecan

A certain suffix of the Semitic imperfective (impfv) verb is **-a**, and merits mention as it seems to appear in Uto-Aztecan frequently enough. Cohortative and volitive are terms having to do with ‘will’ and ‘wanting to do’ the verb it is suffixed to. The cohortative -a in Hebrew signifies encouraging a cohort (group) to do something or a wish/wanting/suggestion that they do something, as in let’s … In Biblical Hebrew, the cohortative is limited to 1st person: let us do (s.th.) , or let me (do s.th.) or I shall (with more emphatic intention). However, in other Northwest Semitic languages closely related to Hebrew, the cohortative is not limited to 1st person. This -a vowel is related to the Arabic subjunctive -a, which signifies any potential action. This Semitic volitive -a at times can apply to a high percentage of subordinate clauses. (Blau 2010, 207; Lipinski 2001, 360-363) And the syntax of Semitic languages often allows much higher percentages of subordinate clauses than are typical in European languages.

This -a suffix is often used with verbs of motion, as in Hebrew neeləkaa ‘let us go!’ (1st pl, from Lipinski 2001, 363), and UA *yĭNka ‘enter’ (go in) from Hebrew yeelka (3rd sg) is exactly the same root as Lipinski uses in his example, but with 3rd person yee- prefix instead of 1st person pl nee-. Many other examples of this -a suffix permeate the Semitic-UA data.

Semitic Pronoun Morphology on Verbs

Semitic pronominal morphology on verb conjugations (pronominal is the adjective from of pronoun) consists of pronoun morphemes prefixed to the imperfective (not-completed/present/future) verb forms and other pronoun morphemes suffixed to the perfective (completed/past) verb forms:

Verbal Pronominal Suffixes of Some Semitic Languages:
Suffix verb conjugation (usually perfect/past) pronoun forms suffixed to *CaCaC-:

	Akkadian	Hebrew	Syriac	Arabic	
I verbed	-aaku	-tii	-eet	-tu	
you masc sg	-aata	-taa	-t	-ta	
you fem sg	-aati	-t	-t	-ti	
he	-	-	-	-a	
she	-at	-aa	-at	-at	
we	-aanu	-nuu	-nan	-naa	
you masc pl	-aatunu	-tɛm	-toon	-tum	
you fem pl	-aatina	-tɛn	-teen	-tunna	
they masc pl	-uu	-uu	-uun	-uu	
they fem pl	-aa	-uu	-een	-na	(Goldenberg 2012, 85)

The bound pronominal prefixes to verbs in the prefix conjugation (usually imperfect/present/future) are shown below. Some person forms also include a suffixed element (like -uu plural), though the prefixes are the primary indicators of person:

	Akkadian	Hebrew	Syriac	Arabic (classical)
I verb	a-	ʾɛ-	ʾ-	ʾa- / ʾu- -(u)
you masc sg	ta-	ti-/tɛ-/tə-	t-/te-	ta- / tu- -(u)
you fem sg	ta- -ii	ti-/tɛ-/tə- -ii	t- -iin	ta- / tu- -ii(na)
he verbs	i-	yi-/yɛ-/yə-	y-	ya- -(u)
she verbs	ta-	ti-/tɛ-/tə-	t-	ta- / tu- -(u)
we verb	n-	ni-/nɛ-/nə-	n-	na- / nu- -(u)
you pl masc	ta- -aa	ti-/tɛ-/tə- -uu	t- -uun	ta- / tu- -(u)
you pl fem	ta- -aa	ti-/tɛ-/tə- -naa	t- -aan	ta- / tu- -na
they masc	i- -uu	yi-/yɛ-/yə- -uu	n- -uu(na)	ya- / yu- -uu(na)
they fem	i- -aa	ti-/tɛ-/tə- -naa	n- -aan	ya- / yu- -na

(Goldenberg 2012, 86-87)

One can readily see the similar morphology among the Semitic conjugated verbs. While most Semitic verbs contain three consonants, Semitic (and Egyptian) have occasional quadrilateral verbs (of 4 consonants), such as Semitic prʕš ‘jump’ from which the Semitic noun parʕoš ‘flea (jumper)’ derives as a ‘jumper’. (Note UA *par’osi / *paro’osi ‘jackrabbit’ which is also a jumper and shows all four consonansts and both vowels.)

1.22 Semitic Pronouns

While presenting the Semitic pronominal affixes on verb conjugations, let us also look at the Semitic independent pronouns and the suffix pronouns. The independent pronouns for Akkadian, Hebrew, Syriac, and Arabic follow. Those found in or relevant to UA forms are in bold. See UA pronouns (101-114).

	Akkadian	Hebrew	Syriac	Arabic (classical)
I	anaaku	ʾanooki / ʾani	ʾenaa /(i)**naa(’)**	ʾanaaʾ
you masc sg	atta	**ʾattaa**	ʾatt	ʾanta
you fem sg	atti	ʾatt	ʾatt	ʾanti
he	šuu	**huu**	**huu**	**huwa**
she	šii	hii	hii	hiya
we	niinu	(ʾa)naħnuu / ʾaanuu	ħnan	naħnu
you pl masc	attunu	**ʾattɛm**	ʾattoon	**ʾantum**
you pl fem	attina	ʾatteen(aa)	ʾatteen	ʾantunna
they masc	šunu	**heem**(maa)	hennoon	**hum**
they fem	šina	heen(naa)	nenneen	hunna

(Goldenberg 2013, 82; Lipinski 2001, 306-7)

The Semitic oblique or suffix pronouns are used as possessors, objects, and subjects (as in his/your giving me/it). Oblique generally refers non-subject pronouns, i.e., object (of verb), dative (to/for whom given/done), and/or possessive pronouns. Again, forms appearing in UA or relevant to UA are in bold:

	Hebrew	Syriac	Arabic (classical)
I	**-ni / -i**	**-ii** / **-ay**	**-ni / -i**
you masc sg	**-kaa** / -aak	-aak / -**ay**k	-ka
you fem sg	-eek / -aak	-eek / -**ay**k	-ki
he	-(aa)**huu** /-**aaw** /-**oo**	**aaw(hi**)	**-hu/-hi**
she	**-haa / -aa**(h)	**-eeyh / -hi**	-ha
we	-nuu	-an / -**ay**n	-naa
you pl masc	**kɛm**	-koon /-**ay**koon	-kum
you pl fem	kɛn	-keen /-**ay**keen	-kunna
they masc	**hɛm / -aam**	hoon /-**ay**hoon	hum
they fem	hɛn / -aan	heen /-**ay**heen	hunna

(Goldenberg 2013, 88; Lipinski 2001, 314-15)

1.23 Semitic Sound Correspondences

Some Proto-Semitic consonants remain unchanged across the Semitic languages (l, r, m, n, y, which will not be listed), while others undergo changes worth noting. Though an additional proto-consonant or two have been proposed and debated, the generally accepted Semitic sound correspondences are as follows:

Proto-Semitic	Arabic	ESA	Ugaritic	Hebrew	Aramaic	Akkadian	(ESA = Epigraphic South Arabian)
*b	b	b	b	b	b	b	
*p	f	f	p	p	p	p	
*g	ǧ	g	g	g	g	g	(Arabic ǧ = j, from Proto-Semitic *g)
*k	k	k	k	k	k	k	
*q	q	q	q	q	q	q	
*t	t	t	t	t	t	t	
*d	d	d	d	d	d	d	
*đ	đ	đ/d	z	z	d	z	(đ = th as in the)
*z	z	z	z	z	z	z	
laryngeals / pharyngeals							
*’	’	’	’	’	’	’/ø	(ø = zero, no sound, disappeared)
*h	h	h	h	h	h	’/ø	
*ʕ	ʕ	ʕ	ʕ	ʕ	ʕ	’/ø	
*ġ	ġ	ġ	ġ	ʕ	ʕ	’/ø	
*ḫ	ḫ	ḫ	ḫ	ḫ	ḫ	’/ø	
*x	x	x	x	ḫ	ḫ	x	
sibilants (s-like consonants)							
*θ	θ	š	θ	š	t	š	
*š / s_1	s	š	š	š(s_1)	š	š	
*ś / s_2	š	ś	š	ś(s_2)	s	š	(ś = originally lateral fricative, ≈ voiceless ɬ)
*s / s_3	s	s	s	s(s_3)	s	s	
emphatic / pharyngealized consonants							
*ṭ	ṭ	ṭ	ṭ	ṭ	ṭ	ṭ	
*ṣ	ṣ	ṣ	ṣ	ṣ	ṣ	ṣ	
*ṯ	ẓ	ṯ/ṣ	ḏ	ṣ	ṭ	ṣ	(ṯ = emphatic interdental fricative)
*Ļ	ḏ	Ļ	ṣ	ṣ	ʕ	ṣ	(Ļ= emphatic lateral fricative)

(Bennett 1998, 68-71; Goldenberg 2013, 68; Lipinski 2001, 112-157)

1.24 Masoretic Hebrew

Masoretic Hebrew is the dialect(s) of the Hebrew Old Testament (OT) text as voweled by the Masoretes about AD 600-700. The original texts or various books of the OT were written with only consonants, like most Semitic languages, and were composed at different times, roughly ranging in date from 1200 to 300 BC. So some 1000 to 1800 years after the consonantal texts were written, the Masoretes developed a system for writing vowels and some consonant variations. The consonant variations from Proto-Semitic and probably early Hebrew to Masoretic Hebrew are that the stops became fricatives or spirants following vowels: b > v, p > f, k > x, t > θ, etcetera, but at the beginning of the word, or when doubled, or following a consonant, b remains b, p > p, etc. The same spirantization occured in Aramaic dialects as well. However, the Uto-Aztecan forms from Semitic do not show such spirantizations in Proto-Uto-Aztecan forms, though some spirantization happened later in some UA languages, like *p > v in some Northern Uto-Aztecan languages. Because UA does not come from a later spirantized Hebrew, but from earlier non-spirantized Semitic forms, we will not include those later spirantizations when citing Hebrew and Aramaic forms, because the spirantization was not original and is not apparent in early UA reconstructions. Arabic spirantized a couple of consonants—*p > f and *g > ǧ/j—changes from Proto-Semitic *p and *g, but again, parallels with UA do not reflect those changes.

1.25 Semitic Cognates

Semitic Cognates are the similar words or groups of related words in the Semitic languages; each group of related words descends from its ancient predecessor or ancestor proto-word. For example, from Proto-Semitic ***đi′b** 'wolf' (Bennett 1998, 60) are descended Hebrew **zə′eb** 'wolf', Arabic **đi′b** 'wolf', Syriac **di'b-aa** 'wolf-the', and Aramaic di'b-aa 'wolf-the'. Initial Proto-Semitic *đ corresponds to Hebrew z, Arabic đ, Syriac d, and Aramaic d; thus, those consonants begin the respective forms in those languages; the glottal stop (', 2nd consonant) and b (3rd consonant) remain the same in those languages. This set (Semitic *đi′b wolf) has a cognate in most Semitic languages (note UA *tï′pa 'wolf'); however, sometimes cognates appear in less than half the languages, such that the once-existing cognate did not survive or continue in all languages. This happens in all language families: some cognates continue prevalent or well represented in most lanugages, while others become sparsely represented, that is, may surface in only two or three languages, or may disappear altogether.

In this connection, sometimes the corpus or extent of an ancient language's vocabulary or cognates can hardly be known. The ancient Akkadian or Assyrian vocabulary is known to be rather voluminous as extracted from extensive records. The vocabularies of thriving modern languages with numerous native speakers, like the various Arabic dialects, can be quite thoroughly known as well. However, some ancient languages, whose records are limited, leave a proportionately limited amount of information behind and so our knowledge of them is similarly limited. For example, the ancient Epigraphic South Arabian languages (a different branch of Semitic than the Arabic dialects) are known only by a limited number of inscriptions on rock, and are limited in content and style to legal transactions, declarations of events, tombstones, and the sort, but are lacking a rich literature or lengthy narratives with extensive amounts of language. Though a little better known than Epigraphic South Arabian, **Biblical Hebrew** is also a limited corpus. The Israelites' dialects changed through time, from Moses to Jeremiah, as all living languages always do, and each book is but a snapshot (not a photoalbum) of that author's dialect in that century. So we know very little when considering all the dialects of all the centuries. The Book of Job, for example, represents its own unique dialect, and has many words which occur only once in the Old Testament (OT), though most books have theirs too. So if the whole OT has many words that made it into the text only once, how many other thousands of words in the spoken language missed out on gaining a single appearance in the OT?

A few inscriptions of ancient Hebrew also exist, but the Hebrew Old Testament text is by far most of what we know about classical or pre-exilic Hebrew (spoken before the exile or before the destruction of Jerusalem in 587 BC). After the Jewish captivity in Babylon, where Aramaic was spoken and where survivors became Aramaic speakers, Hebrew changed and much of its richness and former vocabulary had to have been lost. In fact, the post-exilic Biblical books of Daniel and parts of Ezra are written in Aramaic, not Hebrew. So what percent of the Israelite's pre-exilic spoken Semitic is found in the Masoretic Hebrew text? Would it exceed 10% or 20%? What percent of a pocket English dictionary is found in our Old Testament translation of that Masoretic text? That cannot be a high percentage either, let alone compared to the multi-volume Oxford English Dictionary. Consider, for example, that a Hebrew word for 'squirrel' does not occur in the Hebrew Old Testament text, yet the spoken language certainly had words for squirrel, and UA has three words for squirrel aligning with what would be the Hebrew cognate of Arabic and Aramaic words for squirrel. Arabic **singaab** 'squirrel' would correspond to Hebrew ***š/siggoob** 'squirrel' to which UA ***sikkuC** 'squirrel' corresponds perfectly (C means an underlying consonant that doubles the next consonant, and devoicing g > k, and rising of o > u, all typical of the Semitic to UA sound changes; see number 57). Arabic **qarqađ**aan 'squirrel' > UA ***qoŋi-** 'squirrel' does very well for 5 segments (segments are consonants or vowels) and **qarqađ** is the essence of the word, -aan being a noun augment of sorts: the cluster *-rq- > -ŋ- in Northern UA, which tends to nasalize liquids (change r and l to n or ŋ) and the velar nasal (ŋ) from a liquid and guttural (back consonant) cluster is all quite natural. Like words for squirrel, many other words and verbal conjugations would have been in the spoken language, but not be in the OT text.

Two factors limit our knowledge of the pre-exilic language: besides (1) a relatively small amount of the whole language finding its way into the Israelites' texts while the language was known, (2) even their knowledge of their language deteriorated after the exile, parts becoming unrecoverable within two or three generations. Future discoveries of additional ancient texts is always possible, but as matters now stand, we know only a small percentage of the ancients' conversational vocabularies. The Bible's retention of ancient

Hebrew may approximate the 15% retention (or 85% loss) of Old English in later English after French became the dominant language in English speakers' lives from 1066-1300+.

Whenever another language of a language family is discovered, it is invariably a unique combination of features, some of which are typical and expectable and others not so typical or expected. For example, the Nabatean language, though officially considered an Aramaic dialect, is more Arabic-like than other Aramaic dialects. The language in Job has leanings that are more Aramaic- and Arabic-like than the other books of the Hebrew OT text. So to find a peculiar combination of features in UA, some more Aramaic-like and some more Arabic-like, but all fused into a basic Hebrew conjugation system, is actually quite typical of any newly discovered relative to a group of relatives. To find cognates that match an Akkadian word or an Arabic word or an Aramaic word, but without an attested (verified) Biblical Hebrew cognate should not be thought strange at all. That is how cognates work, in any language family. Each relative has its surprise cognate contributions as well as its random voids.

1.26 'The' in Semitic

'The' in Hebrew and Arabic is a prefix, reconstructing to something like *hal-, though *han- has also been proposed. The -l- is absorbed / assimilated to double the next consonant in Hebrew: hay-yeled 'the-boy'; ham-melek 'the-king'; haš-šaloom 'the-peace'. Various ha-/hi-/a- noun prefixes sporadically appear in UA as noun prefixes, though it is unclear what their original meaning and purpose were, yet they resemble fossilized ha- prefixes, sometimes changing the vowel ha-/hi-, though Hebrew itself also sometimes changes the vowel ha-/he-. These may more often be nouns from Sem-kw. The Arabic article al- lost the h, but keeps the l- before some consonants—al-malk 'the-king', al-walad 'the-boy'—but assimilates before other consonants—as-salaam 'the peace', ađ-đakar 'the-male/man'.

Most interesting, however, are the Aramaic forms, which are abundantly apparent in UA. All Aramaic dialects suffix 'the' to their definite nouns: -aa 'the' is suffixed to masculine nouns and -taa 'the' suffixed to feminine nouns (feminine -taa is actually from feminine -t- + -aa): for example, malk-aa 'king-the', malkə-taa 'queen-the' and this definite the- form is often the citation form or the more common form of the noun. In fact, Goldenberg (2012, 133) says that in Syriac "the historically definite forms became the normal forms of nouns, unmarked for definiteness." The feminine definite suffix (UA *-ta) became part of the citation form in UA as well, though droppable when possessed as in Semitic also. We see -aa fossilized on many UA nouns that were masculine nouns in Semitic, and -taa is still productive as the general absolutive suffix on UA nouns in many branches of UA. Examples of masculine -aa are
Aramaic pagr-aa 'corpse-the' > Hp pïïkya 'skin, fur' (from dead animal) vs. Hebrew (hap-)pɛgɛr
Syriac šigr-aa 'drain, ditch-the' > Hp sikya 'small valley, ravine, canyon with sloped sides'
Aramaic(J) rəʼemaan-aa / reemaan-aa 'antelope-the' > UA *tïmïna 'antelope' (604)
Aramaic di'b-aa 'wolf-the' > UA *tïʼpa 'wolf' vs. Hebrew (haz-)zə'eb 'the-wolf' (618)
Aramaic(J) diqn-aa 'beard-the, chin-the'> UA *tïʼna 'mouth' vs. Hebrew (haz-)zaaqaan 'beard/chin'(617)

Even more interesting is that these suffixes -aa' and -taa' in written Aramaic actually end with a glottal stop, which either was never pronounced, only signifying the vowel -aa, or ceased being pronounced in the various Aramaic dialects, but in UA these suffixes often actually end with a glottal stop in Numic and Takic: Aramaic kookb-aa' 'star-the' > UA *kuppaa' > Serrano kupaa' 'to shine (as of the stars)' (1274)
Syriac ʼaamaqqət-aa 'lizard-the, n.f.' > UA *makkaCta 'horned toad': NP makaca'a 'horned toad' (1055)

Verbal Nouns are used in Hebrew and Arabic much more frequently than is customary in English. For example, for a narrative in Genesis 44:30-31, the King James English has five finite verbs: "when I **come** … and the lad be not with us; seeing that his life **is** bound up in the lad's life … when he **seeth** that the lad **is** not with us, he shall **die**." Yet the Hebrew has only one verb at the end "he'll die" but three verbal nouns and two verbless equative/copula constructions: "As/at my coming … and the lad not with us, his soul bound (adj) to his soul … as/at his seeing the lad not, he will die." Thus, Semitic often employs many verbal nouns more conveniently translated as verbs in English (Stubbs 1996c). So not surprisingly, we find many verbal nouns in UA: e.g., gəlom > UA kolom 'wrap' (934), Hebrew *ra'oot(-aa) 'seeing (it), to see (it), infinitive/ verbal noun' > UA *ta'uta 'find' (100), etc.

1.3 A Brief Introduction to Egyptian

As all living languages are always changing, Egyptian, over its 4,000-year history, also underwent stages of development from Old Egyptian (3100-2100 BC) to classical Middle Egyptian (2100-1600 BC), Late Egyptian (1600-600 BC), and then Demotic, beginning about 650BC and overlapping with and closely related to Coptic, which began being written with the Greek alphabet, and thus with vowels. This last stage of Egyptian, Coptic, continued in use more than 1,000 years, and is still the liturgical language of the Coptic Christian Church today (Allen 2010, 1). Each stage exhibited major and minor changes from its predecessor In fact, as details emerge, we should be able to identify the time or stage of the Egyptian from which the Uto-Aztecan infusion originated. Relevant to that eventuality, it is important to note that "Old Egyptian and Late Egyptian are historical phases of a single dialect, or closely related ones, likely from the north, while Middle Egyptian, chronologically between those two, represents a separate dialect, most likely southern in origin. In the history of the language, therefore, Middle Egyptian somewhat interrupts and obscures the presumably direct evolution of Old Egyptian into Late Egyptian" (Allen 2013, 4). The Egyptian element in Uto-Aztecan is closely associated with the Semitic-p; that and other factors suggest an Israelite group was likely the bearer of both. If Israelite, keep in mind where the Israelites were in Egypt? In the north, the Delta area. So when the UA Egyptian element exhibits both Old Egyptian and Late Egyptian features, such may be significant. My premature sense of the matter is that UA is mostly of that Old-plus-Late Egyptian duality. The prefixed articles of Late Egyptian (pV-, tV-, nV-) are in UA and at least two Old Egyptian features. Tarahumara's plural prefix *i- / *ip- matches Old Egyptian i(p…) as the beginning of plural demonstrative pronouns (these/those); see explanation at 121. A second matter of Old Egyptian in UA is that the UA stative suffix -i is in all eight branches of UA and is the oldest form (-i) of the stative suffix in Egyptian as well (see 116), though it later changed to -w in Middle Egyptian (Allen 2010, 206-7; Gardiner 1969, 234-8). UA has both -i and -wa, and some UA languages, like Hp and Tb, have both *-i-wa, as Egyptian sometimes shows both together also.

Two Egyptian stative/passive features are pervasive throughout Uto-Aztecan. In fact, one is called the old perfective from Old Egyptian and was also used as a stative, though the stative dimension continued through all stages of Egyptian even to Coptic. Stative structures present resulting states of verbs. For example, in English we have 'I do' (present) and 'I did' (past), but 'is done' expresses a present state resulting from a past action. Similarly, in Egyptian a final vowel -i at the end of verbs is the form of both the old perfective (past-tense like) and the stative (Allen 2000, 201; Gardiner 1969, 234-8). Likewise, every branch of Uto-Aztecan has exactly the same feature in which the final vowel of a transitive verb is changed to -i in order to signify the corresponding stative, intransitive, or passive verb. A few examples from 116:
Guarijio has transitive verbs ending in -a with corresponding intransitive verbs in -i (Miller 1996, 130):

Wr co'a 'put out fire'; Wr co'i 'be no fire';
Wr wela 'put upright/standing'; Wr weri 'be upright/standing';
Wr mo'a 'put pl obj's inside'; Wr mo'i 'enter, pl subj's';
Wr sa'wa 'cure s.o., alleviate s.th.'; Wr sa'wi 'be alleviated, go away';

Tarahumara also has such pairs of verbs' (Hilton 1993, 139):

Tr mana 'put, place, set'; Tr mani 'be (in/at a place), exist';
Tr bi'wá 'clean it'; Tr bi'wí 'be(come) clean';
Tr čiwá 'stick s.th., vt'; Tr čiwí 'be stuck, vi';

Classical Nahuatl also has such pairs of verbs (Sullivan 1988, 171):

CN tla-tema 'fill, place s.th.'; CN temi 'be full, be lying down';
CN tla-kotona 'break s.th.'; CN kotoni 'be broken';
CN tla-mana 'put s.th. on the floor'; CN mani 'be stretched out, extended';
CN tla-toma 'undo s.th.'; CN tomi 'be undone'; and so does Tbr:
Tbr towa 'leave s.th. behind, vt'; Tbr towi/tovi 'stay, remain, vi'.

In some UA languages, the final -i vowel is the perfective dimension of Egyptian's old perfective:

Cm -i 'completive suffix on verbs' (Charney 1993, 142-3).
TO -i 'perfective is marked by a final vowel change to -i' (Langacker 1977, 131);
Op -i 'perfective changes final -a to -i' (Shaul 2003, 25);
Eu -i 'the final stem vowel changes to final -i for the Eu preterite [past] in many, if not most Eu verbs, vs. Eu -a-n 'present indicative verb ending':

Eu hipra-n ‘watch over, care for’ vs. preterite: hipri ‘watched over, cared for’;
Eu maka-n ‘give’ vs. preterite: maki ‘gave’;
Eu taha-n ‘burn’ vs. preterite: tahi ‘burned’

The other Egyptian passive frequent in UA is the Egyptian suffix -w which aligns with UA *-wa ‘passive suffix’ and sometimes Egyptian -iw which matches UA *iwa. Remember that Egyptian shows only consonants, not vowels; thus, Egyptian -w and UA *-wa match well. See details at set number 117.

We must state clearly that Ancient Egyptian writing did not show vowels, only the consonants, though the consonants y and w sometimes represented the vowels i and u, respectively.

Reduplication was used in Older Egyptian for pluractional (more intense or frequentative) and imperfective verbs: wn ‘was’ vs. wnn ‘is, being, imperfective’; pr ‘came forth’ vs. prr ‘be coming forth’; and wn ‘walk’ and wnwn ‘walk to and fro’; from Egyptian fx ‘loosen’ are fxfx ‘totally release’ and fxx ‘loosen totally’; dbn ‘go around’ and dbndbn ‘go around and around’ (Bendjaballah and Reintges). Egyptian verbs with 5 consonants are always a reduplication of the 2nd and 3rd consonants: k’p ‘cover’ and k’p’p ‘cover up’; nhmhm from nhm ‘yell’; ḏdydy from ḏdy; sometimes a full reduplication: nḏdnḏd from nḏd (Allen 2010, 157). The most common kind of reduplication is doubling the 2nd of two consonants: wn > wnn; ẖzi > ẖzz; (Satzinger 2014).

Reduplication is also used in Uto-Aztecan for a similar array of uses. Langacker (1977, 128) notes that “virtually every UA language displays verbal reduplication of some kind, and in some cases a variety of patterns.” Reduplication can be found in UA to signify types of plurality, plural verbs, repetitive, continuative, distributive, durative, and intensive aspects of verbs, and for imperfective verb stems (Langacker 1977, 128-131).

A few other Egyptian grammatical structures are apparent in UA as well. The masculine pa-, feminine ta-, and plural na- article (‘the’) prefixes are found here and there as fossilized forms in a number of UA languages. See set number 369. The Egyptian structure *noun-pw* ‘he is a/the noun’ is found to a somewhat limited degree, but in several UA languages. See set 122.

Raymond Faulkner’s (1962) Middle Egyptian-English dictionary is the usual standard or the best available in English. However, Rainer Hannig’s (1995) Egyptian-German dictionary is three decades more recent, has more entries/words from more documents, and includes Late Egyptian and more semantic nuances, etcetera. They are the two Egyptian dictionaries regularly cited in this work, are among the best that are available, and are abbreviated in this work as Egyptian(F) and Egyptian(H), respectively. Coptic is a descendent of Egyptian and has the advantage of exhibiting vowels, some of them hinting at the more ancient vowels. Our primary source for Coptic terms is Jaroslav Cerny’s (1976) *Coptic Etymological Dictionary*. Other works, such as Antonio Loprieno’s (1995) *Ancient Egyptian: A Linguistic Introduction*, and James Allen’s (2013) *The Ancient Egyptian Language: An Historical Study,* and others listed in the Egyptian-and-Coptic bibliography are cited periodically as well.

1.4 Introduction to the Uto-Aztecan Languages, Branches, and Abbreviations

Uto-Aztecan (UA) is a language family of some 30 languages in the western United States and Mexico (map page 41). This book is based on the author's reference work—*Uto-Aztecan: A Comparative Vocabulary* (UACV 2011)—with some adjustments and many additions.

Any comparative work in Uto-Aztecan (UA) is a work in progress, not a finished product. The size of UA and the regular emergence of new materials guarantee that any comprehensive comparative effort is but a new horizon for viewing the next, but hardly finishable. Yet many a linguist's life work finds its final resting place in forgotten files due to (1) lack of time to finish it, despite the potential value to future researchers; (2) uncertainty about certain details, perhaps 3%, though the other 97% would have benefited all else studying the matter; and/or (3) not relishing the prospect that condemnations of the 3% may seem louder than commendations of the 97%. So let the latest from three decades of doing UA be made available lest it be lost to flame or file filler should I exit without warning. Publishing, despite its pretense of completion, is as often only the latest draft of endless endeavor. The original hope of finishing such an undertaking before one's own undertaking gradually gives way to time's reminder that no one gets everything right the first time, or even the last time in mortal exertions the magnitude of a language family, and our assumptions about when the last time might be are regularly erroneous, as we hardly get glimpses of our hourglasses. The tragic unpredictable passing of our mentor Wick Miller in May 1994 is an example.

Wick Miller was an example in several ways: he was open, cordial, and encouraging. He was not demeaningly critical, perhaps a tad animated at times, but generally friendly as a team-player in our cooperative progress in UA. As founder of the Friends of Uto-Aztecan organization, he was a friend to Uto-Aztecanists and devoted most of his life to UA. Miller's 1988 computerized database of potential cognate sets exemplifies his openness. He knew it was a compilation of rough-draft brainstorming in need of sorting, revision, etcetera, but he shared it openly—opening himself to an egoless vulnerability for the sake of progress, being more interested in our progress in knowledge than in his being right all the time. In that spirit is this work offered. Errors, loose ends, and uncertainties are certain, but some UA matters may remain unresolved even if one could spend three lifetimes on them, for many more than that have already been devoted to UA and to the reconstruction of Proto-Uto-Aztecan (PUA).

In the UA reconstructions I do not deal with vowel length, only vowel quality and consonants. Figuring out PUA vowel length may fill another lifetime, but not mine. Reduced consonant clusters with compensatory vowel lengthening underlie some long vowels in UA (CVCCV > CVVCV; see page 63), raising doubts about vowel length until the medial clusters are clarified. That and changing stress patterns—causing vowel lengthening with stress, or shortening or syncope without stress, in the various branches and languages through the layers of time—make the puzzle of PUA vowel-length quite unappealing to me, if not presently impractical. UACV also continues Miller's (1967, 1988) tradition of including sets found in only one branch. Rejecters (page 32) of Northern-Uto-Aztecan (NUA) and others of Southern Uto-Aztecan (SUA) make two-branch sets possibly from PUA, and one-branch sets are worth listing, since a reflex from another branch often appears later, though they can hardly be considered from PUA until such support surfaces. A few loans are listed if entering UA early enough to be found in multiple branches. As Miller (1988, 1) notes, "loans are of as much historical interest as inherited forms."

Edward Sapir (1913, 1915) was the first to apply the comparative method sufficient to establish Uto-Aztecan as a viable language family, after Buschmann, Brinton, Kroeber, and others helped lay the foundations for Uto-Aztecan studies, by identifying the three previously accepted branches—Shoshonean (NUA), Sonoran, and Aztecan. A five-letter surname that looms as large as Sapir's in UA contribution needs no further abbreviation, so sets from Sapir's founding works (1913, 1915) are cited as Sapir. A half century later, Voegelin, Voegelin, and Hale (1962) produced 171 cognate sets to further establish the sound correspondences and phonology of UA. Not long afterwards, Wick Miller (1967) published *Uto-Aztecan Cognate Sets*, containing 514 cognate sets. Miller continued working in UA and his last update (1988) of some 1185 potential cognate sets is herein abbreviated M88. Kenneth Hill (2006) has done much good work in sorting and revising M88, combining some sets, redistributing others, adding new reflexes to existing sets, and adding cognate sets of his own discovery, totaling more than 1200 sets. Hill's revision of M88 is herein abbreviated KH/M06. Besides the usual cognate collections, Kenneth Hill's *Serrano Dictionary* (in progress) has many comparative notes on other Takic languages, Tübatülabal, Hopi, and often Numic languages, i.e., most of NUA, so for sets with a Serrano reflex, it is another comparative resource for NUA, here cited as

KH.NUA. Stubbs (2011) then produced *Uto-Aztecan: A Comparative Vocabulary* with 2700 sets. Ronald Langacker (1976b, 1977a) and Jason Haugen (2008) have authored excellent books dealing with UA grammar. Through the 1980s and 1990s, Alexis Manaster Ramer (AMR) proved most prolific in his outpouring of insightful contributions to UA studies by means of more articles than are easily retrievable, until his illness. His and the works of Dakin, Campbell, Canger, Casad, Estrada Fernandez, Fowler, Heath, Jane Hill, Langacker, Lionnet, Munro, Shaul, Seiler, Steele, the Voegelins, Zamarron, and others—works both published and unpublished, like Kaufman's 1981 draft manuscript *Comparative Uto-Aztecan Phonology*—all constitute a corpus somewhat daunting for mere mortals to master.

As is the nature of research, this author's works also build on the good work of many others; thus, I am greatly indebted to the excellent output of scores of scholars before me. The 2011 work was finally made available after previous mentions (Stubbs 2000a, 2003) in spite of one lifetime being a few short of what is needed to do it. Though it doubles the number of previously known sets, the new are mostly smaller sets, as most of the larger ones, easier to find, have long been identified in previous works. Nevertheless, UACV (2011) adds some 1400 new UA cognate sets, adds new reflexes to previous sets, expands the number of branches for many sets, includes a phonology section treating features of UA comparative phonology (most of it here also), and provides discussion on salient questions in some sets, but mainly marshals an enlarged database and some new perspectives for furthering UA research.

In addition to strict cognate sets, Miller's works and UACV include (1) a score or more that may be early loans into UA and so are not cognate sets from PUA; and (2) another couple of hundred sets do not yet have the multi-branch representation needed to be properly counted as being from PUA. However, many times I and others, starting with single-branch sets, have found cognates in other branches that turn many single-branch sets into multi-branch sets. So single-branch sets are well worth listing in a comparative database designed to facilitate comparative research. (3) Many more UA words in a single UA language correspond well with Near-Eastern forms, which may count as Near-Eastern-UA cognates, but are obviously not UA cognate sets as at least two UA forms are needed to be a UA set.

Before diving into the minutia of comparative Uto-Aztecan (from which one may never return, if set on solving all), consider a bigger picture. As a relatively recent science, comparative linguistics first provided a flurry of impressive results in Indo-European. The more accurate recording of more Native American languages enabled similar bursts of impressive progress in Native Americana by the likes of Boas, Sapir, Kroeber, and Bloomfield. Their graduate students produced another generation or two of prominent comparativists; however, the number of those doing diachronic/comparative work seems on the wane, though a growing number of Mexican linguists are now passing U.S. output in comparative UA. The decrease in U.S. output may be partly due to: first, after the more obvious basics were established and caution resumed reign to rein in the macro-phyla momentum, progress slowed in the fine-tuning of the less obvious, which required deeper digging and other investments filling larger percentages of a lifetime. Second, the decrease in comparativists seems to have coincided with the Chomsky-initiated tidal wave of grammatical theories that swept the linguistic landscape and perhaps washed away a host of potential comparativists into the seeing of grammatical theory as the new wave to ride. I did theory too, before getting hooked on historical, for after a language family's more apparent tenets are established, further solutions can seem so deeply buried in data (data possibly unavailable) that comparative progress can turn into comparative composting; that is, progress often becomes mired in stewing over seeming unsolvables. Nevertheless, let an invitation be extended, that a few more linguists involve themselves in comparative research.

Returning to UA, the comparative effort (UACV) is assembled in hopes of helping Uto-Aztecanists postpone composting. The Near East tie answers many questions previously puzzling. If not accepted, then we can return to miring in our meager gains, loosely called "progress" for the sake of encouragement in a field where all but a handful have turned from comparative research to realms offering more hope of closure than reconstructing a large language family can possibly provide.

In short, the 2700 sets of these studies are intended to facilitate comparative research in UA and serve as a new plateau or expanded database. Adding to and refining this body of data will be an ongoing process by the author and any willing to join the cooperative effort. Other viable cognate sets, new reflexes to existing sets, enlightening discussion, and feedback are welcome, and will be credited to the contributor in future editions, and should be emailed to uanist@yahoo.com (Brian's email).

Table 1: The Preceding Cognate Collections in Chronological Order and Their Abbreviations
(Branch cognate collections are abbreviated as the initial(s) of author surname(s) dot branch; only the six in bold address the whole language family)

Sapir	**Sapir's "Southern Paiute and Nahuatl: a Study in Uto-Aztecan" (1913, 1915)**
VVH	**Voegelin, Voegelin, and Hale's *Typological and Comparative Grammar of UA* (1962)**
B.Tep	Burton Bascom's *Proto-Tepiman* (1965)
M67	**Wick Miller's *Uto-Aztecan Cognate Sets* (1967)**
BH.Cup	William Bright and Jane Hill's "The Linguistic History of the Cupeño" *IJAL* 33 (1967)
HH.Cup	Jane Hill and Kenneth Hill's "Stress in the Cupan Languages" *IJAL* 34 (1968)
I.Num	David Iannucci's *Numic Historical Phonology* (1972)
CL.Azt	Campbell and Langacker's "Proto-Aztecan Vowels," *IJAL* 44 (1978)
Fowler83	Catherine Fowler's "Lexical Clues to UA Prehistory" *IJAL* 49 (1983) and her fieldnotes
L.Son	Andrés Lionnet's *Relaciones Internas de la Rama Sonorense* (1985)
M88	**Wick Miller's 1988 Computerized Database of Uto-Aztecan Cognate Sets (1988)**
Munro.Cup	Pamelo Munro's "Stress and Vowel Length in Cupan Absolute Nouns" *IJAL* 56 (1990)
KH.NUA	Kenneth Hill's *Serrano Dictionary*, with comparative notes relevant to NUA (2001)
KH/M06	**Kenneth Hill's *Miller's Uto-Aztecan Cognate Sets*: *revised and expanded by KCH* (2006)**
UACV	**Brian Stubbs' *Uto-Aztecan: A Comparative Vocabulary* (2011)**

Table 2: The Uto-Aztecan Languages and Their Abbreviations

Mn	Mono	Hp	Hopi	Eu	Eudeve
NP	Northern Paiute	Tb	Tübatülabal	Op	Opata
		Ls	Luiseño	Tbr	Tubar
TSh	Tümpisha Shoshoni	Ca	Cahuilla	Yq	Yaqui
Sh	Shoshoni	Cp	Cupeño	AYq	Arizona Yaqui
WSh	Western Shoshoni	Sr	Serrano	My	Mayo
Cm	Comanche	Gb	Gabrielino	Wr	Guarijio
		Ktn	Kitanemuk	Tr	Tarahumara
Kw	Kawaiisu	TO	Tohono O'odham	WTr	Western Tr
Ch	Chemehuevi	UP	Upper Pima/Pima Alto	Cr	Cora
SP	Southern Paiute	Nv	Nevome	Wc	Huichol
WMU	White Mesa Ute	LP	Lower Pima/Pima Bajo	CN	Classical Nahuatl
NU	Northern/Uintah Ute	PYp	Pima de Yepáchic	Pl	Pipil
CU	Colorado Ute	PYc	Pima de Yécora	HN	Huastec Nahuatl
		NT	Northern Tepehuan		
		ST	Southern Tepehuan		

Table 3: The Branches of the Uto-Aztecan Language Family and Their Abbreviations

Mn	Western Numic (Num/WNum)	Hp	single-language branch	Eu	Opatan within TrC
NP	Western Numic	Tb	single-language branch	Op	Opatan within TrC
		Cp	Takic, Cupan (Cup within Tak)	Tbr	TaraCahitan (TrC)
TSh	Central Numic (Num/CNum)	Ca	Takic, Cupan (Cup within Tak)	Yq	Cahitan within TrC
Sh	Central Numic	Ls	Takic, Cupan (Cup within Tak)	AYq	Cahitan (Cah) in TrC
Cm	Central Numic	Sr	Takic (Tak)	My	Cahitan (Cah) in TrC
		Gb	Takic (Tak)	Wr	TaraCahitan (TrC)
Kw	Southern Numic (Num/SNum)	Ktn	Takic (Tak)	Tr	TaraCahitan (TrC)
Ch	Southern Numic	TO	Tepiman (Tep)	WTr	TaraCahitan (TrC)
SP	Southern Numic	Nv, UP	Tepiman (Tep)	Cr	Corachol (CrC)
WMU	Southern Numic	PYc	Tepiman (Tep)	Wc	Corachol (CrC)
NU	Southern Numic	PYp	Tepiman (Tep)	CN	Aztecan (Azt)
CU	Southern Numic	LP	Tepiman (Tep)	Pl	Aztecan (Azt)
		NT, ST	Tepiman (Tep)	HN	Aztecan (Azt)

The Branches of Uto-Aztecan

Miller (1984) and Cortina-Borja and Valiñas (1989) tallied the number of lexical agreements between UA languages using Swadesh's 100-word list, with 12 substitutions. Cortina-Borja and Valiñas added six languages to Miller's and analyzed the data differently. Table 4 presents most of those data:

Table 4: Lexical Correlations between Uto-Aztecan Languages

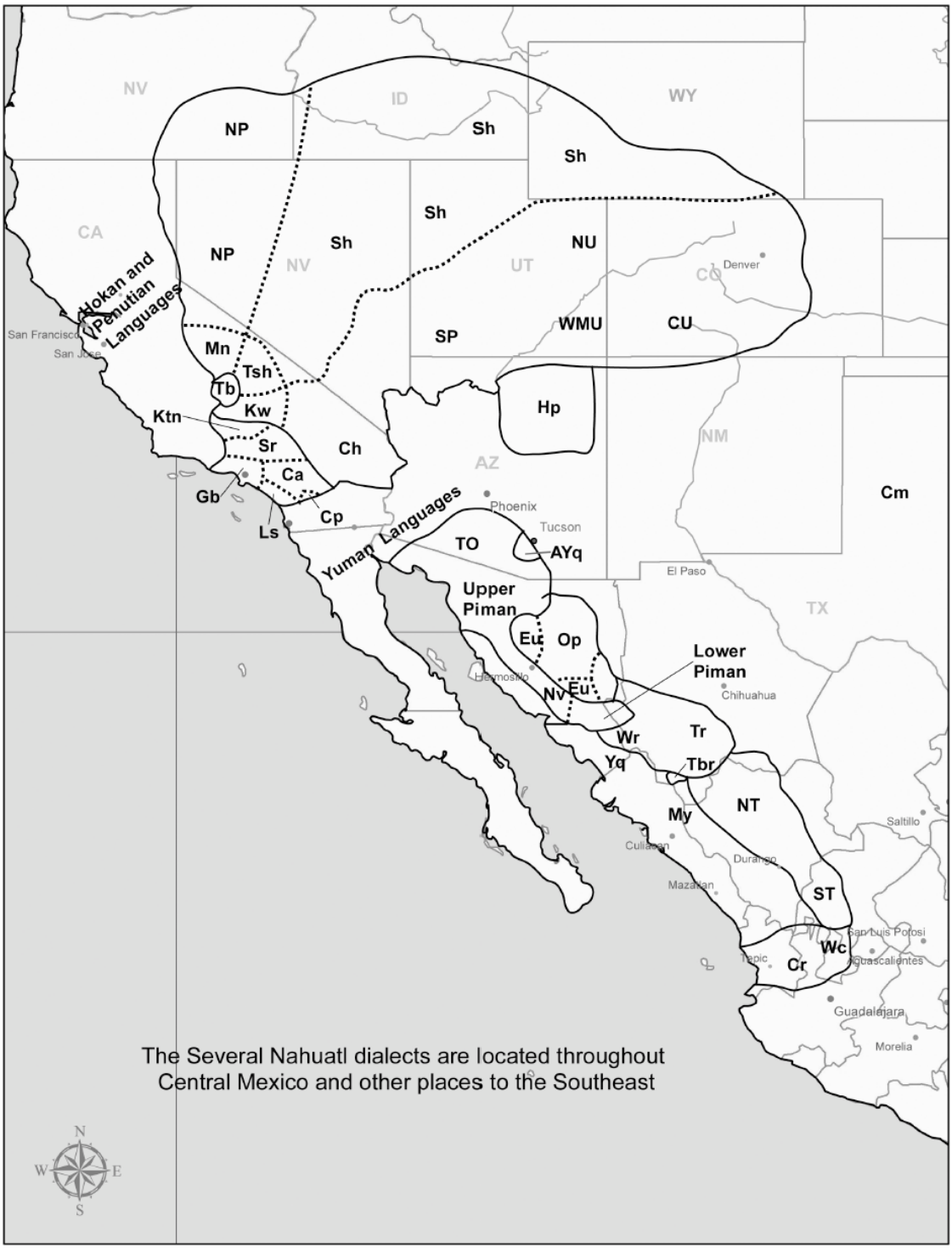
	Mn												
NP	77	NP											
TSh	59	58	TSh										
Sh	58	58	87	Sh									
Cm	57	58	79	88	Cm								
Kw	52	56	54	55	49	Kw							
Ch	50	55	61	58	54	75	Ch						
SP	53	58	62	62	59	79	86	SP					
CU	52	57	59	61	59	76	78	87	CU				
Tb	39	42	37	38	35	39	42	39	40	Tb			
Gb	26	26	26	26	23	24	27	26	27	40	Gb		
Sr	26	24	24	24	21	26	28	27	27	35	45	Sr	
Ca	29	27	27	27	24	27	31	31	29	38	42	50	Ca
Cp	28	27	24	24	23	26	30	31	28	37	34	38	65 Cp
Ls	26	27	25	24	22	24	27	27	26	34	38	35	50 48 Ls
Hp	33	32	27	23	22	31	33	31	32	38	29	29	31 31 26 Hp
TO	23	26	25	25	23	26	28	28	30	35	25	27	31 28 25 32 TO
LP	24	26	24	24	23	24	26	26	27	35	24	27	30 27 24 35 85 LP
NT	25	28	26	26	23	27	28	30	29	37	26	30	32 29 26 33 79 79 NT
ST	22	24	23	23	21	24	24	26	27	33	26	28	31 28 25 30 73 75 82 ST
Wr	26	29	23	23	24	24	24	25	28	36	29	34	34 29 28 32 44 47 47 48 Wr
Tr	23	27	21	21	21	22	22	23	26	32	28	34	33 26 28 28 41 42 42 43 83 Tr
Op	26	29	21	20	20	20	26	24	23	33	26	31	33 29 24 33 40 44 40 39 55 54 Op
Eu	28	27	23	23	22	26	24	26	27	35	26	30	34 29 25 35 45 47 45 43 59 52 73 Eu
My	27	28	25	26	24	27	25	27	28	35	29	33	36 26 28 34 43 45 49 49 58 51 53 61 My
Yq	29	30	26	26	24	29	26	29	30	35	28	32	35 26 28 36 45 47 49 49 58 51 55 62 93 Yq
Tbr	28	27	27	28	27	28	27	30	31	33	24	28	29 26 23 30 40 41 46 43 48 44 42 51 51 53 Tbr
Wc	25	24	23	23	21	23	23	24	25	32	24	28	34 26 27 28 41 43 42 41 51 48 48 49 48 51 41 Wc
Cr	25	22	22	23	21	22	21	22	23	30	19	21	24 23 22 26 34 34 35 35 42 38 35 42 45 46 39 58 Cr
CN	18	18	16	16	14	16	15	16	16	24	20	22	23 19 19 24 29 29 30 29 32 33 39 40 38 39 36 39 37 CN
Te	19	18	16	16	14	17	15	16	17	25	20	22	24 20 19 24 30 30 30 29 32 34 38 40 38 39 35 37 35 85 Te
Za	17	17	15	15	13	16	16	17	18	26	21	20	24 20 19 24 31 31 32 31 29 33 35 39 37 38 35 35 33 80 85 Za
Pl	16	15	14	14	12	16	15	16	17	24	21	19	23 20 18 24 30 30 29 29 33 34 38 40 39 39 37 37 35 79 81 77

Many students of UA see a primary split between Northern Uto-Aztecan (NUA) and Southern Uto-Aztecan (SUA)(Heath 1977:27; Heath 1978:222; Langacker 1977:5; Langacker 1978:197, 269; Fowler 1983:234, Cortina-Borja and Valiñas 1989), yet a few reject NUA and Manaster Ramer (p.c.) rejects SUA. Jane Hill (2001a and b, 2010) also cites evidence for NUA vs. a lack of such for SUA. NUA does exhibit phonological innovations *-l- > n, *-c- > -y- (Manaster Ramer 1992b) and some morphological innovations (Heath 1977:1978), while SUA may exhibit a slightly closer lexical unity. (See discussion in Miller 1983, Goddard 1996, Cortina-Borja and Valiñas 1989.) But until comprehensive morphological studies clarify matters, objecting to the objectors of either half of UA may be premature. Accordingly, NUA has traditionally consisted of Numic, Takic, and two single-language branches: Tübatülabal and Hopi. SUA branches include Tepiman, Opatan, Tarahumaran, Cahitan, Tubar, Corachol, and Aztecan.

Numic (Num) has three subbranches. From southern California, Western Numic (WNum) spread northward along the California-Nevada border into Oregon and Idaho. Central Numic (CNum) spread northeastward through central Nevada, northwestern Utah, into Idaho, Wyoming, and onto the plains. Southern Numic (SNum) spread eastward into southern Nevada, northern Arizona, most of Utah, and the mountainous west half of Colorado. Western Numic includes Mono (Mn) and Northern Paiute (NP). To Central Numic belong Tumpisha Shoshoni (TSh), Shoshoni (Sh), and Comanche (Cm). Southern Numic

includes Kawaiisu (Kw), Chemehuevi (Ch), Southern Paiute (SP), Northern or Uintah Ute (NU), White Mesa Ute (WMU), and Colorado Ute (CU).

Map of the Uto-Aztecan Languages



The term Colorado Ute here replaces Southern Ute, since northern vs. southern is not a language division, but relocation options for the many dialects: e.g., the Uncompahgre Utes from southern Colorado went north to the Uintah-Ouray reserve, though their dialect and ties are closer to southern Colorado Ute; and White Mesa Ute (Stubbs 2011, 6-10), often labeled Southern Ute (because it in the south), retains features in NU and California SNum, but lost in Ignacio's Colorado Ute; and none of the three so-called Northern Ute dialects (two from Colorado) is recorded. So the northern-southern distinction is recent-geographic, not linguistic, and of at least five dialects, only Ignacio's is left in Colorado, thus, the term Colorado Ute.

The tabulations above show high correlations within each branch of Num (76-88), but less between the Num languages of different branches (49-62). Lamb (1958) and others have explained the Num languages' spread from the NUA homeland in southern California out into the Great Basin. The data show the inner-most language of each branch to be more closely related to the outer-most language of the same branch than to the closer neighboring Num languages of different branches. This pattern shows more diversity in Southern California between languages of differing branches only a few miles away vs. closer ties to tongues of the same branch 1,000 miles away. For example, TSh in Southern California is linguistically much closer to Sh (87) in Wyoming and Cm (79) on the plains, all three of Central Numic (CNum), than TSh is to nearby Mn (59), of Western Numic (WNum) and also in Southern California, or to nearby Kw (54), of Southern Numic (SNum) and also in Southern California. This greater diversity in the geographically limited Numic (and NUA) homeland speaks convincingly for a three-way Numic split in Southern California before spreading north, northeast, and eastward into the Great Basin. Shaul (2014) presents many details about the Numic spread, suggesting SNum spread first and WNum last.

Takic (Tak) has traditionally included the UA languages of Southern California, less Tübatülabal (Tb) and Numic languages. Within Tak is a tighter **Cupan** (Cup) group—Luiseño (Ls), Cahuilla (Ca), and Cupeño (Cp)—though the numbers above show Sr as close to Ca as Ls is to Ca. Serrano (Sr), Gabrielino (Gb), Kitanemuk (Ktn) and other now extinct languages together with Cupan constitute the Tak branch. Tak shows a much greater diversity than Numic. The numbers between the Tak pairs range from 35 to 50 (except for Ca-Cp 65) vs. Numic's numbers (49-88). Matters relating to that diversity have periodically caused the unity or exclusivity of the Tak branch to be questioned. **Californian** (Alexis Manaster Ramer 1992a; Kenneth Hill 1998) has been a contemplated union of Tb with Tak. Numbers as low as 34 between Gb and Cp, and 35 between Sr and Ls approximate several other 34's between Tak and non-Takic languages (Wr, Tr, Eu, Tb, Wc). Those inter-Tak numbers are no larger than the 35 through 40 that Tb shares with four Tak languages (Gb, Sr, Ca, Cp). Thus, the union of Tb and Tak into a Californian branch of NUA is reasonable enough in view of the above data, and questioning the traditional Tak unity merits consideration. Nevertheless, the author sees support for Tb's separation from Tak (see discussion under Tb), though hardly overwhelming. Kenneth Hill (2010, 1) also notes Tb's lack of initial ŋ and allowing ŋ only after vowels to be like the Numic languages and unlike the Tak languages' initial ŋ, and sees Tb's lenited absolutive suffix's (*-t > -l) similarity to the Cupan languages as likely coincidental.

Tübatulabal's (Tb) numbers with Num range from 35 to 42, with Tak they range from 34 to 40, and the Tb-Hp number is 38. The differences are so slight and the ranges so overlapping that Tb appears to be about equidistant lexically to other branches of NUA; thus, Tb seems to hold an especially central place in NUA. Yet viewing matters from the other directions, we see that Num is closer to Tb (35-42) than Num is to Tak (21-31) or to Hp (22-33), and that Hp is closer to Tb (38) than Hp to Tak (26-31) or Hp to Num (22-33). Furthermore, Cortina-Borja and Valiñas (1989, 235) see Tb to be slightly more closely associated with Hp and Num than with Tak. So it may be useful to retain Tb as a NUA branch for now. In any case, Tb and Hp both hold especially central positions, not only in NUA, but in UA generally: the Tb and Hp numbers with SUA branches are higher than other NUA languages with SUA languages, though Ca and Sr are not far off.

Hopi (Hp), presently spoken in northern Arizona, holds a unique position in UA—unique as a single-language branch of NUA and as the only known UA tribe to participate in the Ancient Pueblo tradition, along with three other language families (Kiowa-Tanoan, Keresan, and Zuni). Some measures put Hp closer to Tak (Cortina-Borja and Valiñas 1989, 228), while the numbers above show the closest Hp correlate to be Tb (38). Interestingly, however, Hp's next highest numbers are shared with Yq (36), Eu (35), LP (35), and My (34), all of SUA, after which several low 30's (30-33) are shared with some Tak and Numic languages, but also with some other Tepiman and Taracahitan languages. This fairly equal distancing with so many SUA and NUA languages further confirms Hp's unique place in UA.

Southern Uto-Aztecan (SUA) has consisted of Tepiman (Tep), Taracahitan (TrC), Corachol (CrC), and Aztecan (Azt), mostly from Arizona to Mexico City. Miller (1984) included Tep, TrC, and CrC in **Sonoran**; however, Tep and CrC in many respects differ more from TrC phonologically and grammatically than any two NUA branches; and below TrC is further divided. In contrast to earlier leanings toward a UA homeland in NUA areas, hints of greater diversity in SUA areas surface regularly, bringing Manaster Ramer, Jane Hill, and myself to deem SUA areas as more likely prospects for the UA homeland. One such hint is the close proximity of all UA reflexes for PUA *kw in the heart of SUA. Within miles of each other are Tep b, Cahitan bw, Tbr kw, and Tr w/b/ko (Stubbs 1995), while NUA reflects a nearly unanimous kw.

Tepiman (Tep) is so unique phonologically (*kw > b, *c > s, *s > h, *y > d, *w > g) among UA languages that it may merit distinction strictly on phonological grounds and grammar, regardless of word counts. Yet even word counts show a tight Tep entity with numbers from 73-85 between Tep languages, while 34-49 are the numbers between other Sonoran languages and the Tep languages, about the same as between NUA branches. That fact and the unique Tep phonology both recommend a separate Tep branch, here represented by Tohono O'odham (TO) in Arizona and Nevome (Nv) in Mexico, both of Upper Pima, while Lower Pima/Pima Bajo (LP) includes Pima de Yepachec (PYp) and Pima de Yécora (PYc). The Tepehuan languages include Northern Tepehuan (NT) and Southeastern Tepehuan (ST) in western Mexico.

Taracahitan (TrC) has been a term for the core Sonoran languages, i.e., Miller's Sonoran minus Tepiman and Corachol. However, Shaul's (2014) work shows a lack of evidence for a Taracahitan node and recommends four finer divisions for the geographic collection of languages in northwest Mexico between Tepiman and Corachol:

Opatan (Opn) is the closely related pair of Eudeve (Eu) and Opata (Op) or Tewima/Tegwima (Shaul, p.c.).
Tarahumaran (TrWr) includes the dialects of Tarahumara (Tr) and the dialects of Guarijio (Wr).
Cahitan (Cah) has Yaqui (Yq), Arizona Yaqui (AYq), and Mayo (My), with Yq and My sharing 93 items.
Tubar (Tbr) is its own branch. These four branches diverge nicely in reflecting Proto-Uto-Aztecan *kw: PUA *kw > Eu/Op *b, > Cahitan bw, > Tr/Wr *w, and > Tbr kw. Miller (1984) has called **Sonoran** a mesh of languages, which indeed it is with its overlapping and multi-directional influences, and with its intertwining phonological and lexical complexities. For example, **Tubar**, as a unique language in the center of the "Sonoran mesh/mess," is a difficult classification for two reasons: one, the lexical data are limited; two, the limited data, obtained shortly before extinction, show numerous loans and influences upon this small language surrounded by other larger UA languages. It is apparent that Tbr is in part a product of phonological influences from Tep and lexical loans from Cahitan and Tarahumaran, yet it is a kw-language, isolated geographically from the only other kw-languages of SUA: i.e., the Corachol and Aztecan branches. Classification by word counts may be misleading, due to lexical influences upon the small Tbr-speaking population surrounded by larger numbers of Tep (NT) and Tr, Wr, My, and Yq speakers. Phonological influences from neighboring Tep languages upon Tbr include some *s > h, some *w > g, and initial *p > w (Stubbs 2000b). Tbr's lexical position may be more due to loans and meshing movements than to genetic position. Thus, I previously hesitated to call Tbr a single-language branch—because, unlike Hopi's clear distinctions and massive database, Tbr has neither—yet I must concede that the meagerly documented Tbr hardly fits elsewhere and so should be its own branch. However, the work of rewriting and dividing all the TrC notations will happen in a future edition.

Corachol (CrC) consists of Cora (Cr) and Huichol (Wc), showing a closer lexical relationship to each other (58) than to any other UA languages, but phonologically they form a pair and align better with Aztecan than with the old Sonoran grouping. They share an innovation with Aztecan of *p > h/ø and a retention of *kw, neither of which is prevalent in Tep or TrC.

The **Aztecan** (Azt) branch consists of the many dialects related to Classical Nahuatl. Cortina-Borja and Valiñas (1989) include nine in their classification study. Suarez' (1986) admirable comparative study of Nahua dialects merits more use. Of interest is that Azt yields numbers of 30-40 with other SUA languages, but only teens to 20 with NUA languages, except with Tb, Hp, and Ca, with which languages the Aztecan numbers are 23-26.

1.41 Primary Sources for the Lexical Data (in addition to the cognate collections):

Mono (Mn):

Bethel, Rosalie, Paul V. Kroskrity, Christopher Loether, and Gregory A. Reinhardt. *A Dictionary of Western Mono*. 2nd ed. 1993. — Mn

Northern Paiute (NP):

Bednark, James. Project director. *Paiute-English, English-Paiute Dictionary*. A publication of the Yerington Paiute Tribe, 1987. — NP

Liljeblad, Sven, Catherine S. Fowler, Glenda Powell, and Harold Able. *The Northern Paiute-Bannock Language: A Dictionary*. Salt Lake City: University of Utah Press, 2011. — NP(B)

Tümpisa Shoshone / Panamint (TSh):

Dayley, Jon P. *Tümpisa (Panamint) Shoshone Dictionary*. Berkeley: U of C Press, 1989. — TSh

Shoshone (Sh):

Miller, Wick R. *Newe Natekwinappeh: Shoshone Stories and Dictionary*. University of Utah Anthropological Papers, number 94. Jesse D. Jennings, ed. Salt Lake City: University of Utah Press, 1972. — Sh

Crapo, Richley H. *Big Smokey Valley Shoshoni*. Desert Research Insitute Publications in the Social Sciences, number 10. Don D. Fowler, ed. 1976. — Sh(C)

Gould, Drusilla, and Christopher Loether. *An Introduction to the Shoshoni Language*. Salt Lake City: University of Utah Press, 2002. — Sh(GL)

Crum, Beverly, and Jon Dayley. 1993. *Western Shoshoni Grammar*. Boise State University: Occasional Papers and Monographs in Cultural Anthropology and Linguistics, no. 1. — WSh

Comanche (Cm):

Robinson, Lila Wistrand, and James Armagost. *Comanche Dictionary and Grammar*. Summer Institute of Linguistics and the University of Texas at Arlington Publications in linguistics, number 92. 1990. — Cm

Kawaiisu (Kw):

Zigmund, Maurice L., Curtis G. Booth, and Pamela Munro. *Kawaiisu: A Grammar and Dictionary with Texts*. Berkeley: University of California Press, 1991. — Kw

Chemehuevi (Ch):

Press, Margaret L. *A Grammar and Lexicon*. Berkeley: University of California Press, 1979. — Ch

Laird, Carobeth. *The Chemehuevis*. Banning: Malki Museum Press, 1976. — Ch(L)

Southern Paiute (SP):

Sapir, Edward. 1931. Southern Paiute Dictionary. Proceedings of the American Academy of Arts and Sciences 65:537-730. — SP

White Mesa Ute (WMU):

Stubbs, Brian, Mary Jane Yazzie, Aldean Ketchum, Loretta Posey. 2011. *White Mesa Ute: A Dictionary and Lessons*. Preliminary edition. — WMU

Colorado Ute (CU):

Givon, Talmy, ed., and Southern Ute Tribe. 1979. *Ute Dictionary*. Ignacio, CO: Ute Press. — CU

Jean O. Charney. 1996. *Ute Dictionary*. Ignacio, Colorado: Southern Ute Indian Tribe. — CU(Ch)

Hopi (Hp):

Hill, Kenneth C., and the Hopi Dictionary Project. 1998. *Hopi Dictionary*: *Hopìikwa Laváytutuveni*. Tucson: The University of Arizona Press. — Hp

Voegelin, C. F., and F. M. Voegelin. 1957. *Hopi Domains: A Lexical Approach to the Problem of Selection.* IJAL Memoir 14. — Hp(V)

Seaman, P. David. 1985. *Hopi Dictionary*. NAU Anthropological Paper, no. 2. Flagstaff: NAU. — Hp(S)

Tübatulabal (Tb):

Voegelin, Charles F. 1958, "A Working Dictionary of Tübatulabal," *IJAL* 24:221-28. — Tb

Munro, Pamela, and William E. Mace. 1995. *A New Tübatulabal Dictionary*. (revised preliminary version) UCLA. — Tb(M)

Hill, Kenneth C. 2010. Tübatulabal Dictionary. Draft manuscript. — Tb(H)

Serrano (Sr):

Hill, Kenneth C. *Serrano Dictionary*. In preparation, 2001 edition. — Sr

Kitanemuk (Ktn)

Anderton, Alice Jeanne. 1988. *The Language of the Kitanemuks of California*. Ph.D. dissertation, UCLA. — Ktn

Cahuilla (Ca):

Seiler, Hansjakob, and Kojiro Hioki. 1979. *Cahuilla Dictionary*. Banning, California: Malki Museum Press. — Ca

Cupeño (Cp):

Hill, Jane H., and Rosinda Nolasquez. 1973. *Mulu'wetam: the First People: Cupeño Oral History and Language.* Banning: Malki Museum Press. — Cp

Hill, Jane H. 2005. *A Grammar of Cupeño*. UCPL 136. Berkeley and Los Angeles: University of California Press.

Luiseño (Ls):

Bright, William. 1968. *A Luiseño Dictionary*. UCPL51. Berkeley: University of California Press. — Ls

Elliott, Eric B. 1999. *Dictionary of Rincon Luiseño*. Ph.D. Dissertation. San Diego: University of California at San Diego. — Ls(E)

Tohono O'odham (TO):

Saxton, Dean, Lucille Saxton, and Susie Enos. *Dictionary: Tohono O'odham/Pima to English, English to Tohono O'odham/Pima,* 2nd ed. 1983. R.L. Cherry, ed. Tucson: University of Arizon Press. — TO

Saxton, Dean and Lucille. *Dictionary: O'odham Milgaan, English Papago/Pima*. 1969. Tucson: University of Arizona Press.

Mathiot, Madeleine. *A Dictionary of Papago Usage*. 1976. Tucson: University of Arizona Press. — TO(M)

Upper Pima (UP) and **Nevome (Nv)**:

Bascom, Burton W. *Proto Tepiman*. Ann Arbor: University Microfilms, Inc., 1965. — UP

Munro, Pamela, et al. Akimel O'odham. In Preparation. — UP(M)

Pennington, Campbell W. ed. *Vocabulario en la Lengua Nevome: The Pima Bajo of Central Sonora, Mexico*. vol. 2. Salt Lake City: University of Utah Press, 1979. — Nv

Pima Bajo (PB) or **Lower Pima (LP):**

Bascom, Burton W. *Proto Tepiman*. 1965. PhD Dissertation: University of Washington. Printed at Ann Arbor: University Microfilms, Inc. — LP(B)

Escalante, Roberto, and Zarina Estrada Fernandez. 1993. *Textos y Gramática del Pima Bajo*. Hermosillo, Mexico: Departamento de Letras y Lingüistica, Universidad de Sonora. — LP(EF)

Shaul, David Leedam. "A Sketch of the Structure of Oob No'ok (Mountain Pima)" in *Anthropological Linguistics*. vol. 36, number 3, Fall 1994. — PYp

Barragan, Luis M. fieldnotes on the Pima Bajo dialect of Yécora, Sonora, Mexico. — PYc

Northern Tepehuan (NT):

Bascom, Burton. *Northern Tepehuan Dictionary*. In preparation. — NT

Bascom, Burton. *Proto Tepiman*. Ann Arbor: UMI, 1965.

Southern Tepehuan (ST):

Willett, Thomas. *Southeastern Tepehuan Dictionary*. 2005. Preliminary edition. — ST

Bascom, Burton. *Proto Tepiman*. 1965. Ann Arbor: UMI.

Eudeve (Eu):

Anonymous. 1981. *Arte y Vocabulario de la Lengua Dohema, Heve, o Eudeva*. Ed.Campbell W. Pennington. Mexico City: Mexico, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de Mexico. — Eu

Lionnet, Andrés. 1986. *Un Idioma Extinto de Sonora: El Eudeve*. Mexico City: Universidad Nacional Autónoma de México. — Eu(L)

Tubar (Tbr):

Lionnet, Andrés. 1978. *El Idioma Tubar y Los Tubares*. Universidad Iberoamericana. — Tbr

Yaqui (Yq):

Estrada Fernandez, Zarina, et al. 2004. *Diccionario Yaqui-Español y Textos.* — Yq

Johnson, Jean B. *El Idioma Yaqui*. 1962. — Yq(J)

Arizona Yaqui (AYq):

Molina, Felipe S., and David Leedom Shaul. 1993. *A Concise Yoeme and English Dictionary*. Tucson: Tucson Unified School District. — AYq

Mayo (My):

Collard, Howard, and Elisabeth Scott Collard. 1984. *Vocabulario Mayo*. Serie de vocabularios indígenas, no. 6. Mexico, D.F.: Instituto Lingüistico de Verano. — My

Guarijio (Wr):

Miller, Wick R. *Guarijio: Gramática, Textos, y Vocabulario*. 1996. — Wr

Medina Murillo, Ana Aurora. 2012. *Diccionario Léxico-Morfológico del Guarijío*. — Wr(M)

Tarahumara (Tr):

Brambila, David. *Diccionario Raramuri-Castellano*. 1976. La Obra Nacional de la Buena Prensa. — Tr

Hilton, K. Simón. *Diccionario Tarahumara de Samachique*. 2nd ed. Serie de vocabularios indígenas, no. 101. Tuscon: Instituto Lingüistico de Verano, 1993. — Tr(H)

Lionnet, Andrés. 1972. *Los Elementos de la lengua Tarahumar.* México: UNAM. — Tr(L)

Cora (Cr):
McMahon, Ambrosio, and Maria Aiton de McMahon. *Cora y Español*. 1959. Cr
Serie de Vocabularios Indigenas, no. 2. Mexico City: Instituto Lingüistic de Verano.
Huichol (Wc):
Grimes, José E., Pedro de la Cruz Avila, José Carrillo Vicente, Filiberto Díaz, Román Díaz, Wc
Antonio de la Rosa, and Toribio Rentería. *El Huichol: Apuntes Sobre el Léxico*. 1981.
New York: Cornell University.
Classical Nahuatl (CN) and other **Aztecan Dialects**
Campbell, R. Joe. *Draft Lexicon of Molina and Florentine Codex Vocabulary*, 2006. CN(RJC)
Karttunen, Frances. 1983. *An Analytical Dictionary of Nahuatl*. Austin: University of Texas Press. CN
Simeon, Remi. *Diccionario de la Lengua Nahuatl or Mexicana*. Mexico City: CN(S)
Siglo Veintiuno, 1977. First published in French in Paris: la imprimerie nationale, 1885.
Campbell, Lyle. 1985. *The Pipil Language of El Salvador*. New York: Mouton Publishers. Pl
Campbell, Lyle, and Ronald W. Langacker. 1978. Proto-Aztecan Vowels. CL.Azt
IJAL 44: 85-102, 197-210, 262-279.

1.42 Sound Correspondences and Comparative Phonology of Uto-Aztecan

Some Proto-Uto-Aztecan (PUA) consonants attract debate—PUA *l / *r, and *ŋ vs. *n—while the more secure PUA consonants include *p, *t, *k, *kw, *', *h, *s, *c, *m, *n, *l, *w, and *y. Exceptions for *kw before round vowels (*kwo, *kwu) are discussed in Stubbs 1995. Some PUA *t palatalized to c/č in time to participate in the Tepiman sound change *c > s, and are thus mistaken for PUA *c (Stubbs 2000a). The PUA vowels are *i, *a, *u, *o, and *ï. An oversimplified portrayal of the consonant correspondences follows (per Sapir 1913-14, VVH 1962, Miller 1967, 5, Steele 1979, Manaster Ramer 1992b, Stubbs 2003):

Table 5: Consonant Sound Correspondences (mostly initial position)

PUA	*p	*t	*k	*kw	*m	*n	*c	*s	*w	*y	*'	*h
Num	p	t	k	kw	m,ŋw, w	n	c,-y-	s	w	y	'	h
Hp	p	t	k,q	kw	m	n	c,-y-	s	w,l	y	'	h
Tb	p	t	h,k	w	m	n	c,-y-	š	w	y	'	h
Sr	p	t	k,q	kw	m	n	c,-y-	ş,h	w	y	'	h
Ca	p	t	k,q	kw,w	m	n	c,-y-	s	w	y	'	h
Ls	p	t	k,q	kw	m	n	c,-y-	s,š	w	y	'	h
Tep	w,v,-p-	t,c	k	b	m	n,ñ	s, š	h,ø	g	d̰,j	ø,'	',h
Eu	b,p	t	k	b	m	n	c, č	s	w	d	ø,'	h
Tr,Wr	b,p	t	k	w,-'w-	m	n	c, č	s	w	y	ø,',h	h
Yq,My	b,p	t	k	bw	m	n	c, č	s	w	y	'	h
Tbr	w,-p-	t	k	kw	m	n	c, č	s,h	mw, ñ	y,ñ	ø,h	h
Cr	h	t	k,č	kw,čw	m,mw	n	c, č	s	w	y	'	'
Wc	h	t	k	kw	m	n	c, č	s,z	w	y	ø	ø
CN	ø,p	t	k	kw	m	n	c, č	s,š	w	y	ø, ',h	ø

Table 6: UA Vowel Correspondences and medial *l (Sapir 1913-14, VVH 1962, Miller 1967, Bright and Hill 1967, Langacker 1970, Munro 1990, Stubbs 2003):

PUA	*i	*a	*u	*o	*ï	*l	
Num	i	a	u	o	ï	n	
Hp	i	a	o	ö	ï	n,l	
Tb	i	a	u	o	ï	n	
Sr	i	a	u	ö	ï	n,r	
Ca	i	a	u	i	e	n,l	
Cp	i	a	u	i	ɛ/ə	n,l	
Ls	i	a	u	e(i)	o(u)	n,l	
Gb	i,e	a	u,o	e,o	o	n	(Kenneth Hill, p.c. 2002)
Tep	i	a	u	o	ï	l,d̰,r	
Tr,Wr	i	a	u,o	o	e,i	l,r	
TrC	i	a	u	o	e	l,r	
CrC	i	a	ï	u	e	l,r	
CN	i	a	i	o	e	l	

1.43 Consonant Clusters in Proto-Uto-Aztecan Stems

The traditionally accepted form for UA stems has been CVCV (C = consonant; V = vowel). While many stems undoubtedly align with CVCV, evidence is emerging to suggest that many Proto-Uto-Aztecan (PUA) stems contained consonant clusters not previously recognized: CVCCV and others. First of all, Manaster Ramer and Blight (1993b) and Manaster Ramer (1997) have noted evidence for reconstructing clusters for several etyma, such as *kapsi 'thigh' vs. *kasi (Miller 1967). Sometimes those clusters survive in only one language. Second, we see frequent evidence in UA that vowel syncopation (the deletion of an internal vowel as a common phenomenon in UA) creates additional clusters, and that even those later clusters are reduced quite quickly (CVCVCV > CVCCV > CVCV), suggesting that most UA languages do not maintain consonant clusters well. Third, the difficulties found in the correspondences of the medial consonants in UA are likely the result of reductions of previous clusters. In Miller (1967, 5), one can see in table 5 above that the initial consonant correspondences are fairly clear and consistent, while the medial consonant correspondences are more varied and less consistent. Yet many medial consonants being reduced consonant clusters may explain some of the variety and difficulty, if not most of it. If UA had 13 proto-consonants (also debatable), then 169 possible combinations (13 x 13) exist. Perhaps some of those clusters reduced to the velar nasal (ŋ) in some languages, others to a glottal stop (') in some languages, etc. A certain cluster might reduce five different ways among the branches of UA. Complications of clusters may underlie the medial consonant difficulties, which Uto-Aztecanists have only begun to unravel. The UA medial consonant correspondences as listed in Miller (1967, 5) illustrate the confusion:

Table 7: Some of the Medial Consonant Correspondences depicted in Miller (1967, 5)

	*-p-	*-t-	*-k-	*-k^w-	*-s-	*-m-	*-n-	*-w-	*-y-	*-'-	*-h-	*-l-
SP	v,hp,mp	r,ht,c	x,hk,ŋk,k^w	k^w,hk^w,ŋk^w	s,š,ø	ŋw,m	n,hn,ŋ	----	y	----	ø,h	n
Tb	p, b, hp	l, t, d	h,g,hk	----	š	w, m	n, ŋ	w	y	'	', ø	n
Ca	v, p	l, t, š	x, k, q	----	s, š	w, m	n, ŋ	w	y	'	h	l, n
Sr	v, p	r, t, ç	k, q	----	h, ş	m	n, ñ, ŋ	----	y	'	h, ø	r, n
Hp	v, p	r, l, t	k, q	k^w	s	m	n, hn, ŋ	w, l	y	ø	ø	n
TO	v, p	ḍ, t, c	k	b	h	m	n, ñ	g	d	'	', ø	l, ḍ
Tr	b, p,'w	r, l, t	k	w	s	m	n	w	y	h,'	----	l, r
My	b, p	t	k	b^w	s	m	n	w,b	y	'	h	l, r
CN	p, hp	t	k	k^w	s, š	m,-n	n	w	---	---	ø	l

Other medials not listed above include some Num m : NUA ŋ : SUA n (see salt 280, lung 281, husband 284). For those 3 and other cognate sets, PUA *ŋ > SUA n (some say) and PUA *n > SUA l, and that PUA had no liquids; others see the change in the other direction: PUA *n > NUA ŋ and PUA *l > NUA n. The medial liquid(s) (l/r) await explanation, but see 7.9. On the positive side, some progress has been made since Miller 1967: AMR (1992a) clarified PUA non-initial *-c- > *-y- in NUA and other medial matters cited in coming pages. This work also clarifies matters for Tr initial t vs. r (6.1), TrC b vs. p (6.2) both previously thought from PUA *p, the Tb k vs. h < PUA *k dichotomy (6.3), and Hopi l vs. w before low vowels (6.5). Semitic explains Takic *qa vs. *ka syllables and other matters may suggest additional PUA consonants. Of interest is a general lenition shift of consonants in Tep: *t > c (before high Vs), *c > s, *s > h, *h > ', *' > ø.

PUA	*p	*w	*y	*t	*c	*s	*h	*'
Tepiman	w	g	d	t/c	s	h	'	ø

Phonemic Frequencies in Uto-Aztecan

The phonological frequencies of initial syllables in Miller 1988 (M88) were calculated. The exact numbers of initial syllables among UA cognate sets are subject to adjustment, yet those in M88 are reasonably proportionate and available for quick inspection, until this work's sets settle sufficiently for counting. The first column is the number of sets beginning with glottal stop-vowel or initial vowel. (Enough UA languages require glottal stop before otherwise initial vowels that Miller (M88), Ken Hill (KH/M06), and others deem the same for PUA.) The other columns are sets beginning with the specified CV combination. Totals of the lines (vowel totals) are to the right; and totals of the columns (consonant totals) are below. The total number of sets in M88 is 1185, the total both of the rows and of the columns.

Table 8: Initial Syllable Frequencies

	’	c	h	k	kw	m	n	p	s	t	w	y	totals
a	39	18	17	43	15	43	38	64	29	48	27	28	409
i	11	23	7	10	16	6	2	28	18	1	18	--	140
ï	19	15	9	17	6	11	15	17	22	54	12	19	216
o	27	20	8	38	--	11	12	26	15	26	14	10	207
u	9	20	21	37	--	23	5	23	21	24	2	28	213
	105	96	62	145	37	94	72	158	105	153	73	85	1185

Some observations of interest and relevant to the phonological discussions include:
(1) The vowel ***a*** is about twice as frequent as other vowels.
(2) The syllables kwo, kwu, and yi are absent. Yet there are 38 ko and 37 ku syllables, respectively, vs. 10 ki and 17 kï. The ko/ku are nearly as many as the 43 ka, which vowel, across the board, is normally twice what others are. The increase in ko/ku syllables is probably related to the absence of kwo/kwu syllables, though the same cannot be said for an increase in ***i*** in absence of yi.
(3) Among all tV syllables, only one ***ti*** syllable (M88-ti1 ‘man’) existed until Ken Hill redistributed it (to KH/M06-ci24, tu10, tï9), so now no ***ti*** syllables exist (in KH/M06) vs. 48 ta, 54 tï, 26 to, and 24 tu. In contrast, the number of ***ci*** syllables (23) is larger than other ***cV*** syllables (18, 15, 20, 20) in spite of the fact that ***i*** is the least frequent vowel: i.e., 140 ***i*** vs. 409 for ***a*** and vs. 200-plus for the other three vowels. All this suggests that many apparent ***ci*** may be from an earlier ****ti***.

Final Features as Evidence of Earlier Consonant Clusters

Final features suggest the presence or absence of internal consonant clusters. Final features have been discussed by several (Sapir 1914, 451-2; Sapir 1930, 62-65; Irving Miller 1982; Wick Miller 1983; Manaster Ramer 1992b, 2004) and involve the presence or absence of underlying final consonants, whose presence causes consonant cluster behavior at morpheme boundaries. These final features are found in much of NUA, most notably and clearly in Num, but also in Tak and Tb. Sapir (1930) found that Num stems had one of three final features: gemination (-”) or (-C) causes a doubling of the next consonant (> -CC-); nasalization (-N) adds a nasal dimension to precede the next consonant (> -NC-); or spirantization appears to be a lack of a final underlying consonant, such that the next morpheme’s initial consonant appears as it typically does between vowels (*-k- > -x-/-ġ-, *-t- > -r-/-l-/-d-, *-p- > -v-/-b-). Miller, Elzinga, and McLaughlin (2005) provide some TSh examples with the post-position -pa’a ‘on’ after spirantization (*naka-pa’a > naġa-va’a ‘bighorn sheep-on’), gemination (*tuaC-pa’a > tuappa’a ‘son-on’), and nasalization (*pïyïN-pa’a > pïyïmba’a ‘duck-on’). The variety of absolutive suffixes (*-ta > -t(a), -l(a), etcetera) mostly in NUA, also leaves hints of the existence and type of final consonant (Sapir 1914, 451; Manaster Ramer 1992b; 2004). For example, in Tak and Tb, an absolutive suffix -l means the stem ended with a vowel and *V-ta became V-la between vowels (*V-ta > V-la > V-l), whereas absolutive suffix -t suggests the noun stem had an underlying final consonant no longer obvious (*VC-ta > V-t). The peculiar Ls -la is treated at 6.4.

Intervocalic *-t- vs. *-tt-/*-Ct- Clusters, and Many NUA -c- < *-tt-/*-Ct-

Intervocalic *-t- usually goes to -r- or -d- in Num and to -l- in Cupan and Tb (Sapir 1914, 451; Manaster-Ramer 1992b). So when we see intervocalic -t- in those languages, it is usually due to an underlying geminated *-tt- or to a cluster approximating *-Ct- that behaves much like *-tt-. Sapir (1914, 452) also noticed that Num geminated -tt- corresponds to Tak and Tb -t-. Later, Alexis Manaster Ramer (1992a) demonstrated PUA medial *-c- > -y- in NUA, and accordingly suggests the various NUA medial -c- are from other sources than PUA *-c-, unless *-cc- is geminated or clustered. Thus, the source of NUA -c- is often a palatalized *-tt- or *-Ct-, especially adjacent to high vowels. (See 534, 969, 1445.) In fact, Sapir (1914, 445) noted that many UA *c* may be from syncopated *ti. I would add that many, if not more, are also from non-syncopated *ti / *-tti or *tï / *-ttï. In the data below, note the frequency of *t-/*-tt-/*-Ct- > c/-c-, often adjacent to high vowels, but not always.

1368 UA *attip-na 'good': CU ’atti 'good'; SP ’attïN ‘good’; Cp á’či’a 'good'; Ca áča’e 'good, fine, well, very’; Hp -’civa 'accord with’, Hp a’civa ‘behave as expected, do what one can with one’s personal resources and limitations’; Hp àacipna/a’cipna 'do as expected’. Note that Hp a’cipna and Cp á’či’a are identical in five segments (a’ci . . . a) except for a consonant cluster in Hp that aligns with a glottal stop in Cp, and both align with SNum (CU, SP) *’atti, suggesting *-tti- > -ci-. [Syriac ’aṭib / ’aṭ(’)ib ‘do good, treat well’ (causative of ṭ’b; Hebrew haṭṭiib ‘do well’]
UACV-124 ***paCti’a** ‘bat’ > *paci, *pali, etc. NP pidahana'a ‘bat’ actually shows -t-. See discussion at ‘bat’.
534 UA *paCtï ‘daughter’ > Num *pattï ‘daughter’, but pacï in SP and CU. [Hebrew **batt** ‘daughter’ (< *bant / bint)]
1227 UA *patta/*patti ‘flat’ > *paci.

More Examples of Proto-Uto-Aztecan *t/*tt > c and in time for *c > s in Tepiman

We not only see *t or *-tt- > -c-, but sometimes that change was early enough to undergo the Tepiman sound change of *c > s, such that **some PUA *t / -Ct- > c > Tep s**:
437 UA *matta > *maca/i ‘tick’: NP madabi (< *matapi); Kw muu’maa-ci; CU mata-ci (< *matta-ci); Ch mata-vi (<*matta-pi); Cp máči-ly; Ca máči-l; Ls ’amáča; Sr maca-c; Hp màaca; TO maamş; Wr macá; Tr mačá; Wc mate. Takic, Hp, and TrC show -c- (in both NUA and SUA), but Num and Wc show -t-/-tt- (again in both NUA and SUA), yet TO has ş (< c < *-tt-). [Egyptian **mht** ‘an insect’]
1464 UA *takola/*takula 'round, (en)circle': Eu takóris 'circle'; AYq tekolai ‘round’; My tékolai ‘redondo’; Sr ta’kï’q ‘be round, circular’. From the first vowel *a* (Eu, Sr), note some raised vowels (AYq, My). If raised a little more, then:
1464 UA *tikola > *cikola (> Tep *sikola/i) '(a)round': TO sikod ‘round, circumscribed’; TO sikol ‘circular, round’; NT šikóra; NT šikóóraka; ST šikar. Ken Hill adds Cahita číkola ‘alrededor’ exactly the link theorized.
638 NUA *tïkïya 'deer’ is found in most Numic languages and Tb, yet compare
638 SUA *ciki 'white-tailed deer' (Tep *siki < *ciki < *tiki): TO siiki 'white-tailed deer'; PYp siiki 'white-tailed deer’
UACV-108 *paNtuC > *paicu’ 'badger': ST vaisïly ‘tejón’; Cr haihcï(-te) ‘tejón(es)’; and Wc háisï ‘tejón’ all match *paicV (*p > ST v; *p > CrC h). CN peeso’-tli ‘badger’ also parallels ST vaisïly and Wc háisï, all pointing to s.th. near *paicu, though CN s should be c and CN has p while Cr and Wc have h, so CN may be from an early loan. Most forms suggest an originally round final vowel, but puzzles remain. Wr pincúri ‘tejón’ and Tr batúwi ‘tejón’ must be included and may be key to the cluster. Wr pincúri shows *-nc-, a nasal-alveolar cluster, and the dipthong **ai* > *i* instead of > *e*, like CN. ST *s* agrees nicely with the *c* of CrC and Wr. In light of many PUA *t > c adjacent to high vowels and in light of Tr’s t and in light of Cr, Wr, Tr showing PUA *u after the t/c, something like *paNtu may explain all forms, especially since other examples of UA vowels before alveolars tending toward *i* would explain *paicu (< *pantu). In addition, Wr’s nasal in the cluster may explain such a cluster > -c- in most languages, for this may have been a different kind of cluster than in ‘bat’, resulting in Cr -c- vs. Cr -hc- for ‘badger’. This is a 4th example of *t > c > Tep s.
UACV-124 ***paCti’a** ‘bat’ note the -pisa of PYp ho’opisa (Tepiman) and pida- of NP pidahana’a ‘bat’ among the dozen-plus reflexes. Because of NUA -c-, the reconstruction must include *-Ct-/*-t- and NP actually has -t- among many Num -c-, yet in a Tep language (PYp) we find -s-, the usual reflex of *c, but ultimately from *t or *-Ct-.
*paCti’a > Ca pali, > *paci’a > *paca’a (Tb, Kw, Ch, SP, CU), > *pita- (NP pitahana'a ‘bat’),
> *paci’i > háci’i (Cr)
> *paci > *so’-peci (TrC: Tr, Wr, Eu) > *soci (Yq, My); *paCti > *paci > *so’o-pica > Tepiman ho’o-pisa (PYp)
UACV-935 *natipa (> ***nacipa** > ***nacpa** > Tep *naspa) 'fold': ST naspa’ ‘doblar, torcerse’; Eu nátpa ‘doblar’; Nv nasa ‘plegar una cosa’. Eu -t- aligns with Tep -s-, suggesting palatalization before c > s in Tep.
210 UA *tuti > *cuci > Tep *susi(-ka) > Tep susaka ‘sandals’: TO šuušk; LP šuušak; NT súúsaka; ST suusak. In light of Tep’s frequent aniticipatory V assimilation (*V-a > a-a), an original *tuti would have high vowels following both consonants (*tuti > *cuci > Tep *susi), then suffixed -ka would later encourage *susi-ka > susaka. As we often see Tep s < c < *t (i.e., Tep *susa < *susi < *tuti) and since Hp o < *u, then Hp tooci (< *tuti) ‘shoe, moccasin’ agrees with Tep entirely. [Egyptian **twt** ‘sandal’]
620 UA *tapputi / *tïpputi ‘flea’: TO čïïpš; PYp teepas; NT tapïïši; ST tapïïš; Eu tepú’u / tepú; Yq téput, tepučim (pl); My tépput; Wr tehpucí; Tr ŕipučí; Tbr tipú-t; Wc teepïï; Cr tepï-, tepï-ci (pl.). We see a 3rd consonant -t- in Yq, My, and Tbr, and even if the -t- was originally part of a suffix, it understandably palatalized in Tr, Wr, and the Yq pl, and that palatalization (c) is likely the source of Tep s, that is, the 3rd consonant in several Tep forms. The first vowel may well be ***a***; for NT and ST both show *a*, not *ï*, and if ï (a high V) were original, then results similar to *t > c > s as in ‘deer’ and ‘sandals’ for the first consonant would have resulted, but that did not happen, and perhaps because an original initial *ta syllable, which only later became tï, prevented it. [Semitic *đabbot ‘flies’]
809 UA *’ati / *ata / *aCti ‘laugh’: Wr a’ci 'estar riendose'; Tr ačí 'reirse'; My aače 'reírse'; AYq aače; Cr ra-’á’ace 'he is laughing at him'; TO a’as; LP ’a’aši; PYp a’asi; NT ááši-/ásyi; ST ’aas/ašia. Miller includes probable Ca ’ála’ 'mock, echo s.o., vt’. Because Ca ’ála’ has l, the Cupan reflex for intervocalic *-t-, it again may suggest a medial *-t- or cluster *-Ct- originally, which again did the cycle *t > c > s in Tepiman *asi. Ca ’ála’ is a transitive verb, perhaps preserving the final vowel -a, of the alternation -a ‘transitive, active’ vs. -i intransitive, stative’. [Semitic ***-hattil** ‘to mock’]
UACV-2205 *tïyuna ‘keep’: Mn tïyuna ‘store, v’; NP notïïna 'keep s.th.'; Ca téyan 'preserve, carry on (custom, rite)’; NT šiid^{y}úñd^{y}i ‘retacar, guardar, llenar mucho’. In *t- > *c > Tep *s by high vowels, Mn and NT agree well in * tïyuna.

Medial -p- (vs. -v-) from a Previous or Underlying Consonant Cluster

Many UA languages yield intervocalic -v- < *-p-, as the first set suggests. So when those same languages show -p-, it is from gemination or a cluster, perhaps even in Tep, as several sets suggest.
188 UA ***nopi** / ***nohopi** 'hand, arm': TO nowi ‘hand, arm’, pl: noonhoi; PYp novi, pl nonovi; Nv novi, pl: nonovi; NT novi; ST nov. TO pl shows h but no v. [Egyptian **nḫbt** ‘nape of the neck]
221 UA *wïr-pa’a ‘tall, long, great-height/length’: Hp wïïpa ‘tall, long’; Cp wevášа ‘long’; Cp wevášiš ‘tall’. Miller (M67-229) astutely sees Hp wïïpa 'tall, long' as a compound of *wïr-pa’a ‘big-height/length’. Intervocalic -p- in Hp instead of -v- supports Miller’s observation, though Cp -v- in Cp means it was sooner perceived as clusterless or non-geminated in Tak. [Egyptian wr ‘great’]
1070, 1071 UA *naNkapï ‘leaf’: Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï ‘leaf’ (vs. SP naŋqava ‘ear’); CU nïká-’a-vi (vs. CU nïká-vi ‘ear’); Tb naŋhabïï-l; Hp nàapi / nahpi. Hp lost intervocalic -ŋk-, collapsing -ŋkap- > -ŋkp- > -p- in Hp nàapi / nahpi showing -p- instead of -v-, due to a previous cluster. [Semitic *na-qšab ‘be perked up’]
UACV-1547 *mukpiC ‘nose’: While Num *muvi lost all signs of a medial cluster, Sr and Ktn *mukpi agree with Hp mòope(q) ‘in front’ in showing evidence of the cluster.
UACV-1550 *sïCpowa / ***sïk-powa** 'numb': CN sepoowa 'be numb (of body part, from cold or lack of circulation)'; Eu zopóre ‘encogerse’. The first element of the CN term is suggested to be CN sek-tli ‘snow, ice’. Eu normally has intervocalic -v- for *-p-, so Eu -p- (vs. -v-) suggests a cluster in Eu as well.

Reduplication Created Clusters That Later Separated

Some sets show the base form (non-reduplicated) in NUA, while SUA shows the reduplicated form. Another consistency in both sets is that the second consonant is a liquid (-l- or -r-), and it appears that the reduplication first created a cluster, which caused the liquid to change to glottal stop, which was later separated from the other consonant by an echo vowel: *-VLC- > -V’C- > -V’VC-.
221 *wïr, reduplicated ***wïrwïru** > ***wï’wïru** > ***wï’ïwïru** 'big' or Tep gï’ïgïru: among the several UA forms, the reduplicated form is usually the plural form of *wïr. [Egyptian wr / wrw ‘great’]
630 *koli, reduplicated ***kolkoli > *ko’koli** > ***ko’okoli)** 'hurt, be sick, chili pepper': many SUA forms show *ko’okoli, while Cupan shows the non-reduplicated form with its vowel change *koli > *qoli > qili: Cp qilyíqa-t ‘hot, spicy, strong’; Cp qilyíqtu’ni ‘hurt, sting, vt’; Ca qélya ‘feel sore, v’; Ca qélyak ‘peppery, pungent, creating a burning sensation’. In SUA: TO s-ko’ok 'be painful'; TO ko’okol ‘chile pepper’; TO ko’okod ‘hurt, give pain to, vt’; NT kóóko ‘be sick’; NT kóókoli ‘chile’; ST -ka’ook ‘be sick’; ST ko’okoly ‘chile’; Eu kókoe- ‘doler’; Wr ko’koré- ‘dolerse’; Wr ko’kóri ‘chile’; My kó’okori ‘chile’; My kó’okore ‘enfermo’. [Hebrew **xolɛ** ‘be sick, hurting’]

1.44 The Labial Labyrinth in Uto-Aztecan

The labiovelar spectrum in UA is fraught with intrigue. The syllabic frequencies show a complete lack of *kwo and *kwu among UA initial syllables paralleled by a marked abundance of about twice as many ko and ku syllables as k with other vowels: 38 ko and 37 ku syllables vs. 10 ki and 17 kï, and nearly as many as the 43 ka, though across the board, *a*-syllables are normally twice what others are. Lack of *kwo/kwu syllables alongside about double the usual vocalic ratio for *ko/ku syllables may suggest that many *kwo/kwu became ko/ku, or that bo/bu > ko/ku, but ba, bi, bï before other vowels.

A count of TO’s initial syllables provides an even greater discrepancy. Considering that TO b corresponds to PUA *kw, notice that a rough count from Saxton’s (1983) dictionary yields the following:

	a	ï	i	o	u
b (< *kw)	ba(40)	bï(5)	bi(28)	bo(0)	bu(0)
k	ka(48)	kï(20)	ki(13)	ko(70)	ku(88)

Again in TO, a complete lack of bo/bu syllables contrasts with about triple the expected number of ko/ku syllables, as if in Tep languages *kwo/kwu > ko/ku. Note the TO variants of a plant (Mathiot 1976, 362):
UA bihul / hikul ‘a plant’. These alternate forms switch first and second consonants, except that PUA *kw is b before i, but *kw is kw before u. In PUA terms, *kwisuL > TO bihul, and *sikwuL > TO hikul.

If we take each language’s initial correspondences for *kw and place them before o and u, the likely results are *bwo/bwu > bo/bu in Cah (Yq, My), *wo/wu > o/u in Tr/Wr, *kwo/kwu > ko/ku in the kw-languages and in Tep as well, and *kwu > kwi in CN. Interestingly, some semantically plausible sets show that very array of correspondences.
UACV-1896 *kwuhV ‘scrape off, degrain (corn)’: Yq buh-te ‘espigar [take grain from ear]’; My búh-tuk ‘se espigó’; My búh-te ‘está espigando’; Tr ohó ‘desgranar [remove grain from ears]’; CN kwi’kwi ‘chip off (wood or stone), clean up a surface, take s.th. away, get ready, be prepared’. As Miller points out that Tr sometimes shows o as well as u for PUA *u, these four languages show PUA *kwuh ‘scraping off s.th.’: *kwu > Cah bwu > bu; > Tr oh; > CN kwih/kwi’.

UACV-1974 *kwuya (> *kwoya) ‘growl, scold’: Eu búde/nevúde/nepúde ‘growl, bark’ (Eu d < *y); My buuye ‘snarl, growl, bark, scold’; Hp qö’öqöya ‘scold, vt’; Hp(S) qöyqöya ‘he’s scolding’; Tr oyo ‘become angry’; TO kodog ‘rumble, gurgle’; and perhaps CN kwikwinaka ‘make a low sound in the throat; for a dog, to growl; for a person, to hum’ since CN i < *u. But TO kodog with d is usually < PUA *l/r rather than *y.
18 UA *sakwo > *sikwo/sikwi 'witch, bewitch': My sisibo 'hechizar'; My sibori 'hechizado’. Cp sekwíte 'curse, whip' (Cp i < *o) suggests a semantic tie such that the set under *sakwi 'whip, v’ (at whip) may be related: M88-sa27; KH.NUA: Cp sekwíte 'curse, whip'; Cp sekwítxe-l 'whip, n'; Sr şakwit(kin) 'whip, swat, vt sg obj’ (borrowed from Cup?); Gb sakwít 'castigar'; Ls şíqwi 'to punish, whip’ (vowel is wrong, Miller notes), but Miller speaks of the first vowel, often putting too much emphasis on the unstable, unaccented vowels; Tr siku- 'hechizar'; Tbr sigu-l 'hechicero’. Ls -qw-, rather than -kw-, suggests a non-high second vowel, i.e., a second vowel of *o instead of *i originally (Langacker 1970), which agrees with SUA TrC (Tr, My). As for the first V, it appears that **a* went to the schwa options—i and ï—suggesting it may have been unstressed previously, with Sr and Gb maintaining the original *a*. And note My -bo- (< *bwo) with Tak *-kwo-. Tr ku < *kwu may be the medial reflex vs. the initial.

We also often see what we might call **kw-reduction—*kwVC > kuC/koC**—where the vowel between *kw and the next C becomes short enough that the rounding of *kw overrides it, and the result is k + round V + C: e.g., 15 Tr kusá at *kwasa ‘eagle’; 44 Ca kuş at *kwïsi ‘grasp, take’; 24 Tr oke/weke at *kwïkï ‘weep’; etc. Perhaps kw-reduction is more likely between two bilabials, as below:
36 *kwawa/i ‘invite, call’: Cp kwawe ‘call, invite’; Tr o’wí ‘invite’; Wr oí ‘invite to work’; Eu bowá ‘invite’; perhaps the baa- of TO baamuđ ‘plead, invite’ (lack of TO g < *w is frequent enough). These forms show kw-reduction in some (TrC), which brought the kwo-phenomenon into play in Eu, Tr, Wr, while Cp may come nearest the original *kwawV. [Hebrew baʕaa ‘enquire, search’]
8 UA *cakwa / *cakwo / *cakwi 'catch, grasp, close, lock': Ls čáqwi 'seize, catch'; Cp čáqwe 'catch, grab, cling to'; TO šaakum 'catch, grasp’; NT saakómi 'handful'; ST saakum 'handful’; CN cakwa 'close, enclose, lock up'; CN cakwi 'close, get closed, vi’; Pl cakwa (pret cak) ‘close, shut, cover’; Mn cakwiti’i 'close, lock, bolt’. Here kw-reduction in Tep between two labials (*kw and m) triggers Tep ku < *kwu, instead of bu < *kwu. [Semitic *ḍabba / ṣabba ‘grasp, lock’]

Infrequently mentioned is the fact that Tr often lends itself to Tepiman-like phonology in the labial realm or has variants with Tep correspondences in addition to the usual Tr correspondences. The widely publicized sound correspondence for *kw in Tr is w initially and for *w is also Tr w. While those two are most frequent, Tr has dozens of variant pairs, in which one variant indeed shows the touted w < *kw or w < *w or b < *p, but one variant resembles Tepiman phonology: *kw > w/b or *w > w/g/k or *p > w/b:
<u>*kw > b</u>
Tr wasi-/basi-bura ‘loincloth’ (< *kwasi ‘tail, penis’) 5
Tr wasu/basu ‘cook in water’ (< *kwasV ‘boil’) 4
Tr we-móri/be-móri ‘dust’ (< *kwiya- ‘earth’) 19
Tr wa’wé/ba’wé ‘eagle’ (< *kwa’awV > TO ba’ag; Eu páwe)
<u>*kw > gu/go</u>
Tr witá/guté ‘feces’ (< *kwita ‘feces’)
Tr ciwá/cigó ‘rob’ (< *ïcikwa ‘steal’)
<u>*w > g/k</u>
Tr oná/koná ‘salt’ (< *oŋa/*omCa; Wr woná) 280
Tr oona/koona ‘corncob (Wr wo’ná)
<u>*p > w/b</u>
Tr wici-/bici- ‘believe’ (< *piti)
Tr wíso/bíso ‘infect(ion)’ (Wr pehsóni; PUA *pisVk ‘rot, infection’)
Tr bo’o / ko’o ‘del otro lado [of/from the other side]

Other Tr forms show similar and considerable phonological variety: Tr uusabi / kuusabi / guusabi ‘Prunus Capuli’; Tr utuburi / tutuguri / ŧutuburi ‘type of dance’ (note b-g alternation medially)

121 Most intriguing is the pair—Tr bineri ‘alone, only, sg’ and Tr a’wineri ‘alone, only, pl’—as if *p > kw when geminated medially, since -’w- is a reflex of medial *-kw- in Tr, perhaps also in *kap(p)a ‘egg’ below.
UACV-803 *kap(p)a ‘egg’: Eu akabo-ra; Yq kaba; My kabba; Tr ka’wa, among others.
UACV-995 Note medial *-p- > -kw- exists in Num: ***yïpana** 'autumn': Mn yïba, yïbano ‘be autumn’; NP yïbano; TSh yïpani; Sh yïpani; Kw yïvana; Ch(L) yïvana; SP yïvannaC / yïvwanna; CU yuvwa-na(-ttï) / yugwa-na(-ttï).

Note that when the labiovelar glide -w- develops in SP -vw-, then the labiovelar -kw- is the next step in the next language east (CU). Similarly, I have heard native speakers of Yaqui pronounce intervocalic -w- with some velar contact: -gw- (< *-w-), and Shaul and Yetman (2007) suspect Op gw was an intermediate step from *w > gw > g. At *hupa (> *howa ‘back’), the Tbr variants (ova/owa/ogo) show another instance of velarizations of labials preceding

round vowels. Larry Hagberg (p.c.) informed me that in My also PUA *wo is usually pronounced *wo*, but occasionally *go*, but not *gwo*; but with other vowels, *wa, for example, is never pronounced *gwa* only *wa*. Also at 613 Tr gohi < Tep wohi 'bear'. So round vowels can trigger velarization in labials. In contrast, Monzón and Seneff (1984) note *kw > w, bw, b in various Nahuatl dialects.

Manaster Ramer's (1993a) suggestion of *-tw- > -kw- finds support in the My reflex of *ïcikwa/*ït(i)kwa 'steal'. Among the TrC reflexes (Eu écba'a-n, Tbr icikwa, Yq 'étbwa) is My ekbwa, which essentially does the change that Manaster Ramer proposed, changing non-velar t/c to a velar -k- adjacent to the labio-velar *kw/bw.

1.45 Nasals of Uto-Aztecan

Uto-Aztecanists have long held to the correspondences of NUA ŋ: SUA n and NUA n: SUA L (L = either liquid, l or r). David Shaul (1985) and Jane Hill (2007b) summarize the history of the matter well, stating that Miller (in Miller and Silver 1997, 285) viewed the matter as PUA *ŋ > SUA n and PUA *n > SUA *L (l/r). Others, VVH (1962), Campbell and Langacker (1978), Manaster Ramer (1993), and Dakin (2001), have argued for the opposite direction of change: *L > NUA n, and *n > NUA ŋ. Sapir (1915, 475), on the other hand, considered *ŋ > SUA n more probable, but also considered PUA *L and *n to have merged in NUA, or *L > NUA n (Sapir 1915, 477), and that *n remained n in both NUA and SUA, though disappearing in SP when not geminated (Sapir 1915, 473-4). Sapir's view comes nearest the author's. I see PUA as having at least one liquid, if not both *r and *l, in addition to both *n and *ŋ.

The correspondence of NUA n : SUA n is much more frequent than NUA ŋ : SUA n. In Miller 1988 we see n:n in both NUA and SUA in na-1*naka 'ear'; na-2 *naki 'want'; na-5 *napu 'prickly pear'; na-7 *na'i 'fire'; na-29 *naka 'meat'; ni-1 *nioki 'say'; nï-2 *nïma 'liver'; nï-9 *nïmi 'walk around' (126); nï-11 *nïpaR 'snow'; 266, 274, etc.) So if *n > ŋ in NUA, then why did so many more *n remain n in NUA instead of doing the sound change *n > ŋ, like the other one-third of them did? The correspondence NUA ŋ : SUA n is much less frequent and may be limited to medial positions, as we do see ŋ:n in *laŋi 'tongue' (698), *omwa 'salt' (280), *kumwa 'husband' (281), *somwo 'lung' (283). However, the candidates for ŋ:n in initial position may not be valid, that is, may have different stems in NUA and SUA respectively: na-6 ŋa 'root' and na-10 ŋa 'cry'. The set of no-2 ŋo/no 'return, bend' has the best chance for viability, but even they may be different NUA and SUA sets (931).

NUA ŋ is often the reduced result of a consonant cluster, one of which is often a nasal. Because many ŋ are from cluster reductions (though not all), it seems less reasonable that *n became ŋ and then ŋ blossomed into an array of consonant clusters, but rather that *-NC-/-CN- > *ŋ > SUA n. For example, *kumCa 'husband' (below) > *kuŋa (NUA) > *kuna (SUA) seems more likely than *kuna > *kuŋa > *kumwa. The parallel corollary of such a change would be PUA *n > SUA l, and is sometimes the case, yet again I agree with Sapir, that in other cases PUA *L > NUA n. The *n-*L complex remains mysterious in part, though something like a merger of *n and *L to n in NUA, which Sapir (1915, 477) also suggested, and *l and some *n merging to SUA l may hold some potential, though groups of exceptions litter the aspired neatness and await insightful explanation. The next six sets exemplify NUA n : SUA n.

1070: UACV-752a ***nakka / *naNkapa (< *na(N)kasapa)** 'ear' [Semitic *na-qšab 'be perked up (to hear)]

Mn	náqa	Hp	naqvï	Eu	nakát 'oreja'
NP	naka	Hp	naaqa 'ear pendant'	Eu	kéisiven 'oido'
		Tb	naŋha-l 'ear, leaf'	Tbr	naká-r
TSh	naŋki	Sr	qävaač 'ear, leaf'	Yq	náka
Sh	nainki	Ca	náq-al	My	nákka-m
Cm	naki	Ls	náq-la	Wr	nahká
Kw	naga-vi-vi	Cp	náq'a	Tr	naká
Ch	naŋkávï	TO	naak	Cr	našaíh
SP	naŋkava-vi	PYp	naaka	Wc	naaká
SP	naŋka 'hear, v'	NT	naáka	CN	nakas-tli
CU	nïká-vi	ST	naak/nak	Pl	nakas

UACV-1366 ***nïmaC / *nïmaN** 'liver':

Mn	nïwï	Hp	nïïma	Eu	hemát
NP	nïma	Tb	nïïma-l	Tbr	yamá-t
TSh	nïmï(cci)	Sr	nïmïič	Yq	héemam
Sh	nïmïn; nïwïn	Ca	ném'a	My	heémam
Cm	nïïma	Ls	nóóma	Wr	emá
Kw	nïwï-bi	Cp	néma; pípiviska	Tr	imará; emará
Ch	nïwïmpi	TO	nemaj; nem 'a liver'	Cr	neemwa
SP	nïŋwï-n, nïŋwï-mpi	Nv	nïmadi	Wc	néma
WMU	nú<u>u</u>-ppü-n 'my liver'	PYp	nemar; LP hïm	CN	eel-li
CU	núu-pï-n 'my liver'	NT	nïma(dï)/númai	ST	lumaad

126 UACV-1012 *nïmi ‘walk around, live’: **NUA:** NP nïmmi ‘walk’; TSh nïmi ‘one moves’; Sh nïmi ‘live’; Cm nïmi ‘move about, walk, sg’; Ca ném ‘walk around’; Ca némi ‘chase, follow tradition’; Sr nïm/nïmï- ‘walk, walk around, walk along’; Ktn nïm ‘walk, vi, walk on, vt’; Hp -nïma ‘go around doing s.th.;
SUA: CN nemi ‘live’; HN nemi’ ‘walk’; Pipil nemi ‘be, exist’. [Egyptian **nmi** ‘travel, traverse, go’]
885 UACV-878 ***na’ay** ‘fire’; ***na’aya** ‘build/light a fire’:
SUA: Wr na’í ‘flame’ and Wr na’yá-ni / na’i-ma ‘make a fire’; Tr na’í / na’y- ‘fire’ and Tr na’yá- ‘make a fire’; My na’- ‘burn, v’ and My náyya ‘hacer lumbre’; AYq naya’i ‘fire’; TO naada ‘fire, n’ (TO d < *y); ST naada’ ‘make fire’; NT naadá; Nv nadda; Cr á-úu-na’ara ‘go build a fire’;
NUA: Mn ani ‘burn, vi’; NP nai ‘fire, burn vi’; NP na’i’yu ‘burn, vi’; Kw ne’e ‘burn’; SP na’ai ‘burn’; CU na’ay-ttï ‘fire, light’; Ca ná’ ‘burn’; Ls ná’ ‘burn’. [Arabic naar ‘fire’ but written na’r / na’ar]
720 UACV-7a *no’pal / *napu ‘prickly pear cactus/fruit’: **NUA:** NP nabu; TSh napumpï; Sh nabombï (Fowler83); Kw navu-bï; Ch navumpï; SP nabumpï; Hp naavï; Sr naavt; Ktn navïh-t; Ca návet; Cp návet; Ls náávu-t;
SUA: TO naw/nawï; Nv nubo(nïvo); LP(B) nav; NT návoi; ST nav; Eu navúc; Wr napó; Tr napó; Yq naabo; My naabo; CN no’pal-li. [Semitic nbl / Syriac n’bl ‘skin-bottle’]
1407 UACV-2085 ***mo’ona(C) / *monna / *moCna** ‘son-in-law, in-law’: **NUA:** Sh monappï; Kw mono; SP munna / mona-ci; Hp mö’önaŋw 'male in-law';
SUA: Eu mónwa; My mó’one; Yq mó’one; Wr mo’né; Tr mo’né-ra; Wc muune; Cr -mu’un 'yerno'; CN moon-tli 'son-in-law’. [Hebrew maɬ^{a}ne < *maɬne ‘camp, people of the camp’; as in-laws become family]

Medial *-’m- and Other Consonant Clusters with Nasals Underlie Some Medial -ŋ-

UACV-1221 ***sï’moci** 'hummingbird': Wr se’móci ‘hummingbird’; Tr semučí / simučí ‘hummingbird’; NP soŋoi’i 'hummingbird’. NP aligns with *sï’muci in that NP's 2nd and 3rd vowels agree with Tr and Wr, and if the 1st assimilated to the 2nd (*ï-o-i > NP o-o-i), and PUA *-c- > -y- (or i or ’), then *sï’moci > *so’moyi/*so’mo’i > *soŋoi’i has NP being a decent match with Tr/Wr, and glottal stop plus m (-’m-) aligning with -ŋ-. The next three sets show the -’m- cluster in SUA, and -ŋ- in NUA.
771 UA *cu’mi ‘suck, sip’: Kw čohmi ‘suck, v’; Cp čúŋe ‘kiss,vt’; Cp čúmum 'suck obj, as venom’; Cp čúme ‘suck, vt’; Ca čúŋ suck, vt’; Ls čúúŋi 'suck (breast)'; Ls čúŋi 'kiss'; Sr čuuŋ 'suck, vt'; Wr cu’mi 'suck or slurp food'; Tr cu’mi 'kiss, sip'; My čuune; AYq čuune; Hp coocona 'kiss, suck’; CN (paal)čičiina ‘soak up, suck in, smoke, vt' and CN ilčiina 'suck up, consume'; HN čičiina / čičiini’. Nv tup’suma ‘suck, vt’; NT višúúsumai 'suck’. These forms suggest *cu’ma. Six languages show medial -m- or -Cm- aligning with the frequent NUA ŋ and SUA n. [Hebrew **ṭʕm** ‘taste, eat’; plural prtcpl **ṭoʕmiim > *cu’mV > *cuŋV** 'suck, sip, kiss’]
1144 UA ***o’mana** ‘sad, suffering’: CN a’mana ‘be upset, disturbed’; Tr o’moná / o’móna- ‘be afflicted, saddened’; Tr o’móna-ri ‘sadness, affliction’; in Sr the -uŋani- portion of Sr ahauŋanik ‘sad, miserable’; Sr hahauŋan ‘be poor, pathetic, miserable’; Sr hauŋanič ‘poor one, orphan’ (u often pronounced o); and Ktn haoŋa ‘poor’. Words as long as the Sr forms are certainly compounds, so -uŋani- likely aligns with CN and Tr. Here the cluster -’m- appears in SUA (CN and Tr) and as ŋ in Sr and Ktn, as in 771 cu’mi in Tr/Wr and ŋ in NUA; in addition, the Tr and CN forms agree perfectly in the consonants -’m-n-, but disagree in the vowels: a-a-a vs. o-o-a. However, the vowels of Sr and Ktn are between the two, agreeing fairly well with both, perhaps:

PUA *o’mana > CN a’mana
> Tr o’mona
> Sr -uŋani- / Ktn -oŋa [Hebrew ’almaanaa ‘widow’; Arabic ’alima ‘to experience grief’]

856 UA ***yu’mi** > **yuŋi** 'warm’: NP yuwi; NP yui; Sh yuai ‘warm’; Cm yu’a ‘warm (of weather)’; SP yuuttui ‘be warm’; SP yu’mi ‘warm (of water)’, yu’ata (of weather); Hp yoŋi 'be warm’. Even if SP yu’mi and Hp yoŋi have an extra morpheme than the others, Hp (-ŋ-) and SP (-’m-) still suggest a medial cluster. The fact that 9 sets (in UACV) show m in some languages and ŋ in others suggests that medial -m-, when clustered (-Cm-/-mC-), reduces to -ŋ-. [Hebrew **yɦm** ‘be in heat’ (alternate form of ɦmm ‘feel warm, get warm’]
1114 UA *sïk-mukki ‘numb’ < ‘ice/cold-dead’: Hp sűmokiw|ta ‘be numb, vi’; NP ta/ma-sïsïŋi 'foot/hand goes to sleep'; Cm sïsï’nitï ‘numb, feel numb, asleep’; WMU sï’<u>ú</u>ú 'be numb’. The first morpheme could well be a cognate of CN sek-tli ‘ice/cold’. Hp lost the velar stop, but preserved the vowel pattern best. In NP, Cm, and WMU are cluster reductions, showing residual features of both consonants, in which the velar + nasal cluster -km- went various directions: *-km- > ŋ (NP); -’n- (Cm); and ’<u>u</u> (WM; underlined V = nasal V), for all show signs of a velar (velar nasal or glottal stop) and a nasal; a nasalized vowel shows the nasalization in WMU. [Hebrew šɛlɛg ‘snow’ + Hebrew mukkɛ ‘smitten’]

After five examples of -'m- aligning with -ŋ- , consider three well known examples of NUA ŋ aligning with SUA n, but with several seldom-highlighted m's among the NUA reflexes as well.

HUSBAND; MARIDO

Mn	kúwa	Hp	kooŋya	Eu	kúnwa
NP	guma	Tb	kuuŋa	Tbr	--
Tsh	kuhma(cci)	Sr	--	AYq	kuuna
Sh	kuhma/kuha	Ca	--	My	kuuna
Cm	kumahpï'	Ls	kúúŋ; tó'ma-vu	Wr	kuná
Kw	kuhma	Cp	kúŋ	Tr	kuná(ra)/guná(ra)
Ch	kumá	TO	kun	Cr	kïïn (2nd V stressed)
SP	kumma	LP	kun	Wc	kïna
WM	piwá	NT	kúna	CN	--
CU	piwá	ST	kun		

284 UA *kumCa / *kuCma 'husband': this set is one of few whose reflexes appear in 25 or more UA languages. Note Hp, Tb, and Tak ŋ aligns with SUA n, while 9 Num languages show -m(m)- / -Cm-. WMU and CU have piwá 'husband', but kumma 'male' also, in a slight semantic shift on SNum's east end:

SP kumma 'male, husband' SP piŋwá 'wife, spouse'

CU kumáa-vi 'male animal, stud, macho' CU piwá 'spouse, husband, wife'

The fact that nearly all UA languages show a form agreeing with *kuNa, but only vary in the type of nasal, three different nasals, no less—bilabial in Num; velar in Hp, Tb, Tak; alveolar in SUA—suggests that we are dealing with a single proto-form whose medial consonant is likely a reduced cluster, probably involving *m* and something else. Reflexes of 'lung' and 'salt' do similarly. [Egyptian qm']

LUNG(S); PULMÓN(ES)

Mn	sóno	Hp	halayna; mïma	Eu	abokadaga-di
NP	soŋo/sono	Tb	mošooha-t	Tbr	wopaN-s; sorá komwa-lí-t
Tsh	somo/soŋwo/soŋo	Sr	--	Yq	saré'ečia
Sh	sonko/sonno	Ktn	šoŋa-č	AYq	hemaha'ačim
Cm	soomo	Ca	yávayva	My	sáre'ečiam
Kw	soo-vï	Ls	şavá-şva-š	Wr	so'locá
Ch	soo-vi	Cp	qíqilye	Tr	sonorá
SP	soo-vi	TO	hahaw	Cr	šáïñi-mee; ta'atime
CU	sö'ö-vï	PYp	hakadaga; pl: havdaga	Wc	šaaka
		ST	havkal	CN(RJC)	mimiyawayo-tl

291 UA *somCo / *suNCa 'lungs': Mn; NP; TSh; Sh; Cm; Kw; Ch; SP; CU; Tb; Sr; Ktn; Gb sár; Tbr; Cr; and HN sooneewa' 'to swell up (of vipers)'; Tr sonorá. Tr has the expected SUA n for NUA ŋ, but we see NUA -m- (Tsh, Cm) and -ŋ- as well as SUA -n-. [Egyptian sm']

SALT; SAL

Mn	omábi; omaa- 'to salt'	Hp	öŋa	Eu	onát/ónta
NP	oŋabi	Tb	uŋaal	Tbr	oná-t
Tsh	oŋwapi(cci) / omapi-	Gb	'oŋó-r	Yq	'óna
Sh	oŋa- / onka-/ ona-pin	Ca	'íŋ-il	My	oona
Cm	ona-/onaabi/ona'aitï	Ls	'éŋ-la	Wr	woná
Kw	'owa-vi	Cp	íŋeyu 'to salt'	Tr	oná/koná/noná
Ch	--	TO	on	Cr	unáh
SP	oa	PYp	ona	Wc	'únaa
WMU	'öá-vi	NT	ónai		
CU	'öá-vi	ST	'on	CN	--

280 UA *omCa/*oNCa > *oŋa (> SUA ***ona**) 'salt': Reflexes are in all branches except Azt, and medial consonants (n, ŋ, m, ø) again show a pattern similar to 'lung' and 'husband' with Mn and TSh showing m. [Egyptian ḫm'(t) 'salt']

1246 Canaanite ***ha-sim'al** 'left' > Tb **aašiŋan** 'left'

1012 Hebrew **šiqma(t)** 'sycamore' > **UA *sïŋŋa(C)** 'cottonwood and/or aspen tree'

807 *sïm 'laugh': Cp šeme; Ca sém; Od hïhïm; ST h(ï)mpa, h(ï)mia; Nv 'ï'ïmï 'smile'; Ca sém-yaw 'smile'; Ca séŋi 'smile' may involve the same stem as Ca sém-yaw, but with a differing suffix, then ŋ becoming a cluster reduction. [Hebrew **śimḫ** 'be happy'; Hebrew **śimḫaa / śimḫat** 'joy, gladness']

Above are 11 sets having medial clusters of m plus something else corresponding to some NUA ŋ and SUA n. Below are other cluster combinations corresponding to NUA ŋ and SUA n.

1418 UA ***taŋa** 'bag, sack, contain(er)': Sr taŋat 'sack'; Gb taŋár 'sack'; Hp taŋa 'contained things';
Hp patŋa 'squash' (with pa- prefixed); Tbr tanaté 'zurrón, mochila de cuero en que se acarrea a la espalda el ineral'; -ta'ni of Mn kusatá'ni 'sack' (kusa 'sack'); CN taana'-tli 'basket with a handle'; and Yq 'ía-tana 'this shore/side' (a shore as that which contains/encloses water). *taŋa compounded with *pa- 'water' produces *pa-taŋa 'squash, pumpkin, gourd, i.e., liquid-container' (Stubbs 2003:4 and KH/M03-pa66 'squash'): Ch paráŋar(a) 'pumpkin'; SP paráŋwaraN 'pumpkin'; and Hp patŋa 'squash, pumpkin'. Note that the only NUA language not showing ŋ (Mn) does show a cluster of glottal stop plus n (-'n-), which suggests a cluster. [Semitic *ta-ʕra' > UA taŋa']
1066 UA ***corowa / *corwa** 'be hungry': Wr coloá-ni 'be hungry'; (Wr co'-cóla-ni 'be hungry, pl');
Hp cöŋö-w(ï)- 'hunger'; Hp cöŋ-moki 'die of starvation'. Wr coloá- and Hp cöŋö- match well, since Hp ö < *o, and if -owa- > -oa- in Wr, then syncope causing a cluster of *-lw- > -ŋ- in Hp is natural, for w is a labio-velar and SUA liquids often become NUA nasals, so the nasal and velar dimensions' becoming the velar nasal is reasonable. Note Tr čiriwísa 'tener hambre', which has the same three consonants (c, r, w). In light of alveolar consonants causing V > i in Tr, as also in Tr bikiyá 'three'< *pakay. [Arabic ḍrʕ > UA *cor(V)wV]
628 UA *ca'ro 'chin, jaw': Tr ča'ró 'chin'; Wr caló 'chin, jaw'; CN teen-čal-li 'chin'; CN kama-čal-li 'jaw'; Yq čao 'barba'; My čaro hímsim 'bigote'; My čaro wá'asa'ari 'quijada'; Hp càŋw-ti 'open the mouth'. The medial *-'ro- of SUA likely corresponds to Hp -ŋw- much like we saw in *corowa 'hungry' above. These sets (*corowa, *ca'ro, and UACV-326 *yïLCa) with Hp ŋ aligning with SUA liquid plus round vowel suggest two things: (1) they suggest a liquid > NUA nasal, since *ŋ > l/r is hardly likely in the other direction; (2) and they show Hp ŋ aligning with likely clusters of a nasalizing element (*l/r > N in NUA) plus w or round vowel. [Hebrew ***đaqn-o** 'chin-his']
681 UA *wïl 'grow': Ca wél 'to grow, rise up high'; Cp wéle 'to grow'; Ls wola/i 'grow (of plants or anim subj)'; and Hp wïŋwa 'grow, grow up' (< ʕVlwa). [Hebrew **ʕlw** / ʕly / **ʕalaa** 'ascend, go up, grow']

One among many examples of a medial NUA -ŋ- corresponding to SUA -n-, but not from a cluster:

952 UA *poŋa / ***poŋo** 'hit, pound': Cp píŋe 'knock on, knock around'; Ls péŋa/i 'throw, be thrown'; Sr pööŋ 'pound'; Ktn poŋ 'hit with the fist'; Hp pöŋöŋöta 'be making a knocking or rapping sounds'; AYq poona 'knock'; Yq pónne 'pound, crush'; My póona 'hit, touch'; and My popona 'hit/pound with a hammer'. [Hebrew **pgʕ** 'meet, attack']

The prominent UA cognate for 'tongue' is in 7 of 8 branches, in every branch except Numic, and it is yet another example of NUA -ŋ- corresponding to SUA -n- medially as above. Hp and Tb begin with l- and all other UA languages begin with n-, so the Uto-Aztecanists figure that *n- is the initial consonant and that Hp and Tb disassimilated. However, the opposite direction of assimilation is more likely, as explained below:

698 UA *laŋi / *laŋu 'tongue': Hp leŋyi / leŋi 'tongue'; Cp naŋ; Ca náŋ-il^{y}; Sr naŋ|ač; Ktn nïŋi-č; Gb -nóŋin (poss'd); Tb lalan-t / lalun-t; Eu nenét; Tbr niní-r; Yq níni; My ninni; Wr yení; Tr inará/inirá; TO neeni; LP nïnni; PYp neeni; NT nïïni; ST nïïn; Cr nanuri; Wc neení; CN nene-pil-li 'tongue'; CN nene-tl 'female genitals'; Pl nenepil 'tongue'. Sapir suggests that Hp and Tb dissimilated *neŋi > leŋi, then Tb assimilated again > l-l. The reverse is more likely (*laŋa > naŋi), the liquid assimilating to the following nasal, as anticipatory consonant harmony is common in UA. And Tb does preservative V assimilation, so perhaps in this case preservative C harmony also. Initial *l is not common in UA, so assimilation to the usual (*l- > n-) seems more likely than dissimilation to the unusual (*n- > l-). Note also that initial l happens in Hopi (695, 698, 700). Sapir also notes the voweling *a-u in Cr and Tb. Since none of the languages show *e-u, but rather all with u show first vowel a, then the voweling *ï-i could be the 1st assimilating to the 2nd, such that the original 1st vowel was likely *a*, as it appears in Tb, Sr, Ca, and Cr. The 2nd may have more likely been u (which aligns with Hebrew pl), and final V > i is common, but anything else > u is not. So the reconstruction *laŋu serves best. [Arabic *lahgat 'tongue', the Hebrew voweling for an unattested plural would be *lahgoot]

Four decades ago Munro (1973) demonstrated that a half dozen sets show Ls ŋ < PUA *w. The forty years since that time have turned up a few more examples but not an explanation. In fact, some rather sporadic ŋ < *w in some other languages (mostly Takic) seem to complicate more than clarify. The matter is mostly clarified in 6.7, but not entirely.

757 UACV-2575a ***siwa < *si(ŋ)wa / *siwNa** 'female, sister, daughter': Sapir; M67-470; Munro 1973: Hp siwa 'sister of a man'; CN siwaa-tl / sowa-tl 'woman, wife'; Pl siwaa-t 'woman, wife'; Ls ṣawáa-may 'daughter'. Miller and Bright's observation that Ls ṣawáá-may 'daughter' is the diminuitive of Ls ṣuŋáá-l 'woman' is very relevant to the nasal clustered with -w-. CN may show a vowel assimilation to w (*siwa > *sowa) that occurred in other languages also, probably in Tak *suŋa, TrC *sona 'wife' and Tep *hooniga 'wife'.
UACV-2575b ***sï'a** 'girl': I.Num195 *sï'a (young) girl; M88-sï11 'young girl'; KH/M03-sï11: Mn sï'a; NP sïa'a / cïa'a. The WNum forms likely tie to *siwa/siwŋwa, but until an explanation emerges, a separate letter is good.
UACV-2575c ***suŋa** 'man's daughter, wife': M88-su21; KH.NUA; KH/M03-su21: Cp ṣuŋáma 'man's daughter';
Ca súŋama 'man's dau'; Ls ṣuŋáá-l 'woman, wife'; Gb ásoŋ 'wife'; Sr ṣuuŋ 'man's dau'. Add Ktn huŋ 'descendant' and Ktn nïmihuŋ 'wife', pl: nïmihuŋam (< *nïmi-suŋa 'man's-girl/woman').

UACV-2575d ***sona < *suŋa** < ***si(ŋ)wa** 'woman, wife': B.Tep73 *hooniga 'wife'; B.Tep72 *hoonita/hoonata 'to take a wife'; L.Son256 *sona 'esposa'; BH.Cup ṣuŋáma' daughter of man (diminuitive of woman); M88-so8; KH/M03-so8: Tb so'yiil 'wife' (cognate?); Tbr soná-r 'esposa'. [Hebrew **šipḫaa** 'maid, maid-servant, concubine']
1059 UA *tï(N)wa / *tïnwa (AMR) 'name': Hp tïŋwa 'name, refer to, vt'; Tb 'ïndïŋwa-l 'name'; Cp téw'a 'name (n. poss'd)'; Ca téwal; Ls túŋ-la; Sr tïwan(č) 'name, n'; Ktn tïw; TO čïïg '(1) find, (2) call by name'; PYp teegi 'name'; Eu tewát; Tbr temwa-ra; Yq tea; My tééwam; Wr tewá; Tr ŕewá; Wc téévää; Cr an-tyawaa 'he is named X'. Munro suggests -ŋw- may explain *o > u in Ls. Note ŋ with w in Hp and Tb. [Arabic dʕw / daʕaa 'to call, name']
332 UA *koNwa 'snake' reflects a medial -rḫ- cluster (< *qVrḫat). This widespread cognate is in 6 of 8 branches, and while Joe Campell (1976) cites a Nahuatl dialect showing *koŋwa, most show *kowa, except Takic, which has Tak medial -ŋ-: Cp qeqiŋi-ly 'king snake' and Ls qiqeŋ-la 'ring snake' < Tak *koŋo.
[Egyptian **qrḫt** 'serpent (sometimes bird determinative instead of serpent), friend/partner']
Four more instances of pharyngeal ḫ reflecting Ls ŋ follow:
270 UACV-70 ***tïpiwa / *tïpiN** 'ask': Mn tïbiyu; Mn tïpiwï (M88); Mn tïtïwï- 'ask for (objects)'; NP tïbiŋa; TSh tipiŋa; Sh tïpinka (= tïpiŋa) 'ask for'; Kw tïvina; Ch tïviŋi; SP tïvi / tïvi-ŋu 'to ask'; CU tïvïyuy; Hp tïïviŋ-ta 'ask, inquire of, ask for'; Ls tuvyuŋi 'ask a question'; Cp túvyuŋ 'ask'. [Egyptian **dbḫ** 'ask for]
411 UA *hoŋ 'body'; remember Tepiman n corresponds to NUA ŋ: TO hon 'body'; Nv hona; PYp hona; Ls heŋča-wu-t 'cheerful, contented' is key: Ls e < *o, and Ls ŋ corresponds to pharyngeals and to UA *w also in woman, name (Munro 1973) and to SUA n; and Egyptian ḫʕ unites the meanings 'happy' and 'body'.
[Egyptian ḫʕ / ḫʕw 'body', Egyptian ḫʕwt 'joy, rejoicing']
412 Ls heŋča-wu-t 'cheerful, contented'. [Egyptian ḫʕ / ḫʕw 'body', Egyptian ḫʕwt 'joy, rejoicing']
413 Ls hiŋé'-ma-l / hiŋéé-ma-l 'boy'. Ls even shows the 3rd consonant glottal stop [Egyptian ḫʕ' 'child, boy'], besides the first 2 consonants matching in the last 3 sets: Egyptian ḫʕ > Ls hVŋ.

1.46 NUA Liquids Corresponding to SUA Liquids

In contrast to PUA *l > NUA n or *n > SUA l (as Uto-Aztecanists have seen matters heretofore), several sets show liquids for both NUA and SUA:
6 UA *kwïlu 'swallow': Hp kwelo(-k) 'sample by tasting'; Eu béru'u 'swallow'; Tb weleeh 'swallow'. Hp and Eu correspond perfectly through 4 segments, since Hp o < *u and Eu b < *kw. And Tb's w (< *kw) agrees through 3, the last V assimilating to the first, yet all NUA and SUA forms show a liquid.
630 NUA *koli, SUA reduplicated ***kolkoli > *ko'okoLi.** Again, all SUA and NUA forms show liquids.
88 UA ***walaka** 'snail': CN wilaka 'caracol de monte'; Tr warákoara 'caracol'; Ls muvílaqa 'snail' (Ls múúvi-l 'nose'); Wr alágaloci 'snail'; Wr nalágeloci 'snail'; Tr narákuri 'snail'; another example of a NUA liquid (Ls) and SUA liquids, though some languages added prefixes that eliminated initial w(V)-. [Hebrew **ʕaluqaa** 'leech'; Arabic **ʕalaqat** 'leech']
381 UA ***wirhukuN** 'buzzard, turkey vulture, zopilte' (in 7 of 8 branches, missing only in Tep):

Mn wiho; NP wi'ho/wiho	[WNum]
Tsh wihnumpi(cci) / wihumpiccih / wiyombic; Sh wikkumpiccïh	[CNum]
Kw wiku-mahaa-zi; SP wikkuN; CU wəkúci-ge-tï	[SNum]
Hp wisoko; Tb wišokombiš-t 'song of the turkey buzzard'; Sr wirukt	[other 3 branches of NUA]
Yq wiiru; My wiiru; Tr wirú; Tbr wilú	[TrC]
Wc wirïkï; Cr viskï	[CrC]
CN wiiloo-tl, pl: wiiloo-me' 'dove'	[Azt]

Besides a general NUA liquid and SUA liquid correspondence, we see the liquid > -s- in three languages (Hp, Tb, Cr), and being clustered with a voiceless spirant best explains the devoicing of *-r/l- > -s-. Wc (SUA) and Sr (NUA) show all 3 syllables of *wirhukuN, while the rest are reductions. [Egyptian wr ḫq'w 'buzzard']

1.47 Some Uto-Aztecan *-k- > NUA -h-, > SUA -k-, and > ø in Hp, Tb, Eu, Op

TWO; DOS

Mn	wahá-i/tu	Hp	lööyöm	Eu	wodí(m) (gen. woke; acc. wok)
NP	waha('yu)	Tb	woo/wooh; wooyo 'both'	Op	gode
			woo'ami 'twice'	Tbr	nyohór
TSh	waha	Sr	wöh	Yq	wói
Sh	waha/waa-ttïn	Ca	wíh	My	wooyi
Cm	waha	Ls	wéh	Wr	woká
Kw	waha	Cp	wíh	Tr	okwá
Ch	wahá	Od	gook	Cr	wá'apua
SP	waa	Nv	gok	Wc	húuta 'pair, double'
WM	wáyIni	NT	goóka		'útïmana 'second (place)'
CU	wáy-ini	ST	gok	CN	oome

570 NUA *wakay ‘two’: Mn; NP; TSh; Sh wahattïwïh; WSh wahattïn; Cm; Kw wahayu; Ch; SP; WM; CU; Sr waah- / wah- ‘twice’; Gb wahá ‘other, companion’; Ktn wah- / weh- ‘twice’; Cr wá’apua.
SUA *wokay / *wokoy: Sr wöh; Ls wéh; Ca wíh; Cp wíh; Gb wehé’; Hp; Tb; Eu wodí(m)/wok; Tbr n^{y}ohór; Yq wói; My wooyi; Wr woká; Tr okwá. Note liquids in Yq and My wo’olim 'twins’ and Tbr in contrast to -y- in Hp, Eu, Op, and Num. While *wakay and *wokay are likely variants of an original unity, UAnists often separate them according to first vowel, which is fine for the sake of tidiness. Both Num and Cr show initial *wa, while the rest of UA rounded the vowel adjacent to w: *wakay > wokay. [Semitic ’axar]

THREE; TRES

Mn	pahí-i/tu	Hp	paayom	Eu	veidúm
NP	pahi’yu	Tb	paai	Op	vaide
TSh	pahi/pai	Sr	paahi’	Tbr	vayí-r
Sh	paih-	Ca	páh / páx	My	bahi
Cm	pahihtï	Ls	pááhay	Yq	báhi
Kw	pehe/peheyu	Cp	páh	Tr	bikiyá
Ch	pahí	Od	waik	Wr	paiká
SP	pai	Nv	vaiko	Cr	waihka
WM	páyIni	NT	váika	Wc	háika; hairíeka ‘third’
CU	pay-ni	ST	vaik	CN	eei

UACV-2623 *pakay 'three': a form of *pakay is in every language above, plus WSh pahaittïn; Ktn pahi’; Gb páhe’; and note Kw peheyu. Note the k syllable in Wr, Tr, CrC, and Tep, in three branches. Note also Ca páh / páx, with an alternate form suggesting *-k- > -x-/-h-. In nearly the same languages as in *wakay ‘two’ above, here also *k > k in Tr, Wr, Tep; *k > h in most of Num, Tak; *k > ø in Hp, Tb, SP, CU, Eu, Op. The -k- is clear in Tr, Wr, CrC, and Tep.
1071 UA *naNkapï ‘leaf’: Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï ‘leaf’ (vs. SP naŋqava ‘ear’);
CU nïká-’a-vi (vs. CU nïká-vi ‘ear’); Tb naŋhabïï-l; Hp nàapi/nahpi ‘leaf’. The last three sets show Hp losing intervocalic -k-/-ŋk-, but Hp nàapi/nahpi shows -p- instead of -v-, as evidence of a previous cluster.
170 UA ***tïku** 'drunk': Wr tekú 'be drunk'; Tr ŕiku 'become drunk, sick, faint'; Tr téguri/tékuri 'ebrios, borrachos, pl’. [Egyptian(F) **txw** ‘drunkard’]
170 UA ***tïhu** 'angry': Mn tïhuyee 'be angry'; Sh tuhu" 'angry'; TSh tuupïkkan 'be angry’. In light of other examples of a correspondence between Tr/Wr k and h in Num and other languages (agave, two, three, deer), a relationship between Num *tïhu ‘angry’ and TrC *tïku ‘drunk’ is reasonable. [Egyptian(F) **txw** ‘drunkard’]
638 UA ***tïkïya** 'deer': Mn tïhïta 'deer'; Mn tïhïya 'old buck'; NP tïhïdda; TSh tïhïya(n); Sh tïhïyan; Cm tïhïya 'horse'; Kw tïhïya; Ch tïhíya; SP tïġia ‘deer’; SP tï- 'deer, game'; CU tïíyï. Though the first vowel is problematic, Tb tohii-l 'deer' is likely related, since the other three of the first four segments agree. From Sapir on, some have mixed these with *tïnnV 'antelope’ (< *tïmïna), which is another example of syllable reduction causing a cluster: *tïmïna (Ktn) > tïmna > *tïnna.) For ‘deer’ the SP form shows *-k-, while the other Num forms show -h- or nothing. So again, *k > h in most of Num. [Hebrew ***raxel** ‘ewe, sheep’]
638 UA ***ciki** 'white-tailed deer': Od siiki 'white-tailed deer'; PYp siiki 'white-tailed deer’. In light of the frequency of *ti > ci, this Tep stem (*ciki > Tep *siki) likely ties to NUA *tïkïya 'deer’. The Tep k with Num h (< *k) is consistent with the above terms (two, three, drunk/angry) as well. [Hebrew ***raxel** ‘ewe’]

1.48 Consonant Harmony and Consonant Anticipation

Instances of consonant harmony in UA seem to be consistently regressive or anticipatory: that is, the earlier consonant harmonizes with the next consonant:
1100 UA *tanapiko ‘heel’: among others are My témpe’erim and Yq pémpe’im, Yq’s first consonant harmonizing with the second.
96 UA *tïpa > *pïpa ‘throw, v’: Yq and all of TrC show *pïpa while other branches show *tïpa.
1028 UA *yoli 'live, alive, bear, be born': most reflexes align with *yoli, and so does Cr ruúrikame 'alma, vida’ (Cr u < *o) except that the first consonant harmonized to the second.
665 UA *huCkuN- ‘dust’: while 7 languages show *hukkuNpV, CU kukupï (< *kukkuppï) has consonant harmony.
UACV-2233 *pacay ‘shine’: TO wađađ-k ‘be shiny, bald’; PYp vasad ‘shine, vi’. Consonant harmony in TO.
UACV-1851 *pakwa ‘pus’: Tr bawana/wawana ‘erupcion purulenta, sarna’; Ls ’apáákwaya ‘rotten wood, punk’. Medial *-kw- > Tr -w-, so outside of a preceding vowel that Tr lost or Ls gained, both match *pakwa. However, note the consonant harmony in one of the two Tr variants: wawana.
UACV-1943 *turipa / *tVrV ‘shake’: whether the final *-pa in CrC is a suffix or not, notice that Cr harmonized the second consonant to the third: Wc tïtïriva ‘estar temblando’; Cr rubibéh ‘tiembla’;
Eu turiré nomíkdaa ‘shake, stir’; Hp tïrïrï ‘be shivering, trembling, shaking’.

Anticipatory consonant harmony and consonant anticipation (being moved to the preceding syllable) have in common a consonant being moved forward or repeated forward. Uto-Aztecan does both.
UACV-160 *ku(C/N)ta(N)(pa) 'bee': Cp kutáŋva-l 'bumblebee'; Ls kúúkunta-la 'bumblebee'; My kuta kúmera 'bee that lives in wood'; Nv kuarhagi mumuva 'abejas grandes que hacen panales'; WMU kučávi 'bee'. Ls anticipates the nasalization a syllable earlier than is apparent in Cp, while the SUA languages (My, Nv) do their typical lack of clustered nasalization. WMU -č- (vs. -r-) and Cp -t- (vs. -l-) signify a cluster.
UACV-1194 *(na-)patï(N)kï(N) 'fight, v': Mn pidïkï 'fight'; Mn nanna-pidïkï 'fight one another'; TSh napitïŋkïn / napitiŋkïn 'fight'; Sh napitinka" 'to fight'; Cm nabitïkïrï 'war, battle'; Tb paandïgït 'fight'. WNum and CNum *na-pitïNkï and Tb *paNtïkï show Tb anticipating the nasalization a syllable before Numic's nasal feature, and even Num *pitïNkï may be anticipating nasalization from *pVtïkïN.
UACV-390 *pina 'bring, gather, acquire': Tb pin ~ 'imbin 'bring it'; Sr pinai 'bring, bring back'; Wc piini 'be the property of'; Nv vino'o 'for river to carry s.th.'; Tr bi'ni/be'ná 'recoger uno a uno, pepenar'. Note nasalization anticipation in Tb above and below:

Without nasal anticipation	With nasal anticipation
Tb kiig ~ 'ikik 'to sack, store, load'	Tb kam'-(ut) ~ 'aŋgam' 'it fits'
Tb kita ~ 'ikita 'it is locked'	Tb kin-(at) ~ 'iŋgin 'he brings it'
Tb kuuŋut ~ 'uuguuŋu 'she married'	Tb kumaawa'(ït) ~ 'uŋgumaawa' 'it is shady'
Tb kamiiž ~ 'akamiič 'to catch it'	Tb paam ~ 'ambam 'make into a ball'
Tb paabï ~ 'aabaabï 'be tired'	Tb pin ~ 'imbin 'bring it'
Tb pacaa'in ~ 'apacaa'in 'he caches'	Tb paan ~ 'amban 'to close it'
Tb tomocka ~ 'otomocka 'to stumble'	Tb tana ~ 'andana 'to get down'
Tb tuluumiin ~ 'utuluumiin 'to roll his blanket'	Tb taŋ ~ 'andaŋ 'it is raining'
Tb tulu'uma ~ 'utulu'uma 'it rolls'	

The Tb telic (perfective) form generally reduplicates the first vowel. If the second consonant is a nasal, sometimes that nasalization is anticipated with the prefixed vowel, but not always. The cognate languages show no inherent nasalization in front of the verb stem, so it must come from anticipating the nasalization two consonants away. This phenomenon may explain Tb's nasalization in other places.

Besides nasals being anticipated, glottal stops frequently jump to the preceding syllable, and liquids on occasion. This glottal stop hop or anticipation occurs often in TrC, especially in Tr and Wr, and Sapir (1930, 59) noticed the glottal stop's mobility in SP. I have also noticed it in WMU.
8 and UACV-400c Note the glottal stop hop at 'carry' in Tr ca'pi 'coger' vs. Tr na'cabi 'coger pl obj's.
UACV-153 *ci'ma / *(C)a'cima 'beautiful': Tr či'má in Tr či'má(k)ame 'precioso, primoroso, bello'; Tr či'má-re-ma 'ser bello, primoroso, precioso'Cp á'čimal 'pretty, nice'; PYp la'sima 'beautiful'. With additional prefixes in Cp and PYp, the glottal stop hops, as all agree in five segments otherwise—(')ci(')ma—and PYp s < *c.
724 While other forms point to ***paro'osi** 'jackrabbit' at 'rabbit' (such as My paaros, pl. paró'osim), Wr pa'loísi and Tr ba'loísi anticipated or transposed the glottal stop a syllable forward.
UACV-210 Among forms of ***curaka'i** 'bird, woodpecker' is Wr cu'rukí 'bird' with the ' moved two syllables forward.

1.49 Vowel Behavior (or Misbehavior) in Uto-Aztecan

Early on, Sapir (1913, 402) noticed that "most UA languages seem to assimilate vowels of successive syllables to each other to some extent, though in varying manner." He also noted the frequency of vowel syncope and that the existence of many consonant clusters was due to it (Sapir 1913, 415). In fact, Sapir (1913, 417) goes so far as to say, "In Nahuatl (as presumably in UA generally) there were no consonant clusters to begin with. All present clusters have been brought about by the disappearance of short vowels." I vary from that view only slightly: even if many present clusters were brought about by vowel syncope, there were also original clusters, even if many are largely now lost, but sometimes perceptible in the reduction of the old cluster to a single consonant, whether the components of the cluster are retrievable or not.

The UA vowel correspondences are fairly straightforward and obvious by inspection of table 6 (page 46). Hopi shifted them one direction (*u > o; *o > ö), while the Corachol languages shifted them the other (*u > ï; *o > u). CN continued the CrC shift one step further: *u > ï > i. The Tak languages offer less obvious scenarios, treated by Langacker (1970), who also explains PUA *k > Cup q/_o, which q remained even after *o became high front vowels in Cupan: Tak *ko > *qo > qe (Ls) / > qi (Cp, Ca). Examples are at *kuta 'neck'; *koloka 'beads'; and elsewhere.

Vowels > i/ï/e in Unstressed Syllables

Vowel centralization is common in language change. Sapir (1913, 416) noticed that many vowels appear to change to *i* in shortened/aspirated syllables and that a 'dulling' to ə is common in SP in unaccented syllables (Sapir

1930, 8). This is similar to the schwa-phenomenon in English, wherein short unaccented vowels of longer words become ə. The UA schwa-equivalents are i and ï/e.
UACV-504 *(pa)-hawa 'fog, steam': Yq báhe(wa) 'fog'; AYq haawa 'vapor, steam, n'; AYq vahewa 'mist, fog'; AYq vaiweče 'fog, mist'; My baihwo 'neblina, brisa'; My háawa 'vapor'; Eu baúua (baúwa) 'rocío, neblina'; Eu beiwat 'neblina'; Ca háway 'be foggy, vi'; Ca háway-š 'mist, fog'. The diachronic fragility of h results in a dipthong and the loss or near loss of the middle syllable after the prefix *pa-. Also of interest is the fact that all forms without the prefix *pa- show *hawa (Ca, My, and one AYq form) because the first syllable was likely stressed, while all forms with prefix *pa- show a higher vowel after pa-, i.e., pa-(h)ïwa/(h)iwa with second syllable reductions, because pa- was stressed and thus not the first syllable of *hawa. Furthermore, those high vowels are the UA schwas, and, like the English schwa, sometimes result from lack of stress in unaccented syllables, not from PUA *ï or *i.
UACV-2601 *hatawa 'yawn, v': Mn na'ïdawï 'yawn, vi'; NP ïdamuwïnï 'yawning, vi'; TSh hïtawa 'yawn, vi'; Cm ïhtamakï'atï 'yawn, vi'; Kw 'atawa 'yawn'; Eu hátawa (prêt: hátauhri) 'yawn'; My ten háha'awa 'is yawning'; Yq háawe 'yawn'; Cr ha'ateewa 'he yawns'. Note a glottal stop in Cah corresponding to *t in the other UA languages: *t > l/r > ' in Cah. Interestingly, in TrC where the first vowel is stressed, the *a is retained while second and third vowels sometimes change, but in Num where the second vowel is more often stressed, the first vowel goes to ï, the UA schwa, in all Num forms except Kw.
UACV-1067 *ata(N)kaC 'grasshopper', note the 2nd vowel is consistently *a* in TSh aattaŋki(cci); Sh aattenkih; Cm aatakíí'; Kw 'aataka-piži; SP aataŋkaC, aataŋka-ppici except for some CU variants: CU 'áa-rïká-ci / 'áa-raká-ci / 'aa-taká-ci. In the one CU variant, the unaccented a > ï between two accented syllables. In CU the third vowel is also *a*, so only unaccented schwa-like behavior can explain *a > ï in one of the CU variants.
UACV-1850 *ayakwi 'pus': Cp áyexwi-š / áyaxwi-š 'pus'; Ls 'iyáxwi-š 'pus'. Ls and one Cp form both show an unaccented *a > i/ï*, while accented á remains in all cases.
UACV-1286a *yaCV 'laugh': Mn yawi; TSh yahi/yahe; Sh yahnaiC; Cm yahneetï 'laugh, v sg' vs. Cm na'yïnetï 'laugh, v pl'. The two Cm forms are quite identical except that when the prefix *na- is added, the first vowel a becomes the second, and in the unaccented position becomes *ï*.
676 UA *pakuwa 'mushroom, fungus': Mn paagú 'type of pink mushroom'; PYp vikoga 'mushroom(s); Wr wehkoári 'fungus'; Tr wikubékuri 'large white edible mushroom'; Tr wekogí 'mushroom'; Tr wehorí 'type of edible mushroom'; Tr čohowékuwi 'large white edible mushroom'. The phonological variety in Tr is typical (-weku-, wiku-, béku, weko, weho-) and some forms suggest Tep influence. The Mn, PYp, and one Tr form (-beku-) suggest initial *p, whose reflexes in Tep (v/w) are the loan source of some Tr/Wr forms. The first vowel is probably *a* on the strength of the Mn form, which *a* easily assimilates or centralizes to *ï/e/i* when a greater stress is later in the word.
269 *taka 'fruit' are 11 languages with reflexes of *taka, but Kw tïkïpiya 'fruit' shows *a > ï/_i.
1120 *yuhu 'fat, grease': among several Num *yuhu forms with stress usually on the second syllable, we find Kw yïhuu/yuhuu-vï and CU yïú-vi 'fat, oil, grease, lard' which changed *u > ï when unstressed.
UA *pašwel 'young man': Ca pašwél-iš 'young man'; Cp pišwéliš 'young man'.
93 UA *toci 'head': among other SNum *tocí- forms, all accented on the second syllable, is CU tïcí-vi.
UACV-2614 *pana 'yucca whipplei': Ls panáá-l; Cp pəná-l; Ca pána-l. Note Cp ə < *a in the unstressed syllable.

Additional examples of schwa-like behavior (V > ï/i), usually in unaccented syllables, can be found in the UACV at *malkocowa 'hug'; *paca 'long, thin, stretch'; *patto- 'swell'; and *sakwo > *sikwo/sikwi 'bewitch, whip'; etc.

Uto-Aztecan Vowel Assimilations Anticipating Following Consonants

Uto-Aztecan vowels also move toward the point of articulation of the following consonant, anticipating its place of articulation, though again, more often in unaccented syllables, that is, V > o/u before labials and V > i before alveolar consonants: e.g., Semitic baraq 'lightning' > UA beroq 'lightning' raises and fronts -a- > -e- before -r- and backs -a- > -o- anticipating uvular -q.

Some vowels round before labials: e.g., UA *sa'maC 'spread': Kw sa'ma 'spread out (as blanket)'; Kw sa'ma-pï 'blanket, mat'; SP sa'ma / sam'a 'spread out (a blanket)'; SP sa'mappï 'spread out, ptc, cover on which s.th. is laid'; Ch som'á 'spread a blanket'. Note Ch's assimilation of *a > o/_m. Other examples exist dot the data.

Vowels > i before alveolar consonants, especially in unstressed syllables. Note how often vowels become high-front when preceding an alveolar or when anticipating what might be considered a "high front" consonant:
UACV-108 *paNtu' > *paicu' 'badger'.
UACV-358 *packo'or 'prickly pear sp.': PYp pasko'or 'type of prickly pear'; Tr péčuri 'nopal species'.
1066 UA *corowa 'hungry': Tr ciriwísa exemplifies the raising influence of three of four consonants being alveolar, with perhaps help from assimilation toward the third accented -í-.
UACV-2623 *pakay 'three', Tr bikiyá shows the anticipatory influence of -y-.
308 UA From *pa-surV / sura 'sweat' the last two syllables of Wc kwaašiiya 'sweat, n' assimilate the V toward y, while Cr táisï'e 'sweat, vi' or Cr -sï'e (< *surV) agrees well with all the other *pa-surV/sura forms, mostly of Tep.

Kenneth C. Hill notes that Spanish *frazada* is the source of Hp pösaala, and is the likely source of other UA words for blanket: Ca sáala'a, Tbr pirisál, Yq piisam. Comparing Tbr and Yq, note Yq's quick loss of r since European arrival. Also note the tendency of alveolars to raise and front preceding vowels (a > i/_ before r/l/s/t) in Tbr, Yq.
Hp kapiira is from Spanish cabra. To separate the Spanish consonant cluster, i emerged, perhaps partially due to its schwa properties, though having become a long vowel hardly has it schwa-like any more, so perhaps more likely is the influence or anticipation of r.

Vowels' effects on consonants: besides the palatalizing effect of high vowels (*t > c) discussed above, low vowels (PUA *a and *o) often caused *k > q. *k > q/_a is common in Num, Tak, and Hp, but Tak changed *ko > *qo, then kept q even after the subsequent Cupan vowel changes of *o > i (Ca, Cp) and > e (Ls), which then yield Ls qe and Ca/Cp qi < *ko (Langacker 1970). Examples include 1014 *kuta 'neck'; 630 *koli 'hurt, be sick, chili pepper'; 594 *ko'ci 'older sister'; UACV-1637 *koyni 'plow' at 'plant, v'; and others.

Vowels assimilate to other vowels, anticipating the following vowel or preserving the preceding vowel. Relevant to Sapir's (1913, 402) generalization that "most UA languages seem to assimilate vowels of successive syllables to each other … in varying manner" are *u-a > o-a, *i-a > e-a, vowel leveling *a-i or i-a > e-e, Tübatülabal's preservative vowel assimilation, and Nahuatl's anticipatory vowel assimilations, and Tepiman's anticipatory vowel assimilations, each treated below:

The Partial Anticipatory Assimilation *u-a > o-a

UACV-69c *kuC-taC-pï 'ashes': TSh kuccappïh; Kw kuca-pï; SP kuččaC 'ashes, light gray'; CU kuca-pï; Ls koškuyat 'soot' (vowel is wrong, Miller notes); Hp qöcvi (vowel is wrong, Miller notes). The two vowels that Miller notes as wrong (Ls and Hp) are likely due to *u-a > o-a, because three other forms show *u-a, and *u-a > o-a is natural and explains Ls o; otherwise, Ls o < *ï, which would not work here.
UACV-1734 *hupa 'pull out': Kw hovo 'pull out (hair, grass, seeds), v'; Ch hová 'pull out, v'; Nv 'upana 'arrancar'. The semantics are identical, as are the correspondences nearly, since Nv ' < *h. The only difference is *u-a > o-a in NUA, then Kw further assimilated the second vowel to the first.
UACV-1128 *yula 'hang': Ca yúlaa 'to hang'; Ls yóóra 'to swing, hang in the air'. Ls and Ca are similar except for the explainable vowel assimilation in Ls. That assimilation was later than the one in P175 below, wherein the change was before the Ls vowel shift of o > Ls e: that is, *suka > *soka > Ls *sexa. For note that all of SUA and even Sr in Tak show *suka while Ls has *seka.
1260 UA *LukV 'stoop': Ca lúku 'bend the body forward'; Ls lóóqa 'stoop'. The fact that Ls has final -a allows *u-a > o-a to explain Ls o, as in the next set also and others.
UACV-525 *suka 'to heat, be hot (weather)': Ls šéexa 'to simmer, of water when it is about to boil'; Ls šéx-la 'to warm water'; Eu sukáe-n 'caliente'; Op sukkara; My súkka 'está caliente'; AYq suka/sukkai 'warm';
Tr sukáre 'calentarse'; Wc šïkáa 'caliente'; Cr šïká 'sun'; Cr wa-šïka 'be hot (weather)'; Nv 'ukadida 'calentar, vt'; Nv 'ukagï 'calentarse a la lumbre'; NT uukádyi; ST huukad; TO huukaji. Ls e < *o suggests *u-a > o-a as an intermediate step: *suka > *soka > Ls *sexa.
UACV-354 *yuŋa 'cactus fruit': Hp yöŋö 'prickly pear cactus'; Wc yïna; TO juni 'dried saguaro cactus fruit'. Both Wc and TO agree with *u, and *u-a > o-a likely preceded o > Hp ö, as in P169 and P175 also.
UACV-1289 *uŋa > *oŋa '(feel/be) lazy': Hp ööna 'not feeling like doing'; Hp naa'öna 'lazy'; Sr 'ööŋa' 'lazy'; Cp íŋi-š, pl. í'iŋčam 'lazy'; Cp íŋiču 'be unmoving'; Cr wá-'ïna-ase 'he feels lazy, dragged out'. Note Hp n vs. Tak ŋ as in 'suck'. Also note Cr ï < *u, and *u > NUA *o is easily feasible before a following a.
683 UA *'uma 'be cloudy': Hp oomaw 'cloud'; Tr na'oma 'become cloudy, erased'; Tbr homé-k 'be cloudy'. A reconstruction of the first vowel as *u instead of *o is preferred, as we would expect Hp ö < *o, and Tr sometimes shows o where u is expected anyway, and even if that were not the case, a vowel assimilation or lowering *uma > *oma, a common phenomenon in UA, also explains the Tr and Tbr forms.
UACV-847 *muwa 'father': Kw muwa; Ch móa; SP moa; WMU muuwá-; CU múa; *u-a > o-a in Ch and SP.

The Cupan languages show a vowel assimilation from *kuta > *qola (Proto-Cupan) 'neck' 1014, as well as *yuŋa 'cactus fruit'; *uŋa 'lazy'; *uma 'cloud'; *hupa 'pull out'; *suka 'heat'; and *kuta 'neck'; that is, seven show NUA lowering the round vowel in assimilating *u-a > o-a, while SUA languages do not as much.

Subbranches may do so: WNum does *u-a > o-a in WNum *toka (NP, Mn) at *tuka 'black, night, fire go out';
UA *tuCcaC / *tuCCaC 'dirt(y)': Mn tocábi 'dirty one'; NP tocaggïti 'dirty clothes, v'; TSh tuccaappï 'dirt, dirty';
Ch tucá-vi 'dirt'.
UACV-536 *mura 'ear of grain': *mura > Cah mo'a > mo(w)a): Yq móa 'espiga'; My mówwa 'espigar', while the rest of SUA is consistent with *muLa: TO muda 'tassel'; Nv murhadaga 'espiga'; Eu murát 'espiga'; Wr mulá 'espiga'; Tr murá 'espiga'; Cr mwée-yu 'spike/espiga'; NT muurádadï 'la espiga'.

The Partial Aniticipatory Assimilation *i-a > ï/e-a

Similar to *u-a > o-a, so is *i-a > e-a (or > ï-a) as common in UA.
UACV-742 *kisa 'chicken hawk': Tak and Hp show *kisa (Cp kísi-ly; Ca kísily 'chicken hawk'; Ls páákiš-la 'chicken hawk'; Gb pakísar 'chicken hawk'; Sr paakiha-ţ 'chicken hawk'; Hp kiisa 'chicken hawk'). But SNum assimilated the first vowel to the second or *i-a > ï-a (Kw kïsa-vi 'chicken hawk'; Ch(L) kïsavu 'hawk species').
225 UA *witta > wïtta 'wrap' shows SNum *witta, but *wïtta in CNum and WNum.
UACV-614 *sika / *siki 'cut (hair), mow', Tr has two stems: Tr sikí and a secondary stem Tr seká. Other forms (at 'cut') with 2nd vowel *a* also show the change (> ï-a); yet other forms level the vowels (> ï-ï).
UACV-2028 *huppa 'skunk': among many *huppa forms is CN epa-tl 'skunk' which likely acquired its vowel thus—**uppa > *ipa > CN epa—the last step being i-a > e-a.
UACV-1338 *wina > *wïna 'limp, be lame': Cm wihnai mi'arï 'walk lamely, limp'; Ls wóna 'limp, be lame'. Note the identity of three of four segments (*wVna), with *i-a > ï-a, and ï > Ls o.
630 UA *koli (*kolkoli > *ko'okoli) 'hurt, be sick, chili pepper': While many SUA forms show the reduplication *ko'okoli, Ca and Cp show *koli > *qoli > qili. Then after acquiring final -a, Ca lowers *i-a > e-a: cf. Cp qilyíqa-t 's.th. hot, spicy, strong'; Cp qilyíqatu'nine 'hurt, sting, v'; Ca qélya 'feel sore, v'; Ca qélyak 'peppery, pungent, creating a burning sensation'.

Vowel Leveling

Hopi *e* is the only Hp vowel not aligning with PUA's five vowels, but vowel leveling of *i-a* or *a-i* is often the source of Hp *e*. Ken Hill (p.c.) also mentions reductions of *ai* as a source of *e*, which is another form of vowel leveling:
1457 UA *cikwa 'rain, v': TO siibani 'drizzle, sprinkle' and Hp cekwekwe-ta 'be raining big drops as at the outset of heavy shower' (cekwe- 'soak') suggest *cikwa with vowel leveling in Hp.
UACV-109 *kwila / *kwita 'badger / tejón': Ca wílyaly 'badger'; Tbr kwelé-t/keré 'tejón'.
19 UA *kwiya 'earth, land': most vowels reflect *kwiya, but Tr, Wr, and Cr leveled the vowels *i-a > e'e.
1105 UA *kali 'kidney': SP qaniN-, qanimpi 'kidney' and the k^{y}ele- portion of Hp k^{y}elevosna 'kidney'.
640 UA *piska 'rot, pus, infection' and Hp peek^{y}e 'pus, pus-filled infection'. (*piska is more fully elaborated below under phonological reductions.)
UACV-234 *ciya 'bitter': CN čičiya 'bitter, sour' and Tb ceeyee'ït / 'eceeyeeu 'be bitter' show *i-a > e-e.
890 UA *kani 'house': In SUA: Wr karí; CN kal-li; Tbr kalí-n 'pueblo'. In NUA: NP kani; TSh kahni; Sh kahni; Cm kahni; Kw kahni; WMU kaní; CU káni; Tb hanii-l; and Hp qeni 'place, room, space'. Note how many of the vowel leveling exampes involve Hp.
1095 UA *pisa 'pound': NT viaáhai 'remoler'; Hp pïsïsï-ta 'be a continuous drumming or pounding sound'. With vowel leveling, these agree.
135 UA *mana/mani 'stumble, roll (over), fall over/off/down': Cp máne 'roll, fall off, stumble'; Ca mána/i 'fall down (rolling), roll, stumble over'; Cp manániŋiyqal 'he fell over'; Ls máána/i 'stumble and fall, roll down (a hill) vi, vt'; Sr manamk 'fall down'. Note Hp mïnï(k) 'stumble and fall, fall down' the leveled vowels: *mani > mïnï.
UACV-1391 *laya 'lie with legs/feet spread/pointing outward': The specific semantic identity of Hp lèesi-kiw-ta 'lie with feet pointed outward' and of Ls láya 'lie with legs spread apart' makes this match probable, when we consider that Hp e is usually from vowel leveling, such as a-i / i-a > e-e, or as we have here: aia/aya > ee, as in Ls laya and Hp lèesi, if -si is of another morpheme.
UACV-2358 *ta'ika 'tomorrow': Ch ta'íka 'tomorrow'; Kw te'eka-su 'tomorrow'. Kw again levels the vowels.
1043 UA *mama'u 'woman': While other languages show *mama'u, Kw levels the vowels to Kw momo'o:
Kw momo'o 'woman'; Ch mamá'u 'woman'; Ch(L) mamau'u 'woman'; SP mamma'u-ci 'woman, young woman'; WMU mamá-či 'woman'; CU mamá-ci 'woman'.
2580 UA *pami 'girl': My beeme 'girl'; Yq béeme; AYq veeme; Tr bamirá. Tr probably shows the more original vowels with vowel leveling occurring in Cah: *a-i > e-e.
162 UA *siwa(N) 'sand': While Num shows *siwaN, the TrC terms level the vowels of 'sand' similarly: *siwa > se'e.

Tübatülabal's Frequent Preservative Assimilation of Second Vowel to the First

UACV-1587 *huna 'out(side)': NP hunaggwa 'outside'; Sh hunankwa 'outside'; Cm hunakï 'outside';
Tb 'oonooban 'the outside'. Probably *u-a > o-a > o-o.
6 UA *kwïlu 'swallow': Hp kwelo(-k) 'sample by tasting'; Eu béru'u 'swallow'; Tb weleeh 'swallow'.
Hp and Eu correspond perfectly through 4 segments, since Hp o < *u and Eu b < *kw. With Tb w (< *kw), Tb agrees as well, considering that the second vowel assimilated to the first.
UACV-137 *mo'olV 'bear': Kw mo'orii-ži 'brown or black bear'; Tb mo'olohy 'brown bear'.
206 UA *tuwaC / *tu'aC 'to bear, son, child': among many forms approximating *tuwa'/tu'a, we have
Tb tu'mul 'baby, offspring' which even assimilated the vowel of the suffix *-maL 'small, young'.

829 UA *pit-kanas ‘loincloth, rear-cover’: Hp pitkïna 'kilt, breechclout' and Tb pigiiniš-t 'shirt'; the latter portion likely relates to *kïna ‘cover’ and the *kanas of Cr (at clothing) with preservative vowel assimilation in Tb.
742 UA *comi /*comya ‘hair’: CN comi-, Hp -cmi, Tb comoo-, with preservative vowel assimilation in Tb.
UACV-234 *ciya 'bitter': Tb ceeyee’ït~’eceeyeeu 'be bitter’; CN čičiya 'bitter, sour’; likely *i-a > e-a > e-e.
UA *hu-ma’sa ‘(arrow-)feather’: Hp homasa ‘wing feather’; Tb ’umuša-t ‘arrow feathers’.
677 UA *wakol > *wikol ‘round’: Tep gakod; NP wïkono’o ‘ring, circle’; Mn wigo’onogi ‘crooked’; but Tb(M) wiiginat ~ iwiigin ‘stir, v’.
826 UA *mulawi 'dance, v': Tb muuluwat 'dance, v’; TO mualig '(of a person) to spin or dance’.

Nahuatl’s Anticipatory Assimilation of First Vowel to Second Vowel

162 UA *siwaN ‘sand’: Most of Numic suggests *siwa(N), while most of SUA lost -w- and some leveled vowels, such as My see’e. However, some SUA forms kept the original vowels: Nv hia, TO -hia,
Tbr siha-t, and Wc šie.káari almost. However, CN šaal-li again anticipated the second vowel (iwa > aa), though š is evidence for the original first vowel (AMR 1996d).
UACV-1685 *wiwa ‘amaranth, pigweed’: Hp wiiwa ‘amaranth (pig weed)’; CN waaw-tli ‘amaranth’. Another example of CN’s propensity for assimilating 1st V to 2nd: *wiwa > *wawa > waw.
692 UA *cako ‘small’: Hp cay, pausal acc: càako ‘small, little’; CN coko ‘s.th. very small’. Comparing Hp’s pausal accusative form, CN’s first vowel anticipated or assimilated to the second.
UACV-1739 *(ta)tacowa ‘push’: CN totočoaa ‘to push, shove someone or something to the front’; Tr na’tačo 'push each other'; Cr raa-tátahči ‘lo empuja’; Yq táhta 'bump’. CN assimilated *a-o > o-o.
UACV-1746b *to’asa 'throw': Wc túaša ‘tirar’; Cr tiú’utu’asah ‘tira (piedra)’; CN tlaasa 'throw s.o. down’.
597 UA *taputi 'cottontail rabbit': Sixteen languages match perfectly the four segments *tapu, which consistency is rare in UA. For CN tooč-tli, we have both loss of intervocalic *-p- and a change of first vowel to second: *taputi > *tapoč(i) > *taoč- > CN tooč-. CrC kept the first vowel, but also lost intervocalic *-p-: *tapoci > *tapci > CrC *taciu 'rabbit’ in Wc táciu; Cr táciu’u.
1245 UA *su’i / *suwi ‘hare’: while all of Tak, Hp, and Tb show *suwi/*su’i ‘jackrabbit’, CN si’-tli shows anticipation in *su’i > si’i, then loss of final vowel; though *u > CN i also, no palatalizing s > š.
98 SUA *tïkpa-wa (< *tukum-pa-wa) 'up, above, sky, on': Tr ŕe’pá; Tr ŕe’paní 'sky, up'; Eu téva(n)/tewa;
Tep *tïvagi (< *tïpawi) aligns with *tïkpa-wa (cf. Hp tokpela, Hp l < *w); CN tlakpa-k 'above, on top’. Note that while all others (and others not repeated here) show ï-a, CN has a-a. See ‘sky’ for details on other forms.
1144 UA *o’mana ‘sad, suffering’: CN a’mana ‘sad, troubled’; Tr o’moná-/o’móna- ‘be afflicted, saddened’; Tr o’móna-ri ‘sadness, affliction’. Tr and CN agree in the cosonants -’m-n-, but disagree in vowels: a-a-a vs. o-o-a. Note CN again has earlier vowels anticipating following vowels *o-V-a > CN a-a-a.
UACV-1042 *tapusa > tïposa > tïposi 'gopher': TO jewho/čïwho; PYp tïvua; NT tïvóóhi; ST tïvua; Eu tïvósi;
Yq tébos; Wr te’pósi; Tr repósi. For CrC and Azt, ***tapusa > tausa > tusa** > **tosa**: CN tosan ‘gopher’; Cr tauhsa ‘tuza’. At both *tapusa ‘gopher’ and *taputi ‘rabbit’, CrC kept the first vowel (a), but CN assimilated the first vowel toward the second (a-u > o-o).

Anticipatory Vowel Assimilation in Tepiman: *u-a > ua-a, and *i-a > ia-a

Nevome’s vowel anticipates the vowel on the other side of the consonant in the other languages.
UACV-160 *ku(N)ta(N)(pa) 'bee': Cp kutáŋva-l 'bumblebee'; Ls kúúkunta-la 'bumblebee'; My kuta kúmera 'bee that lives in wood'; **Nv kuarhagi** mumuva 'abejas grandes que hacen panales’; WMU kučávi 'bee’.
1102 UA *suma 'hungry': Eu hisúmrava 'hambre, n'; Eu hisúme 'haber hambre'; Eu hisúm-ce 'tener hambre';
ST uama 'die of hunger’. From *suma > Tep (h)uma > ST uama, as ST anticipates the following vowel.
826 UA *mulawi 'dance, v': TO mualig '(of a person) to spin or dance'; Tb muuluwat 'dance, v';
Tb muuluwii-l 'dance, n’. This pair shows three consonants in agreement. It is plausible that the Tb vowels assimilated between the initial syllable's u and the third C w, or second assimilating to first as above, then with the frequent Tep vowel anticipation, TO's vowels reflect the original, though shifted a syllable forward: *muLawi > mualig.
297 UA *masiwa ‘centipede’: Eu másiwa; Yq masíwe; My masia; TO maihogi; PYp maihig; Nv maiokka (< *mahioga < *masiwa). Wr ma’yáka, Tr maagá/ma’agá, and Tr mahará may derive from Tep loans: *masiwa > Tep *mahiga > mahaga (Tr) and > ma’yaka (Wr). Vocalically TO behaves much like in *muLawi above, anticipating the 2nd vowel, but with rounding toward -w-, a form of anticipation: *masiwa > *maisowV > maihogi.
739 UA *si’a > Tep hi’a ‘urinate, v’: TO hi’a; Nv i’a/’i’a; PYp hia’a. PYp aniticipates the following vowel.
1095 UA *pisa 'pound': NT viaáhai 'remoler'; Hp pïsïsï-ta 'be a continuous drumming or pounding sound’. Note NT anticipatory assimilation and Hp’s vowel leveling.
210 UA *tuti-ka > *cuci-ka > *susi-ka > susa-ka also shows Tep anticipatory vowel assimilation.

Vowel Transposition or Vowel-Line Shift

Another phenomenon frequent in TaraCahitan and sometimes in Tep is what might be called vowel-line shift, transposition, or leapfrog; that is, a sequence of vowels shifts in position relative to the consonants, similar to TO: *mulawi > TO mualig.

UACV-1171 At 'heel' Tr ŕanikura and Eu tenuka have matching consonants (*t-n-k) and the two forms have a similar string of vowels (i/e-u-a), but the vowels have shifted one slot relative to the consonants.
264 At 'rainbow' is another vowel-line shift in these four forms: though the feeble -h- dropped out in Tr/Wr, the vowel pattern persisted, thus shifting the remaining consonants: NT kiihónali 'rainbow'; TO gihonalï;
Wr kenolá; Tr ginorá. Note:

'rainbow' *kihonali (TO, NT) 'heel' Tr ŕanikura
*kinola (Wr, Tr) Eu tenuka

88 among CN wilaka 'caracol de monte'; Ls muvílaqa 'snail'; Tr warákoara 'caracol'; Wr alágaloci 'snail'; Wr nalágeloci 'snail'; Tr narákuri 'snail', note another example of vowel transposition:
Wr a-a-a(l)o-i
Tr a-a-u(r)i

Often *u > ï in Numic

1368 UA *tu'a- 'good': CU tïï'ay 'be good/well'; CU tïï'a-tï 'good'; WMU tïï'a-; Yq tú'i 'bueno, está bueno'; My tu'uri 'be good/well'.
UACV-2069 *suku 'snake, lizard': TSh pa-suku 'water snake'; Mn pasúgu 'water snake'; Tb pišuugat 'red racer snake'; Yq/AYq sikkuča'a 'coral snake'; Ch sïgïpici 'lizard'; CU sïgï-naġóy-či 'lizard'; Kw čigïpi-ži 'lizard' (*s > c?).
622 UA *cukka/*cukki 'crowded, mixed': CN ciciika 'stuff s.th. tight'; SP cïkki 'be mixed with'; CU cïku'mi 'narrow, constricted'; Cm cïhki-/cïkk- 'crowded'. Since *u > i in CN and *u > ï in Num is frequent enough, Num and CN agree through *cuk, and the final vowels (-a vs. -i) are the active/transitive in CN and stative in Num (except CU).
UACV-2300 *hu'uC 'thorn': Kw hu'u-pi-vï 'boxthorn, desert thorn'; Sh hï'ï- 'stickers'.
754 UA *puni 'turn, look, see': Mn puni/poni; NP puni; TSh puniC 'see, look at, study'; Sh puniC/puiC 'see'; Cm puni-tï; Ch puunii 'see, look'; SP pïnni 'see'; CU pïni-kya 'see, vt'; CU pïni-'ni 'look at'.
Hp poni-ni-ykï 'start moving, wake up' is cognate with Num *puni 'see/look', as would the more basic stem Hp poni- 'turn, bend' be also, as in Hp poni-l-a 'turn, make turn, steer' as well as the Tak forms *puni 'turn'. 'He turned to look' and 'he turned' and 'he looked' can all apply to the same instantaneous event. Note that the eastern end of the SNum line (SP, CU) changed *u > ï.
UACV-166 *hupi 'bumblebee': Mn hïbíwu 'bumblebee'; NP huupi nodda 'bumblebee'; Sh hïpi-muih 'bumblebee'.
81 UA *hupi (*huppi?) 'woman, wife': While other UA languages show forms consistent with *hupi, the Num languages show *hïpi/*hïppi (< *hup(p)i): Mn hïïpí'; TSh hïppicci(cci); Sh hïpi; Cm hïbi, though occasional gemination remains to be clarified.
UACV-353 *muCta 'cholla cactus': Cp múta-l; Ca múta-l; Ls múúta-l; Sr muutu|ţ; Sh(C) mïca 'cactus'. While Tak shows u, the Num form has ï, as well as -c- < *-Ct- or *-tt-.
UACV-2319 *yuna/i 'pour, put': Mn tïyuna 'pour into'; Cm payunitï 'pour water on, water, vt'; Ch yuná 'put pl obj's'; CU yunáy 'scatter, put pl obj's'; Kw yïna/yuna 'pour'. Note a Kw form showing yïna < *yuna.

Pima de Yepáchic (PYp) Vowel Metatheses

PYp occasionally metathesizes its first two vowels from a pattern of PUA *a-i > i-a, or *a-u > u-a:
UACV-124 *paCti'a 'bat' several languages illustrate *paCti'a > *paci/*paca, but PYp -pisa < *pica.
UACV-1697 *yalipá 'poison': Mn (y)enipá' 'poison, n'; Mn enipa'a 'poison, v'; Wr yeloá 'poison, n'; Wr yeloé-na 'poison, vt'; PYp dirav 'poison for fish'. PYp fits well, because Tep d < *y and v < *p, and it shows the same metathesis as in 'bat': i-a < *a-i. TrC (Wr) often shows intervocalic -p- > -w- late in a word.
597 From *taputi 'cottontail rabbit' note the vowel metathesis in PYp tuuva 'cottontail'.

Compensatory Vowel Lengthening with Consonant Cluster Reduction

Other examples exist, but the following instroduce the phenomenon of compensatory vowel lengthening in conjunction with consonant cluster reductions: CVCCV > CVVCV. Examples in Tb include Tb(V) paanïnt 'ant' vs. Tb(M) pa'nïnt 'ant'; and Tb(M) polo'mat ~ 'opoloom 'bend, vi'.

Ls also provides examples. At UACV-2386 'touch' are Cp ŋášxa 'be rough'; Cp ŋašxaŋášxa'a-š 'rough, adj'; and Ls ŋááxa/i 'scratch, scrape, vi, scratch, brush against, vt'. These show a cluster in Cp being reduced in Ls with compensatory lengthening of the vowel. In contrast to most Tak terms for 'sky' having no long vowels (Ca túkva-š,

Cp túkva'a-š, Sr tukuhpt̨), we see the long vowel in Ls túúpa-š, which again reduced the cluster. Ls *p remaining a stop (vs. -v-) is evidence of the previous -kp- cluster (*tukupa > *tukpa > *tuupa) with a long vowel in Ls.

Hopi's long vowel with falling tone in some dialects (àa), aspiration in others (ah), usually signifies a previous consonant cluster reduced to one consonant with compensatory vowel lengthening, for -àa- at least and for -ah- if -h- is considered a voiceless vowel continuation of the preceding vowel.

1071 *naNkapV 'leaf': Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï 'leaf'; SP naŋqava 'ear';
Tb naŋhabïï-l; Hp nàapi / nahpi 'leaf'. Note that Hp lost -k- / -ŋk- and that Hp nàapi / nahpi shows -p- (instead of -v-) usually due to a previous cluster, and with the reduced cluster, Hp has a long vowel.

221 UA *wïr-pa'a 'tall, long, great-height/length': Hp wïïpa 'tall, long' is a compound of *wïr-pa'a 'big-height/length'. Hp -p- (vs. -v-) means a cluster, yet the first morpheme does not inherently have a long vowel. So the long vowel in the compound is due to a cluster's reduction with compensatory lengthening.

274 UA TO toon-k 'hill'; SP tonnoqqi / tunnuqqi 'a hill rises'. The long vowel in TO appears to be long due to the cluster reduced in TO, but still apparent in SP.

1407 UA *mo'na / *mo'ona > monna / moona 'son-in-law': Sh monappï; Kw mono; SP monna; Hp mö'önaŋw 'male in-law'; Eu mónwa; Wr mo'né; Tr mo'né-ra; My mó'one; Yq mó'one; Tbr moa-saká-r; Wc muune; Cr mú'u 'affinal relative'; mu'un 'yerno'; CN moon-tli 'son-in-law'; Pl muunti; Ca míŋkiw'a. The long vowels in CN, Pl, and Wc are obviously not original, as a dozen other UA forms show short vowels with an intervocalic glottal stop or a cluster (-'n- / -nn-), so the long vowels in the three are secondary and appear to be due to reduced consonant clusters.

With *yu'ma 'tired, worn out' we see clusters in Tb yu'mat~'uuyu'm 'worn out' and Ch yum'á 'tired, suffer, drunk, dead, pl', but without the cluster, we see a longer vowel in Yq yúume 'cansarse' and My yuúme 'se está cansando'. These examples suffice to introduce the fact that consonant cluster reduction with compensatory vowel lengthening is a feature of UA comparative phonology.

The Vowel Changes from Semitic and Egyptian to Uto-Aztecan are treated in section 7.1.

Pattern of Presentation of the Uto-Aztecan and Semitic Data

First is listed the relevant Semitic / Egyptian forms; the most relevant are in bold calibri font. Then is cited the UA reconstruction(s) and the relevant UA set from the reference work *Uto-Aztecan Comparative Vocabulary* (UACV). The UA data are listed thus: UACV-the set number in UACV: then a reconstruction and definition: then the preceding UA cognate collections citing that set: then are listed the UA cognates from the various UA languages, followed by discussion. Some later data and detail, perhaps of interest only to Uto-Aztecan specialists, may be in small print. Then follow a bracket of searchable code for phonological detail, and a bracket of the branches represented by that UA set. Times New Roman is the font for most of the book, but Times New Roman when bolded is less clear, so Calibri font is often used for the primary bolded forms to be compared.

Sections 2 through 5 focus mainly on consonant correspondences of the 1500+ parallels, with occasional comment on vowel correspondences; however, section 7.1 more properly or thoroughly addresses vowel correspondences; section 7.2 shows the medial consonant cluster results in UA; and section 7.3 treats the Near-East grammatical and morphological parallels in UA. Those three normally comprise the comparative method. Yet in addition to those, section 6 shows how these language ties explain seven puzzles of UA previously unexplained. Section 8 reviews the Aramaic leaning of the Semitic-p contribution in UA.

2 The Semitic-kw Contribution into Uto-Aztecan

In the Hebrew and Aramaic forms, the post-vocalic spirantization of Hebrew b > v, p > f, t > θ, and k > x will not be represented for three reasons: (1) it is not original, but a development in Masoretic Hebrew, a late AD-600 dialect's pronunciation, though Blau (1998, 30) reasons that it likely occurred before 300 BC; (2) it seems not to have applied in the dialects found in UA; and (3) such representations would be unnecessarily confusing to non-Semiticists.

2.1 **Uto-Aztecan** vowels sometimes accord with the archaic vowelings Hebrew/Phoenician or Ugaritic:

	Hebrew	UA
1 plural suffix	-iim	*-ima
2 passive/reflexive/recriprocal prefix	ni-	*na-
3 perfect of yšb 'sit, dwell'	yaašab	*yasipa

The UA morphemes above show some similarity with Masoretic Hebrew, though nothing exact: -iim and *-ima; ni- and *na-; yaašab and *yasipa. However, the facts that (1) Hebrew -iim came from an earlier ***-iima** (Moscati 1964, 88, 97; Blau 1976, 30 explains loss of final short vowels in pre-Hebrew; and Huehnergard 1987, 296; Gordon 1947; Segert 1984, 51; and Bennett 1998, 79 shows the actual form -iima in Ugaritic for gen and acc masc pl); and that (2) Hebrew ni- (niqtal or nifʕal prefix) came from an earlier ***na-** (Blau 1976, 51); and (3) Hebrew yaašab from an earlier ***yašiba** (Moscati 122), all show a near identity between Pre-Hebrew forms and Proto-Uto-Aztecan (PUA) forms:

	Pre-Hebrew	PUA
1 plural suffix	*-iima	*-ima
2 reflexive/reciprocal prefix	*na-	*na-
3 sit, dwell	*yašiba	*yasipa

1 Hebrew **-iim** came from an earlier ***-iima** (Moscati 1964, 88, 97; Blau 1976, 30 explains loss of final short vowels in pre-Hebrew; and Huehnergard 1987, 296; Gordon 1947; Segert 1984, 51; and Bennett 1998, 79 show the actual form -iima in Ugaritic for the Northwest Semitic genitive and accusative masculine plural, from which the Hebrew plural derives):

UACV-2673 ***-ima (> -im, -m, -mï)** 'plural suffix': Sapir; Langacker, 1977, 80 (*-mï); KH/M06-ns5: Hp -m/ -mï- 'nonsingular suffix'; Sr -m / -mï-; Ktn -m; Ca -m; Cp -m; Ls -m; Gb -m; CN -me' 'absolutive pl suffix'; -tin 'absolutive pl suffix' (with ns-01); CN -waan 'possessed pl suffix'. Langacker (1977, 80) reconstructs the UA pl suffix as *-mï, by taking an average of the more conservative forms, many of which indeed are -mï; however, several forms suggest *-ima. Consider Cp -im; Ca -em; Yq, My, and AYq -im (after C), -m (after V); Ls -(u)m; Hp -m; Sr -m; Tbr -m; Kw -mï; Cr -ma; Wc -ma; Wr -ma (pl verb suffix); Op -m(e) (Shaul 2003, 27). And Dakin (1979) reconstructs an earlier *-ma for CN -mï. Tep languages show pl -m only on pronouns. Though most UA languages begin the pl suffix with -m, five languages (Cp, Ca, Yq, My, AYq) show a high front vowel (i/e) before -m. Likewise, many show ï or no vowel after the m; yet at least three show -ma, and because ï behaves like the UA schwa, a change from final *a > ï is natural in an unaccented position. The loss of the first vowel *-i is also expectable, because most UA words end with a vowel, which creates an environment of two vowels, the second usually giving way to the first; i.e., if a noun ends in -a, then: *-a- + -ima > -amï. Yet in spite of those two processes, the first vowel is apparent in five languages and the last vowel is in at least three, making a reconstruction of *-ima quite viable, to which Miller agreed in a personal conversation prior to his untimely death that the case for *-ima is reasonable. In the Tep branch, this plural suffix is only found on pronouns: e.g., UP hïgam 'those' vs. hïga 'that'; and UP iidam 'these' vs. iida 'this'; Tep api 'you, sg' vs. apim 'you, pl'. At 904 is Hebrew feminine plural suffix -oot / -ootee[y]. [NUA: Num, Tak, Hp; SUA: Tep, TrC, CrC, Azt]

2 Northwest Semitic ***na-** (Blau 1976, 51) as a passive, reflexive, and reciprocal prefix in Semitic is identical to UA reflexive, reciprocal, passive UA *na-:

UACV-2675 ***na-** 'reciprocal/reflexive/passive prefix': KH/M06-vp1: Hp naa- 'reflexive prefix on verbs'; TSh na- 'passive prefix on verbs' (Dayley 1989, 50); Sh na- 'passive/reciprocal prefix on verbs' (Crapo 1976, 12, 19-20); Cm na- 'passive/reflexive/reciprocal/plural prefix on verbs' (Charney 1993, 103-4, 126); Ch na- 'reflexive/reciprocal prefix (Press 1979, 49); SP na- 'reflexive/reciprocal prefix'; CU na- 'reciprocal prefix on verbs' (Givon 1980, 159-60); Eu na- 'reciprocal prefix on verbs' (Lionnet 1986, 29); Tr na- 'reciprocal prefix on verbs'; WTr na- 'reciprocal verbal prefix' (Burgess 1984, 33); CN ne- 'passive prefix' (Sullivan 1988, 75); Cr nya- 'refl prefix' (Casad 1984, 160). [NUA: Num, Hp; SUA: TrC, CrC, Azt]

3 Hebrew **yšb** ‘sit, dwell’ or earlier Northwest Semitic ***yašiba** matches UA ***yasipa** ‘sit, reside’: Hp yésiva (Voegelin 1957, 35); Tr asiba; Yq yesa; TO dahiva; ST daivu. (TO and ST are Tep languages for which *y > d, *s > h or zero, and *p > v). However, some Uto-Aztecanists attribute the final -pa to an old choative suffix; however, ST daivu ‘stop (of bird) and sit’ shows u, not a, which does not align with -pa, but aligns perfectly with the Northwest Semitic plural *yašibu, while UA *yasipa aligns with the Northwest Semitic singular *yašiba. Furthermore, the verbal forms of both Northwest Semitic and UA contain 3 semantic dimensions of *yasipa: ‘sit’ and ‘dwell/reside’ and ‘jump’ in both language families.
UACV-2005a ***yasa / *yasi** ‘sit’: VVH76 *ya$_n$sa ‘to sit’; M67-380 *ya/*yas ‘sit’; L.Son351 *yasa/*yas-i ‘sentarse’; B.Tep17 *daha ‘be seated’; M88-ya1; AMR *yansi; KH/M06-ya1: Tb yandzït~’ayanc; Hp yeese ‘sit, reside, v.i.imp/pf. pl’; Hp yeesiwa ‘reside, be in place, vi imp. pl’; Hp yésiva ‘sitting, camping, pl’ (Voegelin 1957, 35); TO đaha ‘be sitting, be, be present, reside’; TO đahi ‘sit’; Wr yasa/yasi ‘estar sentado [be seated]’; Tr yasá / asá / así ‘sentarse, estar sentado’; My yeesa; Eu dasé ‘sentarse’; Op dasa ‘sit, sg.’; Tbr nesa/neca ‘sentarse’; Wc yáá ‘sentarse’; Cr na-’a-vé’e-yeihša ‘I’m going to get on (the horse)’; Wc yááše ‘empezar a estar sentado’; Tr ayása ‘dwell, inhabit temporarily’. Note *-ns- > -nc- in Tb.
UACV-2005b ***yasipa** ‘sit’: in connection with this word, note how many languages have a form pointing to a third syllable with *pa or *yasipa and *yasipu: Hp(V) yésiva ‘(they’re) sitting down, camping, pl’; TO(M) dahiva ‘sit, camp’; Tr asiba ‘sentarse’ (asi-ba ‘sit-incoative’); Wr yasipá ‘sentarse’ (vs. yasa- / yasi-); ST daivu has an entirely different vowel. Compare TO(M) đahivup ‘sit/alight repeatedly, vi repet; pl: đad(h)aivup’ and TO(M) đahivuim ‘wish to sit down; pl: đadhaivuim’. The *-pa morpheme is often ascribed to a fossilized inchoative suffix, but not all such languages have it (though it could be fossilized then lost), but more problematic is that two show *yasipu (Hebrew pl) vs. *yasipa (Hebrew sg). [*-ns- > -nc-]
[NUA: Hp, Tb; SUA: Tep, TrC, CrC]

The Hebrew Old Testament text as we have it, also known as the Masoretic text, was voweled by the Masoretes about AD 600-700. Yet that form of Hebrew, known as Biblical Hebrew, is only one of the dialects of ancient Hebrew, and the vowels were added very late, more than a thousand years after the consonants were written. Hebrew, as we know it, lost the short final vowels of proto-Northwest Semitic, but as seen in 1 and 3, those vowels appear in UA. Not all UA forms preserve the phonology so well. More often UA has reduced the Semitic forms; nevertheless, archaic features do turn up occasionally.

Also worth noting is that these three items tie with Hebrew specifically, because only Ugaritic and Hebrew have -iima / -iim for the plural; Arabic has -uuna / -iina; Aramaic -iin; East Semitic (Akkadian) has neither m nor n, only -uu/ -ii. Proto Hebrew has *na-, but not Aramaic or Arabic. Similarly, only Northwest Semitic has yšb, with initial y (< Proto-Sem *w); Arabic and South Semitic have w, and East Semitic has nothing, but lost that initial consonant. Other matters specify Northwest Semitic, but not necessarily Masoretic/Biblical Hebrew. In fact, the Semitic-p holds several affinities with Aramaic (see section 8).

Three primary sound changes or sound correspondences between kw-Northwest Semitic and UA are
Hebrew b > PUA *kw (for dageshed b: initial, doubled, clustered);
Hebrew ṣ > PUA *c (ts);
Hebrew -r- > PUA *-y-/-i- (when not at the beginning of a word)

2.2 Hebrew/Phoenician b > Uto-Aztecan kw

Uto-Aztecanists figure Proto-UA *kw > b in Tepiman, Opatan, and some Aztecan dialects, perhaps because Indo-European *kw > p. However, the opposite direction of change, from bilabials (p/b) to labio-velars (kw/gw), happens also. Consider six examples, the last three from UA. The Celtic branch of Indo-European divided into p-Celtic and q-Celtic. Welsh, a q-Celtic language, pronounced Latin loans beginning with v- as gw-: veneris > gwener ‘Friday’; verus > gwir ‘true’ (Gregor 17, 37). As well, my wife from Argentina reports that certain dialect areas in Western Argentina say gweno (< bueno) and gwevo (< huevo), etc. Bryce Cleghorn (p.c.) reports the same phenomenon in some areas of Central Mexico. Likewise, in UA itself some bilabials (p) become labio-velars (kw). At UACV-995 *yïpanaC ‘autumn’ are Mn yïbano ‘be autumn’; NP yïbano; TSh yïpani; Kw yïvana; SP yïvannaC / yïvwannaC; CU yuvwa-na-tti / yïgwa-na. Note that when -w- develops (SP), then -kw- comes next (CU) in the Southern Numic line of dialects. I have also heard native speakers of Yaqui say a slight -gw- for -w- medially. We also have Western Numic showing kw

< *w in UA. Semitic b > UA *kw may have happened due to influence from certain Oto-Manguean languages which have no bilabials, but do have various labio-velars, which identities need more research yet.

An intermediate step of -w-, as in b/p > v/w > kw, is often part of this process. For example, Proto-Mayan *w > Q'eqchi' kw, as in *warik > kwaark 'sleep' and *winq > kwiinq 'person' (Purse and Campbell 37-38). Blust (Baldi 252) notes many instances of *w > gw or *w > kw in Austronesian and elsewhere. In French loans from Germanic, *w > gw also: French guêpe < Middle French guespe < Old French wespe < Frankish *wespa, waspa < Germanic (cf. German Wespe); French guerre < Frankish *werra < Germanic (cf. Old High German werra 'strife, quarrel' (List of French Words of Germanic Origin). However, as likely, if not more likely, is that once rounding became associated with a bilabial, the next step was switching place of articulation (bw > gw, lips to velum). In pronouncing w, there is near closure at both the lips and the velum (e.g., PUA *w > g in Tepiman). So when b > bw, then bw > gw/kw, switching place of articulation from the lips to the velum, is a natural enough next step. That would appear to be the case for b^{w}eno > g^{w}eno in some Spanish dialects, and in SNum SP yïvannaC / yïvwannaC > CU yuvwa-na-tti / yïgwa-na 'autumn', and perhaps in Welsh veneris > gwener 'Friday'; verus > gwir 'true'. Thus, perhaps in UA also. This applies to Semitic/Hebrew dageshed b (initial, doubled, after consonant), while non-dageshed (after a vowel) > p.

4 Hebrew **baašel** 'boiled' < bšl / baašal 'grow ripe, boil, cook' (perfect baašal; imperfective: yV-bšVl**)**:
UACV-521 ***kwasïC** 'cook (=c), boil (=b), ripe(n) (=r)'

Mn	toqwasïkï 'c over coals'	Hp	kwasi 'c'ed'; tïkwsi 'r'	Eu	basa/base-n 'c, b, r'
NP	kwasïpï 'r'	Tb(H)	wïššït, pfv ïwwïš 'c, r'	Tbr	kwase/kwasi 'c, b, r'
TSh	kwasïC 'r'	Sr	kwahaan 'c'; akwahi 'r'	Yq	bwasa 'c'; bwase/i 'r'
Sh	kwasïC 'b, c, r'	Ls	kwaşi 'c, r'	AYq	bwasa'a 'c'; bwase/i 'r'
Cm	kwasï 'c, r'	Ca	kwas 'r'	My	bwasse/bwassi 'r'
Kw	kose 'c'	Cp	kwase 'r'	Wr	wasi 'c'; iwa 'r'
Ch	kwasï 'c, r'	TO	baha/bahi/bai 'c,r'	Tr	wasa/wase/wasi 'c,r'
SP	kwašï 'b, c, r'	PB	baida 'c'; bahidaga 'r fruit'	Cr	kwasi 'c, r'
CU	kusi/kwasi 'c'; kusï 'r'	PYp	bahi 'c'ed, r'	Wc	kwašee/kwašii 'r'
		NT	baahyi 'c, r'	CN	yoksi 'c, r'
		ST	baidy 'c, r'		

The above item—UA *kwasï 'cook, boil, ripe(n)'—appears in all 30 UA languages and demonstrates their respective sound correspondences of PUA *kw: kw in most languages; b in the Tepiman branch (TO, PYp, PB, NT, ST) and Eu; bw in the Cahitan branch (Yq, AYq, My); w in Tb, Tr, Wr. Not only does the unique semantic combination of 'boil, cook' and 'ripen' exist in both Hebrew and UA, but the sound correspondences match as well. While the third consonant (l) is missing in most, the Numic languages show a final underlying consonant (C) and the AYq glottal stop is a common reflex of previous, but missing liquids in Yq and AYq: *bašala > bwasa'a. Note also the yo- prefix in CN, similar to the yV- 3rd person imperfective prefix of Semitic. That CN often reduces kw-syllables to ok/uk in certain phonological environments is also relevant: *yV-kwasi > *yV-kwsi > CN yoksi. The forms at 5 (for UA *kwasi 'tail) also reflect the various languages' reflexes for PUA *kw:

UACV-521 ***kwasïC / *kwasaC** 'cook(ed), ripe(n)': VVH50 *kwa$_{u}$sï/*kwa$_{u}$si; M67-152c; BH.Cup *qwaš; I.Num80 *kwasï; L.Son117 *kwasï/kwas-i; M88-kwa1; Munro.Cup30 *kwááşi-š/kwaşí-š 'cooked, ripe' (Munro notes the Cupan forms are deverbalized forms); AMR 1993a *kwasiC; KH.NUA; KH/M06-kwa1 *kwasiC: Mn ku(')-qwassï 'get/be ripe'; NP kwasi-ppï 'cooked, ripe'; TSh kwasï 'ripen'; Sh kwasïC 'cook'; Cm kwasï-/h 'cook'; Kw kosi/kwasi- 'cook, roast, be cooked'; SP kwašï- 'be ripe, done, cooked'; SP kwašï-ppï 'passive participle'; WMU qw*ah*sű-y 'ripen, cook, simmer, vi'; CU kusí / kwasí 'burn, scorch, be ripe, cooked'; Tb wïsït/'ïwïs 'ripen, cook'; Cp kwáše 'get ripe'; Ca -kwás- 'ripen'; Ca -kwasni- 'ripen, make ripe, make fruitful'; Ls kwási-š 'cooked, ripe'; Ls kwasú-'a 'become cooked, ripen'; Sr kwahyi 'ripen, become cooked'; Sr kwahaan /kwahaanin 'cook, vt'; Sr akwahi' 'cooked, ripe'; Ktn kwahan 'cook, vt'; Hp kwasi- 'get cooked, baked'; Hp tïkwasi 'bec. mature'; TO bahi/baha 'bec ripe, cooked'; Eu basá-n 'cocer, madurarse'; Wr wasi-pá-ni 'cook, especially with water'; Wr iwasí 'fruit'; Tr wasí 'cocerse'; My bwássi 'maduro'; My bwásse 'madurar'; My bwassa 'cook, vt'; My bwasse 'cook, vi'; AYq bwasa 'cook, vt' (past: bwasa'a); AYq bwase 'cook, vi'; AYq bwasi 'cooked, ripe'; Tbr kwase/kwasi 'madurar'; Tbr kwasi-te- 'cocerse, hervir'; Wc kwásee/kwasi 'ripe'; Cr kwasí 'it is ripe, cooked'; CN (i)kwasi / ikwsi 'ripen, cook'; Pl uksi 'ripen, be cooked/done'. Ken Hill adds Ktn kwah / kwaha 'be cooked'; Ktn kwahan 'cook, v'; Ktn a-kwahi 'cooked, ripe'. Let's add Nv bahida 'sazonar'and Nv bahidaga 'ripe fruit'. Employing different prefixes, CN wiksi 'cook, ripen' and CN yuksi / yoksi 'cook, ripen' also belong. This is one of few sets having reflexes in nearly all UA languages. I like Manaster-Ramer's and Ken Hill's reconstruction with a final consonant as is apparent in the final gemination in some Num languages, -t (vs. -l) in Tb, and AYq's 3rd C glottal stop. Note that this stem is the base of many derivatives for fruit; I suspect that Tewa bai/be 'fruit' is tied to the Tepiman form (bahi) of this stem. [kw-reduction in Kw]
[NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

5 Hebrew **báášaar** ‘flesh, penis’: UA ***kwasiC** (AMR) / *kwasiy ‘tail, penis, meat’; the semantic change from ‘penis’ to ‘tail’ is discussed below; unless otherwise specified, the following are the UA terms for ‘tail’:

Mn	kwazi	Hp	sïrï ‘tail’; kwasi ‘penis’	Eu	basít
NP	kwasi	Tb	wïšii-l	Tbr	bakusí/wakusí-r
TSh	kwasi(cci)	Sr	a-wad	Yq	bwásia
Sh	kwesi	Ca	kwas	My	bwasia
Cm	kwasi	Ls	píqwsiv	Wr	wahsí
Kw	kwasi-vi	Cp	qwaš	Tr	wasí
Ch	kwas(i)	TO	bahi; baik	Cr	kwasí
SP	kwasi	PB	vahi/bahi	Wc	kwaašíi;
CU	kwasí-çi	PYp	bahi	CN	kwitla-pil-li
		NT	báhi ST bai		'anus-appendage'

UACV-2271 ***kwasiC** (AMR) ‘tail, penis’: Sapir; VVH51 *kwa$_u$si 'tail'; M67-430*kwasi/*kwaci; I.Num81 *kwesi / *kwasi; BH.Cup *qwas’; B.Tep2a *bahi; L.Son116 *kwasi 'cola'; M88-kwa2; KH.NUA; KH/M06-kwa2: this reflex is represented in every UA language except the Aztecan branch; Hp kwasi 'penis' is cognate with UA *kwasi ‘tail’; in fact, I once heard Miller state that the original meaning of *kwasi was 'penis' and changed to 'tail' in the other UA languages. Ls píqwsiv (< *pi-kwasi) suggests so, as ‘back-penis’—i.e., ‘tail’. NT baabáídyi ‘carne [meat]’; NT baabáídyiuvai ‘oler a carne, vi’; and NT baabáítyai ‘hacer cecina [make jerky]’ are also cognate. Ktn kwacita-c ‘tail’ reminds us that c/s difficulties are common in UA. Ktn and NT and Cahitan suggest a final C as AMR’s reconstruction shows. [*kw > w in Sr] [NUA: Num, Hp, Tak, Tb; SUA: Tep, TrC, CrC]

While Hebrew **baaśaar** primarily means ‘flesh’, a less frequent secondary meaning is ‘penis’ (cf. Leviticus 15:2, Ezekial 23:20 and 44:7, 9), NT baabáídyi 'meat, flesh’ (reduplication of Tep *bahid) is significant for a couple of reasons: one, it does mean ‘meat, flesh’ and does phonologically match UA *kwasiy, since NT/Tep b < *kw (Tep b or NT b corresponds to PUA *kw) and PUA *s > Tep h, but the fragile h’s of the Tepiman languages usually disappear in NT and ST: PUA *s > Tep h > NT/ST ø (ø means zero or no sound); furthermore, it shows the third consonant: Tep d < PUA *y < Hebrew r.

Regarding a semantic tie between ‘tail’ and ‘penis’, two other Near Eastern words have the same pair of meanings. Egyptian sd ‘tail’ yields Coptic sat/set ‘tail’ and Coptic set/se’et ‘penis’ (Lambdin 1983, 266; Cerny 1976, 163); in addition to that, Egyptian sd ‘tail’ very nicely fits Hopi sïrï ‘tail’ (d > r/V_V), which item probably helped Hp retain the original meaning of *kwasi ‘penis’ as Hopi is the only UA language that does not have *kwasi meaning ‘tail.’ In addition, Hebrew zaanaab ‘tail’ also came to mean ‘phallus’ in Middle Hebrew (Koehler and Baumgartner, 274).

6 Hebrew **blʕ / baalaʕ** ‘swallow, v’; Arabic **baliʕa** ‘swallow’; Assyrian **belu** ‘swallow’:
UACV-785 ***kwïluC** 'swallow': Eu béru’u 'swallow' (Eu b< UA *kw); Hopi kwelo(k) 'sample by tasting, v’ (Hp o < UA *u); Tb(V) weleeh 'swallow' (Tb w < *kw); Tb(H) weleehat. [NUA: Hp, Tb; SUA: TrC]

7 Hebrew baamaa (< ***bahamat**) ‘back, hill, mountain ridge, high place’; Ugaritic bmt ‘back’; Arabic buhmat ‘great mass of stone’ (Lane 268) originally ‘a grave’; these Semitic nouns are from the root *bhm, and even the fragile medial -h- shows up in two of the three CNum languages below:
UACV-99 ***kwahama** ‘back’: M88-ko27; KH/M06-ko27: Central Numic *kwaham- 'back’;
TSh kwɛm-pï 'back (of body)'; TSh kwɛm-pi 'back (of something)'; Sh kwɛhɛm-pï 'back (of a body);
Cm kwahi ‘back (of person or animal), n’; Hp kwïmï(k-) ‘to bulge upward’. [NUA: CNum, Hp]

8 Arabic **ḍabba** ‘cleave to the ground, take hold, keep under lock, put in safe keeping, guard carefully’ (would correspond to Hebrew ***ṣbb**). Hebrew ṣ corresponds to Arabic ḍ, and Hebrew ṣ and Arabic ḍ correspond to UA c, in Semitic-kw; and interestingly here we have the consistency of both ṣ/ḍ > c and bb > kw, and with the same pair of meanings ‘grasp’ and ‘lizard’ (9) in both Semitic and UA:
UACV-400a ***cakwa / *cakwi** 'catch, grasp, close (one’s grasp or close s.th. else), lock': M88-ca3; KH.NUA; Stubbs1995-9; Stubbs 2003-35: KH/M06-ca3: Ls čáqwi ‘to seize, catch'; Cp čáqwe 'catch, grab, cling to'; CN cakwa 'to close, enclose, lock up'; CN cakwi 'close, get closed, vi’; Pl cakwa (pret cak) ‘close, shut, cover’;
Mn cakwiti’i 'close, lock, bolt’; WMU č*ah*qqwí / č*ah*qqwíi / č*uh*kkwí ‘lock s.th., vt’; WMU č*ïh*kkwí’na-y ‘turn, vt’; SP čuġwaa-ŋqï ‘fasten on’; CU cugwí ‘adhere to, stick to’; CU č*ïh*kwíi ‘turn, twist’; CU č*ïh*kkwí’napï ‘key, n’; Ch čikwí-čui ‘turn’; Kw caagu-bï ‘glue’. TO šaakum 'catch, grasp’; NT saakómi 'handful'; ST saakum ‘handful/fistful (of grain)’. [labials, TO; -a vs. i] [NUA: Tak, Num; SUA: Tep, Azt]

UACV-400b *ca'wi 'take': Mn ca'winoo 'carry (by a handle), vt'; NP caggwï'huk 'carry off'. [WNum]
UACV-400c *cappa/*ca'pi 'take': L.Son29 *capi 'coger': Eu zápa-/cápa- 'coger, agarrar'; Tr ča'pi-mea 'coger, agarrar, casarse'; Tr na'cabi 'coger pl objs'; Wr ca'pi-ná 'agarrar, sostener'; Op capi. Note the glottal stop hop or anticipation in Tr *ca'pi and *na'capi. TrC *ca'pa/i may be related to *cakwa/i as another item showing some evidence of clustered or geminated noninitial p relating to kw, and the glottal stop may suggest a cluster. A division like cold. [Tr glottal stop hop; *-kw-/*-p-] [SUA: TrC]

9 Hebrew **ṣaab** (< ***ṣabb**) 'lizard'; the Hebrew form is cognate with the Arabic verb above:
Arabic **ḍabba** 'cleave to the ground, take hold, keep under lock' and Arabic **ḍabb-u** 'lizard':
UACV-1385 ***cakwa** 'lizard': Ca čaxwa-l 'a brown lizard'; CN te-čičikoo-tl 'type of lizard'; maybe Tb šiko-l 'lizard'; thus, Semitic ḍabba 'grasp, lock, lizard' and UA cakwa 'grasp, lock, lizard'.

As in 8 and 9 above, items 10 and 11 also show medial **Hebrew -bb- > UA *-kw-**:

10 Hebrew šibber, impfv **-šabber** 'break, break in pieces' (qittel); Hebrew šɛbbɛr 'grain (as broken or threshed for use): **UA *sakway** 'break, ruin': Hp sakwi-ta 'break apart, break down, ruin'; Ca sakway 'mess up'; SP čukkwi 'crush'; and Tr si'o-ca-ma 'destroy, break to pieces' since Tr -'w- is Tr's medial reflex of *kw > -'w- > -'o-.

11 Hebrew dibber < *dibbar; impfv -**dabber < *-dabbir** 'to speak' (qittel):
UACV-1876a ***tïkwi** 'say': M67-434 *te 'to tell'; I.Num234 *tï(ï)(h)kwi(i) 'say, tell'; M88-tï17: Mn tïïkwi 'tell, vt'; NP tïïkwi(hi) 'tell'; SP tïkwïnna 'tell a story, v'; TSh teewi 'point, tell,talk about'; TSh teewinna 'talk about'. Tb alaawi' 'talking' (Voegelin 1935, 124); Tb(H) allaawat 'to talk, speak'; Tb(H) allaawappïï-l 'speaker', because Tb w < *kw and *-t- > -l- in Tb, the Tb forms fit a prefixed infinitive: *ha-dabber. Of pfv *dibbar: TSh tïtiiŋwaC 'teach'; Sh(C) tekwaC 'talk'; Cm tekwarï 'speak, talk to'; Cm tekwapï 'word, speech'.

12 The pronominal prefixes to the impfv stem include y-, t-, n-; thus, UA *yïkwi as a reduced form of Hebrew yədabber 'he speaks' with 1st and 3rd syllables after loss of 2nd, a common pattern in UA:
UACV-1876b *yïkwi 'say': I.Num82 *kwi(i) 'say'; M88-kwi12: Sh yekwiC 'say s.th., sg subj'; Cm yïkkwi 'say, vi'. UA *yïkwi < *yï-takwi is feasible since the 2nd syllable of 3 is often reduced and often eliminated in UA, especially Numic. Perhaps Hebrew nədabber > CNum *nikwi 'say' > Sh niikwi 'say, tell, vt'; Cm niikkwi 'say to s.o.' The preceding may contain the prefixes (tï-, yï, ni-). [NUA: Num]

13 Arabic **snw** 'gleam, shine'; Ethiopic **snw** 'be beautiful'; Hebrew šaani 'scarlet'; Assyrian siniitu 'dyed cloth': Hopi **soniwa** 'be beautiful, pleasing, look good, as of s.th. bright, brilliant, or handsome'; Hopi sonwa-y 'beautiful (of women), bright (of colors)'. Interestingly, Hebrew(BDB) above listed Arabic snw and Ethiopic snw as cognate, but inserts 'but' before the Assyrian cognate, perhaps puzzled by the semantic tie, yet Hopi has all three meanings: 1 beautiful, 2 bright, 3 having to do with colors. [1s1,2n,3w]

14 Hebrew **baazaaq** 'flash of lightning'; Aramaic(S) bzq 'to scatter, sow, shine'; following the prefix *aNkaC- 'red', notice UA *kwisak or *kwicak:
UACV-1328 *aNkaC-**kwissaka** / *aNkaC-**kwicci'i** 'lightning': Mn aqakwiči'i 'lightning, flash (of lightning), v'; also Mn aca-kwiciqa / aca-kwiciki 'be shiny, gleaming, be flashing (like lightning)' with a different prefix; Cm ekakwice'e 'lightning flash, n'; SP aŋqa-qqwišarï 'lightning, red-flashing, n'; SP qwišša 'to flash, spark, vi'; Kw 'aga-gwiša 'be sheet lightning' (said to be compound of aga 'red' and kwiži 'pile up' suggested, but the latter morpheme is 'to flash or lightning' in all the other languages); WMU paná-qq*wi*ssa-y 'lightning, vi'. WMU has a different first morpheme, but the same second morpheme and also means lightning. CU paná-qosɛ́y 'lightning, vi'. Because Tb w < *kw, then Tb(V) wašakwašāg 'it is lightning, v'; Tb(M) wasakwasa'gat~ wasakwasāk 'flash (of light, lightning, fire)' also belongs. So this exists in each branch of Num and Tb. Perhaps also Ktn kwačea' 'start or stoke fire' and/or Ktn kwačkwačïk 'have blisters or be red all over'. Tb, SP, WMU, and CU all show the 2nd V as *a*, Tb has both such, but with many first i vowels, let there be one of each in the reconstruction. It may be that a geminated *-ss- > -cc-, as *-tt- does not usually lenite so far as s, and as many languages show s as c. For *aNka of the compound, see 'red'. [NUA: Num, Tb, Tak]

15 Arabic **baaz** 'falcon', pl biizaan; Aramaic **baaz-aa** 'falcon-the'(CAL); Syriac baaziiq-aa 'hawk, falcon-the':
UACV-737a ***kwasa** 'eagle': L.Son115 *kwasa 'aguililla'; M88-kwa4; KH/M06-kwa4: NP pui kwasa 'blue heron'; Tbr kwasá 'clase de ave pescadora grande [type of large predatory/fishing bird]'; Ca kwasanemčíip 'baldheaded bird'; Wr kusá 'tipo de gavilán [type of hawk]; Tr kusá 'aguililla [little eagle]'.
UACV-737b ***kwisa** 'eagle': M67-146b *kwi 'eagle'; Fowler83; M88-kwi5; KH/M06-kwi5: Cr čuíhšï 'hawk'; Wc kwíiṣï yïï.yári 'aguililla'; CN kwiiš-in 'large bird of prey, hawk'; Pl kwiṣ-ti 'hawk'; perhaps Kw kïsa-vi 'chicken hawk'. These two (a and b) are likely related; whether *kwisa was original and the 1st vowel assimilated to the 2nd (*ɨ-a > a-a) or whether *kwasa was the proto-form and the first vowel raised and fronted toward the alveolar is hard to say; either is possible, and thus these two are likely variants of the same etymon *kwVsa.[*u > ï in Kw] [NUA: Num, Tak; SUA: TrC, CrC, Azt]

16 Aramaic **blm** ‘to silence, muzzle, wrap up, guard, restrain’; Hebrew **blm** ‘to curb, restrain’; Aramaic(S) **blm** ‘to wrap up’; Aramaic(S) **blm** ‘guard, protection, n’; Syrian blm ‘to muzzle, check, bridle’; Syriac **baalm-aa** ‘halter, bridle’:
UACV-383 ***kwalma** ‘put arm around, carry under the arm’: BH.Cup *kwal- 'armpit'; M88-kwa14; KH/M06-kwa14: Cp kwál’a ‘side, armpit’; Cp kwalma 'carry under the arm’; Ca kwálma 'hold under armpit, put arm around s.o.'s neck'; Ls qwálma 'armpit'; Gb kwár 'armpit’. While possible that *kwalma is a compound, none of the authors of the works on the three Cupan languages show it hyphenated, so Cp kwál’a 'side, armpit' (vs. Cp kwalma 'carry under the arm') may have shortened or lost the final syllable. [iddddua] [NUA: Tak]

17 Hebrew zəbuub ‘flies’ (collective); Arabic đubaab, pl: đibbaan ‘flies’; Akkadian zubbu / zumbu ‘flies’: Aramaic(J) diibbaa; Aramaic zbwr ‘hornet’; Aramaic(J) ziibuur ‘bee, wasp’; Arabic zunbuur ‘hornet’; relative to Semitic *đVbb (Hebrew zbb) ‘fly, flies’ and **UA *sikwoti** / ***sikwori** ‘fly’, the UA form looks like a feminine plural (< *zabboot) or from a general form of *đVbbV(t) ‘fly’ as found in various Semitic languages; in any case, the consonants (*đ/z > s, *bb > kw) agree with Semitic-kw:
UACV-913 ***sakwoti > *sïkwoti,** or ***sakwoti** > Cah ***sabori > *saipori** ‘fly, bee’: M67-181 ‘fly, n’; M67-33 *sek/*cek ‘bee’; L.Son227 *saiwori ‘mosca’; M88-sï5 ‘fly’; M88-sï18; Stubbs 1995-13; Stubbs2000b-42; KH/M06-sï5; KH/M06-sï18: the following forms divide themselves into those that show *kw as the medial consonant and those that show a bilabial (*p, b, bw) or were borrowed from UA languages showing bilabials:
UACV-913a ***sï’kwo-** (< *sakkwo-?) ‘fly, n’: CN šiiko’-tli ‘bumblebee’; Ca kuŋ-sexwet ‘bumblebee (husband-bee)’; Eu sébor ‘fly’; My sé’ebori ‘fly’; My kuku-sebo’ori ‘bumblebee’; Yq sé’ebo’i ‘fly’; Wr se’wá ‘fly’; Wr se’óri ‘honey, kind of honey bee’; Wr so’óri ‘kind of fly bigger than se’wá, possibly same as se’óri’; Tr se’ori ‘fly, bee’; Wc šéekïi ‘gnat’ (Wc ï < *u) also appears to belong. What of Ls kúpşax-la ‘type of bumblebee’ (with Ca kuŋ-sexwet)? Eu b corresponds to PUA *kw (Eu basít ‘tail’) and CN šiiko’- certainly shows medial *kw rather than *p. Eu and Cahitan -bo- could feasibly be either, but best fit *kwo > bo. Tr w and Wr w normally reflect PUA *kw in initial position, and -’w- often medially. Here Tr -’o- and Wr -’w- are medial variants of PUA *kw, and not from *p, because Tr and Wr show p/b for *p. So CN, Tr, Wr, Yq, My, and Eu all show *-kw-, being consistent with the kwo-phenomenon medially, while some other UA forms suggest *saipoli (< *sayapoli ?), perhaps borrowed from languages with medial bilabials:
UACV-913b ***saypori** ‘fly’: Nv saivori ‘abeja’; NT sáívuli ‘fly’; Op saiwori ‘mosca’; Tbr sayvól ‘abeja’; Tbr haya-vól ‘mosca’; Wc šáipï; Cr šáihru/sa’ihiru ‘fly’; CN saayool-in ‘fly’. Some of these forms may be borrowed from Tep b or Cahitan -bo- (<*kwo); either would be taken as *p in other UA languages. Nv and NT seem to have borrowed from TrC, perhaps Tbr, since *s > Tep h, not s. CN saayool-in, on the other hand, is identical to Tbr except for the missing bilabial v/p, and CN typically lost *p. In fact, the similarity of Tbr sayvól, Op, NT, and Nv *saivoli/saywoli to CN saayool-in is quite identical in all five remaining segments: s-a-y/i-(v)-o-l/r. Thus, this set b seems suspect for meshing or diffusions of Cah *sïbori into Azt, Tep, and other TrC languages.

Of considerable interest is that in Semitic, especially Assyrian, the root zbb carries two sets of meanings: ‘fly’ and ‘be in a frenzy, be an ecstatic’, that is, under the influence of spirits or bewitching power. Uto-Aztecan also has two sets of words meaning ‘fly’ and ‘curse/bewitch’ which not only have the same two sets of meanings, but also both correspond with *sVkwot, which correspond with Semitic *zVbbot.

18 Assyrian zubbu / zumbu ‘fly’; Assyrian zabaabu ‘be in a frenzy, act crazily’; zabbu ‘type of ecstatic’;
UACV-203 ***sakwo > *sikwo/sikwi** 'witch, bewitch: M88-sa27; KH.NUA; KH/M06-sa27: Cp sekwíte / sakwíte ‘curse, whip’; Cp sekwítxe-l 'whip, n.'; Sr şakwi’ 'whip, vt'; Sr şakwitkin(a) 'whip, swat, vt sg.obj.'; Gb sakwít 'castigar'; Ls şíqwi 'to punish, whip’ (1st vowel is wrong, Miller notes). The ‘curse’ semantic dimension of Cp, with *kwo > bwo / bo in Cah, likely ties these to My sisibo 'hechizar [to curse (of a witch); My sibori 'hechizado [bewitched]’; Tr siku- 'hechizar [to curse, witch]'; Tbr sigu-l 'hechicero [a male witch]’. Interesting is Ls -qw- rather than -kw-, suggesting a non-high 2nd vowel, i.e., a 2nd vowel of *o instead of *i originally (Langacker 1970), which agrees with SUA TrC. As for the first V, *_a_ likely went to the schwa options—i and ï—suggesting it may have been unaccented previously, with Sr and Gb maintaining the original _a_. Note Tak -kwo- and My -bo-. Perhaps Tr and Tbr ku < kw after loss of V. Ktn kwitea ‘bewitch, kill by witchcraft’ with loss of initial syllable. [labials, kwo, u/o; t > ’ in Sr] [NUA: Tak; SUA: TrC]

19 Arabic **barr-** ‘land (as opposed to sea)’; Hebrew baar ‘open field’; Aramaic(J) bar-aa ‘uncultivated ground, forest, prairie-the’; perhaps from an Aramaic form resembling ***barr-aa** ‘field-the’:
UACV-753 ***kwiya / *kwira** 'earth': VVH112 *kwiya 'dirt, earth'; B.Tep6 *bidai ‘clay’; M67-151 *kwi/*kwiya 'earth'; L.Son126 *kwiya 'tierra'; M88-kwi2 'land, earth, dirt' KH/M06-kwi2 *kwiy= *kwin: TO biđ ‘adobe, mud, clay, plaster’ (TO b = UA *kw, and TO đ < *y); My bwiya 'tierra, suelo, piso'; AYq bwia; Yq bwía, pl: bwiam/bwiram; Tbr kwirá-t 'tierra, mundo'; Wr we’é; Tr weé/we-/wi’yé; Cr čwéh; Cr čuáa-ta’a 'on the ground'; Wc kwí(y)e. Note the *r* instead of *y* in both Tbr and the Yq pl, which liquid also aligns with the NUA n in the Takic forms and NP that KH/M06-kwi2 adds to Miller’s list: Sr pääkwiñit ‘mud’ (water-dirt) and Gb kwenár 'mud’. Sr and

NP pakkwinapa ‘clay’ may be ‘water-earth’ as Ktn pakwinit ‘clay, mud’. What of SP kwaraŋavi ‘rolling country’? I agree with Hill’s moving Ls kwiláli ‘to soil, make dirty’ away from *kwiya to *kwiCtaC ‘defecate’. [-rr-/-r- > y, > -n- in Tak/NP] [NUA: Tak, Num; SUA: Tep, TrC, CrC]

20 Hebrew(BDB) **brr** ‘to select, choose’:
CN **kwia / kwiya** ‘to consider s.th. one’s own, to keep’; CN kwi-lia ‘to take s.th.’; Ls čikwáyi- ‘to choose, select’ may align with the impfv which has a *ti- prefix: *ti-bar > čikwáyi-, vs. prfv *barra > kwiya.

In 19 and 20, we see both the verb (20) and a noun (19) of very different meanings, but of the same root and the same correspondences. Similar to Semitic brr > UA *kwiya, are (64) Semitic krr > UA *kiya and (65) Semitic mrr > UA *miya further below.

21 Semitic/Arabic ganaba ‘set aside, keep away, steal’; Arabic ***ganb-** ‘side, n’; Arabic ***ganba** ‘beside, next to, near, at, preposition’; Arabic *baina ganbaihi ‘inside (it), within’; to be thoroughly demonstrated later, Semitic g > Semitic-kw ŋ, and *-nb- > *-bb- > -kw-, so *ganba > *gabba > ŋakwa, as expected:
UACV-1980 ***-ŋakwa** / ***-ŋako / *(mana)-ŋakwa** ‘side’: M67-376 *nakw ‘side’; I.Num110 *naŋkwVh ‘direction,side’; I.Num89 *ma(a)na(a)ŋkwa(h) ‘far’; M88-na16 ‘side’; KH/M06-na16: Hp -ŋaqw, -ŋaqö (pausal) 'from, away from, inside of’; Ca máŋax ‘on/by the side of, near’; Cp -ŋax ‘from, because of’; Ls -ŋax ‘from, because of’; in shortened forms Cp -ŋa ‘at, in’; Gb ŋa ‘locative suffix’; Ca ŋa ‘location’; but Ca -ŋa-x ‘from’ (Seiler 1977, 201-2). More fully treated later after 917. Both the ŋ (< g) and the -kw- < -bb- < -nb- suggest Semitic-kw. Whether Seiler’s morpheme break is correct or not, ŋa could be shortened from ŋakw. [initial *ŋ > SNum ŋ, > C/WNum n, as in sycamore] [NUA: Tak, Hp, Num]

22 Hebrew bll ‘to moisten, to mix up (flour, cakes, etc)’, pl: *ball-uu; Arabic balla ‘to moisten’:
UACV-2079 ***kwal** ‘soft’: M67-401 *kwa 'soft'; M88-kwa8 'soft'; KH/M06-kwa8: Yq bwal 'soft'; Yq sí’ibwal 'very soft'; and AYq bwalko ‘soft, smooth’; Eu barínari 'blando [soft], lo que fue ablandado por otro [what was softened]’; Eu baroré’e ‘está blando [is soft]’; Eu baroré ‘blandamente, suavemente [softly]’; My bwalko ‘blando’; first two syllables of Cr kwa’ačíra’a ‘está suave, blando, tierno, débil’ (*l > ’ in Cr). Cr fits well because intervocalic *-l- > Cr -’-. [’/l] [SUA: TrC, CrC]
UACV-1448c ***kwannu / *kwiNtu** ‘stir’: SP kwan’nu ‘to stir (mush)’ (< *ball-uu Semitic pl, as *l > NUA n); SP ci-kwan’nu-i ‘stir (mush) with a stick’; Sh(C) kwintuiC ‘mix, stir, vt’ (with CNum *tuhiC ‘melt’).
Wc kwamáá ‘mix, stir’ has kwaN, perhaps with a different 2nd morpheme and thus a different cluster.
UACV-1448a ***kwat** ‘stir’: Sh(M) kwatoi ‘stir’; AYq bwaata ‘stir, mix together’.
UACV-1448b ***(ci)-kwi-(tu)** ‘stick-stir’: Mn ci’wido ‘stir’; NP cikwiduiwïnï ‘stir’; Sh cikkwiC ‘mix, sift’. The ci- prefix in SP and Numic is a separate morpheme. [-ll- > -n-] [NUA: Num; SUA: TrC, CrC]

23 Syriac **bilṭii**-taa ‘boring worm-the, teredo xylophagus’; Syriac blṭ / bəlaṭ ‘to be worm-eaten’:
UACV-2592a ***kwici** ‘worm, feces-snake’: M67-475 *kwic ‘worm’; L.Son120 *kwici; M88-kwi11; Stubbs 1995; Stubbs2000a-8; KH/M03-kwi11: Yq bwicia; My bwítcia ‘gusano [worm]’; Tbr hi-kwicí-t 'oruga'; Wc kwísi/kwíici 'gusano'; Cr čú’ihnu 'caterpillar'; NT obí-bisi (Lionnet); Wr ihkucíwa 'gusano' (ih- is a moribund noun prefix, notes Miller); Tr kučíwa-ri ‘gusano’; CN kwitkooaa-tl 'tapeworm’. Miller also includes Pl kwil-in ‘worm’ and Eu hícira 'gusano'; the Eu initial consonant is unexpected and Lionnet wonders whether it is an error for *bici-ra*.
UACV-2592b ***koci** (<*kwici): Note the similarity between CN i’koč-in ‘type of earthworm’ and Wr ihkucíwa ‘worm’ and Nv kosiburi ‘worm sp’. Because Tep s < *c, Tep *kosi- reflects *koci of CN and Wr. [SUA: Tep, TrC, CrC, Azt; NUA: Num]

24 Hebrew **bky/ bakaaʸ** ‘cry, weep’ [Semitic-kw has Semitic bakaa > UA ***kwïkï** / ***o’kï** 'cry’]:
UA *kw > Tr w and Wr w, so Tr weke/oke ‘weep, shed tears’ < UA *kwïkï:
UACV-604 ***kwïkï / *o’kï** ‘(shed) tears’: M88-’o6 'tears': AMR1993; Stubbs1995-28; KH/M06-’o6:
Tr weke/oke ‘ [shed tears]’; Wr o’kéwa ‘lágrimas [tears]’; Tr oke-wá ‘lágrimas’; Wc úkai ‘lágrimas’ corresponds to Tr/Wr oke. [SUA: TrC, CrC; NUA: Tak]

25 Hebrew **bky / bakaa** ‘cry’; this likely involves a meaning change from ‘crying’ to ‘crying one, baby’ much like Syriac bk’ / bakaa ‘cry’ underlies Syriac bak-aa ‘cock/rooster-the’ as the ‘crier’:
UACV-147 ***kwakiC** ‘baby’: Sr kwakii-t ‘young one, youngest one’; Ktn kwaki-t ‘baby’. [iddddua] [NUA: Tak]

26 Hebrew **bɛn** ‘son’; plural noun when possessed by another noun is Hebrew **bənee**ʸ ‘children (of)’; so from Semitic-kw UA ***kwVnïï** ‘child(ren)’ > Azt ***konee** 'child, offspring’:
UACV-142a ***konï** 'child, offspring': CL.Azt26 * **konee** ‘child, baby’; M88-ko24; KH/M06-ko24: Pl kunee-t, kunee-w (poss’d) 'baby, child'; CN konee-tl 'child, offsrping of female’. Semantic changes from pl to sg and sg to pl are frequent. UA kwVnee > konee is expected, as kw plus short vowel often loses the vowel to the rounding of kwV > ko/ku, and also the possessed form Azt konee-w < Hebrew bənaa-w ‘children-his’ fits. I like Hill’s association of these with Numic *kono ‘cradle board’ (UACV-142b), as a tie seems probable, especially in light of Tb hono- ‘fetus’.

27 Syriac **brm**: et-barram ‘be consumed, worn out’; Arabic brm[1] / barima ‘be weary, tired of, fed up, bored with’ (verbal noun is Arabic baram):
UA *kwiyam / *kwiam ‘be lazy, do lackadaisically’: Sh **kwiam**-pïh ‘lazy’; Hp kweemo ‘fool around with, fiddle with, check out in an unserious manner’. [iddddua]

2.3 Hebrew ṣ > c (ts) in Uto-Aztecan

Above at 8 and 9 are Semitic ṣbb ‘grasp’ > UA *cakwa ‘grab’ and Semitic ṣabb ‘lizard’ > UA *cakwa ‘lizard’, the first examples of Semitic ṣ > c (ts). Hebrew ṣ becoming Uto-Aztecan c (ts) is what Hebrew ṣ changed to in some Jewish dialects, as also the Hebrew ṣ (ṣade) is pronounced c/ts in modern Hebrew in Israel today as well. Further below (at ɦ), are more examples of Semitic ṣ > c (ts):
83 Hebrew **ṣrɦ** ‘cry, roar’ > UA ***cayaw** ‘yell’
84 Hebrew **ṣmɦ**, impfv: **yiṣmaɦ** (< *ya-ṣmaɦ) ‘sprout’ > UA ***icmo** ‘sprout’
85 Hebrew **ṣlɦ** ‘rush, v’ > UA ***coloa** ‘flee, run’
Immediately below are additional examples of Semitic ṣ > c (ts) in Semitic ṣurṣur ‘cricket’ > UA *corcor ‘cricket’ and Hebrew ṣəvii ‘gazelle’ > Hopi cöövi- ‘antelope’.

28 Arabic **ṣurṣur / ṣurṣuur** ‘cricket’; Aramaic(J) ṣarṣuur ‘cricket’; Akkadian ṣarṣaar-u ‘cricket’; Syriac ṣiṣr-aa / ṣiiṣr-aa ‘cricket’:
UACV-588 ***corcor** ‘cricket’: Ktn corcor ‘cricket’; Cr su’usuí (-r- > -’- in Cr); Wc šuušúi. The Ktn form (from NUA) essentially equates to Arabic ṣurṣur, and both mean ‘cricket’. Cr and Wc do also, with the usual *-r- > -’- in CrC. Cp selyimselyim ‘cricket’ shows pl -m with each half, while Ca sé’lyem (pl) shows only one half. One syllable (instead of two) of Semitic ***ṣur** (> UA ***curu**) is compounded with s.th. else in Eu bawisoróc; Hp -coro of Hp laqan-coro / naqan-coro / yaqan-coro ‘cricket’ (Hp laqana ‘squirrel’); ST kaalyi soi; HN cicikame-tl; and the -son portion of Sh maison ‘cricket’. Specifically compounded with *tuku ‘black, dark’ are Tbr toko-sol / tuko-súl ‘cricket’; NT tuukúsuli; Wr tuhkucúrumi; Wr(MM) tukučúrumi; Tr ŕukúčari; and probably Yq kíičul and My kiíčul, pl: kučúlim with a vowel change and loss of the first syllable: *tuku-curi > *kucuri > *kiculi. This may be a Semitic-p term due to -r- > -r-, vs. Semitic-kw -y- (< -r-); the cluster -rṣ- > -c- is natural though -ṣ- > -s- when not clustered; then consonant harmony affected the first C: ṣurṣur > ṣurcur > curcur. The four Tepiman forms—TO cukugšuad; Nv tukag’sabarha; LP(EF) tuksáawer; PYp tuksarvar—also compound with *tuku, but show an enigmatic bilabial (b, w, v). Thses cognates are in 6 of 8 branches and in no less than 18 UA languages. [*-rC- > -u’uC in Cr as in *wr and *xli] [NUA: Tak, Hp; SUA: Tep, TrC, CrC, Azt]

29 Hebrew ṣəbii / ṣəvii ‘gazelle’; Arabic ẓaby-u ‘gazelle’; Aramaic(J) ṭaby-aa ‘deer, gazelle’:
Hp cöövi-wï ‘antelope’.

30 Hebrew **ṣippoor** ‘bird, small bird’:
UA ***cipuri** ‘bird’: Tr ciburi / číuri / čúri ‘pollo, pollito [chicken, baby chick(s)]’; TO sipug ‘bird, cardinal’ (TO s < UA *c, and the -g is likely of another morpheme); Wr cu’ru ‘kind of bird’.

31 Hebrew **ṣll** ‘to tingle, quiver’; Hebrew **ṣlṣl** ‘to whirr, buzz (of insects)’; Hebrew məṣillaa ‘bell, n’; Hebrew ṣɛlṣəliim ‘cymbals, percussion instrument’; Arabic **ṣll** ‘to ring, clink, clank, clatter, rattle’; Arabic ṣaliil ‘rattle, clatter, n’; UA terms mean ‘rattle’ and ‘chili’ as a plant that rattles in the breeze when ripe:
UACV-429 ***cil** 'chile': CL.Azt27 *čiil ‘chile’; M88-ci10; KH/M06-ci10: CN čiil-li ‘chile’; Hp ciili ‘chili pepper’. As Miller and Kenneth Hill suggest, the Hp term is likely borrowed from CN; but Mn ciini’ 'chili' does show the expected NUA sound change *l > n, though other NUA terms may also be borrowed from CN, especially Cp čiilyi. Cp and Hp fit a later loan pattern; however, Tb and other Num forms match *cira/cita, with a final *a*, instead of *i*, and Azt originally had *-ta as the absolutive suffix: TSh cita 'chili pepper'; Cm ciira’; CU čirïï; Tb čiira’/čiida’. It is curious, however, that so much of NUA has s.th. similar to the CN form, while all of SUA, CN's closest neighbors, have a different word *ko’koli. Due to the hollow rattling sound of ripe chile in the wind, CN čiil- could be from verbs like CN ciliin(i) ‘to sound, of a bell’. See below *cili ‘shake’ and M88-cï9. [liquids] [NUA: Num, Hp, Tb; SUA: Azt]
UACV-1929a ***cïl** ‘shake’: CL.Azt143 *cəlowa ‘shake’; M88-cï9; KH/M06- cï9: CN cecelwiaa ‘shake out, beat s.th. for s.o.’; CN ceceloaa; Pl cehcelua, etc. [SUA: Azt, TrC]
UACV-1929b ***cïlïïlï / *silala** ‘shake, rattle’: Mn sïnïnïgi ‘quiver’; NP sïnïnïggiwïnï ‘scared and shaking’; TSh sïnnïnnïki ‘shake, shiver’; Cm sïï-cïnitï ‘have chills, tremble with cold, vi’; Kw sïnïn’a ‘shake, shiver’; Hp silala- ‘clack, jingle, rattle’; Tb cïnïnïï’ ~ ’ïcïnïnïï’ ‘shake in fright’; Ca čéleley ‘shake (of body)’; CU sïnïgay ‘shake, shiver, tremble, be nervous’. Though most of these have the 2nd syllable reduplicated, CN cecelwiaa ‘shake out, beat for s.o.’ and CN ceceloaa ‘shake, save s.th., vt’ reduplicated the first.
UACV-1929c ***cili** ‘jingle, rattle (when moved, shaken)’: CL.Azt156 *čiliinV ‘to sound, ring’; M88-ci12; KH/M06-ci12: CN čilini; Pl ciliini; Hp silala-ta ‘be jingling or clinking’; Ca čilčil ‘to sound (of a rattle)’. [c/s] [NUA: Num, Hp, Tb, Tak; SUA: Azt]

32 Syriac **bṣr** ‘to lessen, fail, diminish, dwindle’, participial adj ‘wanting, poor, thin, inferior’;
Syriac **biṣr-aa** ‘a little, a small portion’; in a cluster of *-ṣr- > -’r-/-’l-, the ṣ > ’ in a cluster; PUA *kw > Wr w and Tr w:
UACV-2505 ***kwï’lawi / *kwïCtawi** ‘weak’: Wr(MM) wi’ló / wi’ró ‘estar doblado [folded/wrinkled], lacio [withered], flojo [loose, slack], no tener fuerza [not have strength]’ and wi’ró ‘estar doblado [folded / wrinkled], lacio [withered], estar débil [be weak]’; Tr we’ro / wi’ro- ‘estar débil [be weak], desforzado [weakened], desmazalado’; CN kwetlawi 'weaken, wither, crumple'. [SUA: TrC, Azt]

Semitic ṣ became UA c in initial position, as shown in examples 28-31. In contrast, Semitic ṣ in medial position also become c in SUA, but behaved differently in clusters and inNUA. In Numic, Semitic ṣ > ’ as in 33 below and eye (532) and (44) in other examples.

33 Hebrew bṣr ‘cut off, make inaccessible, enclose’:
SP qwi’a-ppï (< *kwi’aC-pï) ‘fence’; Hebrew pharyngealized ṣ regularly goes to Numic (or SP) ’ (glottal stop) as in Hebrew biṣṣar ‘make inaccessible’:
UACV-452 ***kwi’ay / *kwi’aC** 'surround, fence': SP kwi’a-ppï 'fence'; CU kwi’áy 'surround as fence, fence, encircle, v'; CU kwi’a-pï ‘fence’; WMU qwi’(y)é ‘build fence’; WMU qwi’(y)á-qqa-ttü ‘fence, n’; Sh kwïa-ppï / koa-ppï ‘corral, fence, antelope surround’; Ch takwi-ntui ‘encircle’. The preceding are all SNum forms and likely relates to other forms *kwiC-taa compounded with s.th. else: Mn kwitaa ‘surround, go around, v’ (this contrasts in final vowel length with Mn kwita ‘defecate’); NP kwïdï’a ‘fence corral’ and NP *kwïti’a in NP bbuggu ggwïdia ‘horse corral’ (bbuggu ‘horse’) and NP na’unaggwai kwïdiadu 'enclose with fence’. Jane Hill (p.c.) adds Ktn kwitu’mïk ‘turn, v’. The NP forms are noteworthy in that final *-ti’a > -tia when later in a phrase. Perhaps the glottal stop hopped forward (transposed) to create a cluster (> *kwi’ta), which then became variously *kwi’a and *kwita in other Num languages. [cluster *tt/’] [NUA: Num]

34 Hebrew **bdl** ‘divide, separate’; *hibbadel ‘be separated’; Arabic batala ‘separate’:
UACV-1580 ***kwatta** ‘open’: Ls hiqwáta ‘be an opening’; Ca kwétel ‘stick out, perk up, vi, pry open, vt’. [iddddua] [Tak]

35 Aramaic(J) **birkaa** ‘blessing’; Hebrew brk ‘to bless, praise’; praises are often sung; and Syriac zmr also means both ‘sing’ and ‘praise’, the denominalized verb’s change from ‘bless’ to ‘sing/song’ is reasonable:
UACV-1982 ***kwika** ‘sing, song’: M67-379 *kwika; L.Son123 *kwika ‘cantar’; CL.Azt147/315 *kwiika; M88-kwi3 ‘sing’; KH/M06-kwi3: Eu bíke ‘sing’; Eu bikát ‘song’; Tbr kwik ‘sing’; Wr wigatá ‘sing’; Wr wiká ‘song’; Tr wikará ‘sing’; My bwiika; Yq bwíka; AYq bwiika; Wc kwika; Cr čuíika-ri ‘song, n’; CN kwiika ‘sing’; Pl takwiika ‘sing’. This is a denominalized verb from the noun birkaa and is in most SUA languages, but hardly found in NUA, except -’wexe of Cp pína’wexe ‘sing enemy songs, v’. [iddddua] [SUA: Cah, Opn, TrWr, Tbr, CrC, Azt; NUA: Tak]

36 Hebrew bʕy / baʕaa[1] ‘enquire, search’; Ug bġy ‘wish’; Arabic bġy ‘search’:
UACV-1493 ***kwawa/i** ‘invite, call’: Stubbs 1995-11: Cp kwawe ‘call, invite’; Tr o’wí ‘invite’; Wr oí ‘invite to work’ (borrowed from Tr; otherwise, woi); Eu bowá (= UA *kwowa) ‘convidar [invite]’; perhaps the baa- of TO baamuđ ‘plead, invite’ (lack of TO g < *w is frequent enough). [iddddua] [kwV > ku] [NUA: Tak; SUA: Tep, TrC]

37 Hebrew bʕy / baʕaa[2] ‘bring to a boil, bulge out’; Arabic bġw ‘swell up’:
UA *kwawa ‘boil’: Hopi kwala-(k-) ‘boil, come to a boil’. Semitic ʕ > UA *w > Hopi l between low vowels.

38 Arabic **bahiya** ‘to become empty, pierced with holes’ (Lane, KB), III to vie, compete with s.o.’;
Hebrew bohuu ‘emptiness, wasteness’:
Hp kwahi / kwàyya ‘suffer the loss of s.th. of value’; Hp kwaha-na ‘deprive of, take at the expense of s.o. or to the loss of (s.o.)’. [iddddua]

39 Syriac bhl / bəhel ‘cease, become quiet, tranquil, calm, serene, gentle’:
*kwaha reduplicated > Hp kwakwha ‘1. tamed, 2. peaceful, tranquil, gentle, easygoing’. No final -l in (4) bašal > kwasï either.

40 Hebrew sbl ‘carry’; Hebrew sabbaal ‘burden carriers’; unattested Hebrew ***hisbiil**:
Hp **iikwil**-ta ‘put on the back to carry’.

41 Hebrew **bə’or** ‘pit, cistern, well’: SP qwi’oqqi (< ***kwi’oC**-ki) ‘be hollow and round’; SP qwi’oqqi-čï ‘round and hollow, solid high ring, hollow ball, circular valley’.

42 Syriac **bdr** ‘scatter, put in disorder, sprinkle, shed’:
Hp **kwïrï**(k-) ‘get in a heap, collapse to a disordered pile, fall to disarray’. [iddddua]

43 Hebrew **baħuuraa** (< baxuuraa / bxr) ‘young woman’:
Sh **kwïhï** ‘wife’. *u > ï often in Num, and no final -r consistent with no final -r in Hebrew báśar > *kwasi.

44 Arabic qbḍ (i) ‘seize, take, grab’, impfv ya-**qbiḍ**(V); Hebrew qbṣ ‘collect’: UA *kwisV ‘take, carry, grasp’; Sem ṣ > ’ in Num, not in Tb, Hp:
UACV-396a ***kwïsïC (AMR) / *kwïsa/i** (< *kwisa?) ‘take, carry’: Sapir; VVH52 *kwï(sï) 'to take, get'; M67-76 *kwe ‘carry’; I.Num88 *kwïha 'catch, take'; M88-kwï2; AMR (1990) *kwïsïC; KH/M06-kwï2 *kwïsïC ‘carry’; Jane Hill 2008: NP kwïhï 'carry'; TSh kwïïC / kwïïn ‘catch’; Cm kwïhï 'catch, capture'; SP kwïï ‘take sg obj’; Tb wiiš(at) ~’iwiš 'catch, rope, vt’; Hp kwïsï ‘receive, take, pick up’; TO bïhi 'acquire, get'; Yq bwíse; My bwisse; Ktn kwick ‘wring (clothes), milk (cow), vt’; Cr -čue- in Cr rá’-a-čue-nyi 'he is going to take it away'; Wc kwe ‘llevar algo largo y sólido’; Pl kwi grab, take'; CN kwi 'take, vt’. Num appears to have lost intervocalic -ṣ- (as usual) or *-s- > -’-/-h-. Miller's inclusion of the 2nd Tb form, Tb wïkït ‘get, catch, grab’, with a very different medial consonant is possible if from a compound something like *kwïs-kV, but see *wik ‘take by hand’ below. Be that is it may, we must add PYp behe ‘carry, get, grasp, seize’; ST bïïya’ (pret. bïi) ‘adquirir, obtener, conseguir’. The Cahitan vowel (i) may be original. Sapir, VVH, and Miller have all included the Azt forms, with loss of final syllable. The forms in b also belong after reduction of kwV > ku:
UACV-396b ***kus** ‘take’: BH.Cup *kuṣ ‘take’; M88-ku18; Stubbs 1995-6; KH/M06-ku18: Ca -kús- ‘take’; Cp kuṣa- / kuṣáánə- / kúṣanə- / kuṣí- ‘get, fetch, take’; Ls kuṣááni ‘take, grasp sg. inan.obj’. These are related to the above by *kwïs > kus. [labials *kwV > ku, Tb w < *kw; V problem; *s > h in Num] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]
UACV-396c ***kwisa > *kwiha** ‘carrying net’: at KH/M06-ku11 ‘bag’ Hill lists Sr kwiih-t ‘carrying net’ and Ktn kwiha-t ‘net, carrying net’ as maybe with the *kusa ‘bag’ forms, with which I agree. Be that as it may, an interesting side note is Ktn kwihaka / kwihak ‘woman’ may derive from *kwisa-ka ‘carrying-net-haver’, the one who does the carrying. [NUA: Tak]
UACV-396d ***kusa** ‘bag, sack’: M88-ku11; KH/M06-ku11: Mn kussa/kúsa; Sh kussa; WSh kusa (acc. -i) ‘pants’; TSh kusa ‘pants’. Add Wc kïsíuri ‘talega, bolsa’ whose vowel agrees (Wc ï < *u). Miller includes *kusa with the *kuna ‘bag’ forms, but unless the 2nd syllables are separate morphemes, the differing 2nd consonant suggests a different etymon, and Wc agrees. [NUA: Num; SUA: CrC]

45 Hebrew qbl, -**qbiil** ‘confront agressively’; Arabic qabbala ‘go southward (i.e., forward)’; Arabic aqbala ‘turn forward’; the basic meaning of the Semitic verbs is ‘to be in front, go front-ward’ from which other meanings derive such as ‘meet, be face to face, receive’, but this aligns with a hi-qtiil form *hi-qbiil with the original Semitic meaning of ‘go forward’: Hopi **kwila**-(k-) ‘take a step, to step forward’.

46 Hebrew bry, impfv: -bre ‘consume food’; this root bry is related to or a variant of br’; Hebrew (qittel) bire’/birey ‘eat’; Hebrew (hiqtil) -bree’ / -brii’ ‘provide food’; Hebrew biryaa ‘patient’s diet, food’; Arabic bari’a, impfv: ya-bra’-u ‘recover, be free of illness’:
UACV-775 ***kwa’a** 'swallow, eat': Sapir; VVH48 *kwa(‘a) 'eat, swallow'; M67-152a *kwa 'eat'; BH.Cup *qwa- 'eat'; L.Son113 *kwa/*ko’a 'comer'; M88-kwa5 'eat'; AMR 1993a *kwa’aC ‘eat’; KH.NUA; KH/M06-kwa5: Cp kwá 'eat'; Cp qwe’í-š 'food'; Ls kwá/qwá 'eat'; Gb kwa’á; Sr kwa’-i; Eu hibá’a- ‘comer [eat]’; Eu bawá ‘dar de comer [give to eat]’; Yq bwá’a; My bwá’a; Tbr ko-; Cr kwa’á; Pl kwa; CN kwaa. Miller includes Tr go’á/ko- and Wr ko’á, though Tr wa’a / a’wa 'swallow' exhibits the expected sound correspondences of *kwa’a. Tr go’á/ko- and Wr ko’á better fit the forms of *ko’a below, where is also Tep *ko’a. However, let’s do add Tep *ba’a/ba’i (<*kwa’a/kwa’i) ‘swallow’: TO ba’a/ba’i 'swallow'; Nv ba’a; PYp ba’i’ia; NT bááyi; ST baya. What of TO bibid ‘serve s.o. food’? [NUA: Tak; SUA: Tep, TrC, CrC, Azt]
UACV-776 ***ko’a** 'eat': VVH131 *ko’a 'eat'; M67-84 *ko 'chew'; B.Tep115 *ko’ai 'eat'; M88-ko4; KH/M06-ko4: Ls qé’ni 'feed animal'; TO ko’a; Wr ko’á-; Tr go’-mea / ko’mea / go’á / go’yá / ko-; Tbr koa. In M88-ko4 Miller combines the *ko’a and *kwa’a forms, which in the kw-languages can easily alternate (thus some forms are in both lists here as well), but they are clearly distinguished in the Tepiman and Cahitan branches where ko’a and ba’a/bwa’a forms sometimes exist in the same language: e.g., TO ko’a 'eat' and TO ba’a ‘swallow’, though an early *kwo > ko in Tep/Cah would make the set even more complex than the mere complexity that we presently think we are dealing with. Ktn kwa’ ‘eat’ and Ktn ko’ ‘eat’ hardly help. [NUA: Num, Tak; SUA: Tep, TrC]

47 Hebrew (hi-/ya-/ta-)-brii(’/y) ‘provide food, i.e., feed’; Hebrew biryaa ‘patient’s diet, food’:
UACV-780 ***kwi** 'food, feed, give food': VVH53 *kwi 'food'; M67-152b *kwi 'food'; M88-kwi6; KH/M06-kwi6: TO bia/bi 'dish out (food)'; Miller (M67-152b) shows Sr kwi’a-t, -kwi’a’ 'food' but Hill (1994) has only Sr kwa’i’aaţ 'food’, whose first vowel better agrees with *kwa’a above; NT biááhai 'serve (food)'; NT bíídyi 'give to eat'; ST biidya 'serve (food)’; first syllable of Hp kwiivi 'boiled or stewed food'; Hp kwiiva 'cook by boiling’. Semitic-kw often shows the 1st C of a cluster rather than the 2nd as in Semitic-p, thus -br- > -kw-. [NUA: Tak, Hp; SUA: Tep]

48 Hebrew bwṣ / buuṣ, pfv: baaṣ ‘be white’; Arabic byḍ, perfv **baaḍa** ‘be white’; Hebrew beeṣaa ‘egg’; Arabic bayḍa(t) ‘egg’; Hebrew buuṣ ‘byssus, a costly white fabric’; Syriac buuṣ-aa ‘fine white linen-the’. Semiti ṣ > UA *c, and UA *c > NUA y, and y is what we see in the NUA languages of Ls, Cp, and Hopi:
UACV-2545 ***kwaya** 'white' (< *kwaca?): Ls xwáya ‘be white’; Cp xwáye ‘be white’; Hp qöya ‘a bound form meaning white, pure, used especially in ceremonial contexts’; perhaps Cr kwaina. *kwV reduction in Hp, of *kwaya > *koya. Is Hp qööca ‘white’ a loan from SUA? [NUA: Tak, Hp; SUA: CrC]

Like 44-47, the next two (49-50) show the Semitic verb stem that clusters the first two consonants, such that *-CbaC > *-bbaC > UA *kwaC. Interestingly, most Semitic verbs show a stem vowel -u- in -CCuC, but a small percentage have the stem vowel -a-, and the following are two of them and both show -a- in UA also:

49 Hebrew yi-**gbar** ‘be superior, achieve’; Hebrew(BDB) yi-gbar ‘be strong,prevail’;Aramaic(S) gbr ‘prevail’:
UACV-2556 ***kwaC(-ku)** ‘win’: TSh kwaaC ‘win, beat’; Sh kwakkuC ‘to win a game’; Cm kwakurï ‘defeat, win over someone’; Kw kwaha ‘win’; SP kwaa ‘win, beat’; CU kwa’á-y ‘win, beat, earn’; CU kwá-’ni ‘win, beat, earn’. Only *-kwaC- aligns with -gbar-; final -ku perhaps < Hebrew bo ‘in, often verb’s object’. [NUA: Num]

50 Hebrew -lbaš- ‘put on (garment), clothe (oneself)’: impfv stem vowel is -a-, as in UA: -lbaš > kwasV; in fact the plural would be -**lbašu**, reflected in most Numic languages also; and again -lb- > -bb- > -kw-:
UACV-484 ***kwasu** ‘dress, shirt’: M88-kwa12 'dress, shirt': I.Num79 *kwasu/*kwasï 'dress, shirt'; KH/M06-kwa12: NP kwasï ‘clothing, shirt’; TSh kwasu 'dress'; Sh kwasun ‘dress’; Cm kwasu’u 'dress, coat, shirt'; Kw kwasupïci 'dress, skirt'; Hp kwasa 'dress'; My bwáhhi 'sapeta’. Ken Hill adds Ch kwasu ‘woman’s dress’; Ch kwasú-ntu ‘dress, put on dress, v’; TSh kwasu’un ‘dress, n’. Add Yq bwahim ‘calzones’; AYq bwahim ‘diaper, loincloth, breechclout’; and NP kwasïiya 'put on clothes, v’. Note Cah (Yq, AYq) loses -s- both here and in *(a)tïsa. [Num ï < *u] [kw1l,kw2b,kw3s1] [NUA: Num, Hp; SUA: TrC]

After 42 examples of b > kw or medial -Cb-/-bb- > -kw- (4-12,14-27, 32-50), consider other sound changes:

2.4 Many Sounds—such as h, k, t, p, m, n—Remain Such in Uto-Aztecan

51 Hebrew ***kaatep** ‘shoulder, shoulder blade, upper arm’; Arabic **katip/kitp**- ‘shoulder, shoulder blade’; Syriac kətep / katp-aa ‘shoulder-the, shoulder blade-the’:
UACV-1966 ***kotapa / *kotapo** ‘shoulder’: B.Tep112 *kotava/o ‘shoulder’; M88-ko29 ‘shoulder’; KH/M06-ko29: TO kotwa / kotïwa (TO w < PUA *p); LP kotov; PYp kotev ‘shoulder blade’; NT kotáva/kotááva ‘hombro’; NT kotbo ‘hombro’; ST kotvo. Other words are interesting, but not without their difficulties. If the initial ’a- could be isolated, note the -kol- of CN a’kol-li ‘shoulder’. Note that the latter portion of Tr na-’tapu ‘push with the shoulder’ is quite identical to Tep *kotapo (> ’tapu); perhaps a reduction of the first syllable caused k > ’ in a cluster (*na-ktapu > *na-ktapu > na’tapu), for na- as the reflexive prefix (exert self, shoulder oneself to s.th.) is a likely morpheme break. Likewise, Mn téébï ‘shoulder’ may tie in with first syllable lost. SP antïŋwiaavu ‘shoulder’ might align with Mn if nasalization before both of SP’s consonants (-nt- and -Nb- > -ŋw-) were explainable. Hebrew qameṣ (long aa) is sometimes pronounced o, if something triggered such. [NUA: Num; SUA: Tep, TrC, Azt]

52 Hebrew **mukkɛ** ‘smitten’ (passive hoqṭal participle *mu-nkay > mukkɛ, from the root nky):
UACV-655a ***mukki** ‘die, be sick, smitten’: Sapir; VVH86 *muuki/*muuku die; M67-126a *muk / *muki; BH.Cup *mukii? 'a sore'; B.Tep155 *muuki; L.Son155 *muku/*muk-i; M88-mu2; KH.NUA; KH/M06-mu2: Tb muugït~’umuuk 'die'; Tb mugiinat~’umugiin 'hurt'; Tb muugut 'spirit of a dead person'; Ls múúki-l ‘sore, boil, knot in wood’; Ls múúki- ‘fester, v’; Ls múú- 'be in eclipse, of sun, moon'; Ca -múk- ‘get sick, weak, die’; Ca múk’il^{y} ‘sore, n’; Ca múki-š ‘sick person, dead person’; Hp mooki 'die, faint, be numb, suffer from or be afflicted by'; Ktn muk ‘be sick, die’; Ktn mukic ‘disease’; Ktn mukim ‘dead people’; Hp mokpï 'corpse'; TO muuki 'die, corpse'; Eu mukún 'morirse [die]’; Wr mugu-ná/mugi-má 'morir, sg'; Wr muguré 'corpse'; Tr mukú-mea; My múúke; Yq múúke; Cr mï’ïči 'dead person, he is dead; etc.'; Cr wamï’ï 'se murió'; Wc mïïki 'dead, adj/n'; CN miki ‘die, suffer from’. PUA *u > CN i, CrC ï. Sapir includes SNum terms SP čaŋwïqqa, čaŋwïkki, čaŋwukki (< *ca-mukki) 'die off, disappear’. It and Tak -k- (vs. -x-) suggest *-kk-, but SP moġoa does not; thus, Ken Hill rightly separates those.
UACV-655b ***mukki** 'sore': Munro.Cup121 *múúki-l 'sore'; M67-128a; KH.NUA: Ls múúki ‘ to fester, v’; Ls múúki-l 'a boil, knot in wood'; Cp múki-ly 'sore'; Cp múkilya’a-š 'sore, pl’; Ca múk’i-ly; Sr mukṭ 'a sore, n'; Sr moki’ 'be getting sore, vi’. Cp muhí’i-š ‘suppurating, sore, adj’ a variant with softened medial consonant? Though the semantics vary—e.g., 'spirit' in Numic—this is one of the few etymons found in all eight branches of UA. Note Tb g < *kk rather than Tb h (< *k) due to the underlying geminated *-kk-. [medial *-kk- > Tb g, Wr g, Tak k, not x] [Num, Hp, Tb, Tak, Tep, TrC, CrC, Azt]

53 Hebrew hukkɛ ‘was smitten’ is 3rd sg huqtal perfective (vs. mukkɛ, huqtal participle above) and is in Tb: Tb(H) hookii ‘deceased grand-relative (grandfather, grandson) after death’.

54 Hebrew taapel ‘whitewash’; Aramaic(J) ṭəpel-aa ‘paste, plaster, coating-the’:
UACV-758 ***tïpi-c** ‘white clay’: M88-tï52; KH/M06-tï52: Ls tóovi-š 'white clay' (synonymous with tóóva-l); Sr tïïvi-c 'white clay, cement’; Gb tóviy 'white clay’. While these ‘clay’ forms are close to *tïpaC ‘land’ (see 75), these 3 languages have separate terms with a different final vowel and different absolutive suffixes. The Semitic semantic retention of ‘whitewash, plaster’ to ‘white clay’ is impressive. Ktn towi-c ‘white paint’ may be a loan from Gb. [NUA: Tak]

55 Hebrew **mayim / meem**- ‘water’:
UACV-2499 ***mïma** / ***mïmï**- ‘ocean’; M88-mï10 'ocean'; Munro.Cup84 *məəma-t 'ocean': KH.NUA; KH/M06-mï10: Cp méme-t 'ocean'; Cp mémŋaxwi-š 'white man'; Ls móóma-t 'sea, ocean'; Gb mómot 'mar, lake'; Ca móoma-t / múuma-t 'ocean' (Ls loan?); Sr mïïm-t 'ocean, lake’; Ktn mïmï-t ‘lake, sea’; perhaps Cr mwaíhete ‘mar [sea]’. Jane Hill (2014, 197) points to Wintuan *meem ‘water’ and similar in other California languages as a possible loan source for this UA term. [Gb V] [NUA: Tak; SUA: CrC]

2.5 Hebrew s and š Merged to s

Instances of Uto-Aztecan š are usually more recent palatalizations of Proto-Uto-Aztecan *s > š adjacent to high vowels. Both Hebrew s and š merged and correspond to Uto-Aztecan *s.

56 Hebrew **šɛkɛm** ‘shoulder, nape of neck, back, ridge of mountain’**;** Samaritan **šekam** ‘shoulder’; Hebrew **šikm-** (possessed); the third consonant m or general nasal N is apparent in the 2nd group of words (CV-1967b) while the first group (CV-1967a) lost it:
UACV-1967a ***sïka** ‘shoulder, arm, armpit’: M67-7 *seka ‘arm’; M67-375 *seka ‘shoulder’; L.Son249 *sïka ‘brazo, mano’; M88-sï1 ‘armpit’; KH.NUA; KH/M06- sï1 ‘armpit’: Hopi sïkyakci ‘shoulder, shoulder blade’; Hopi(Seaman) sïkyakci / sikyakci / sökya ‘shoulder’; Cp -ṣék’a ‘shoulder (poss’d n.)’; Ca -sék’a / -sék- ‘shoulder (poss’d)’; Ls sóóka ‘shoulder’; Gb sok(in) ‘shoulder’; Sr ṣïïka’ ‘shoulder, upper arm’; Ktn šïka-c ‘shoulder blade’; Tb šiki-t ‘upper arm, arm’ shows a final C; Tbr saká-r / haká-r ‘sobaco [armpit], agalla de pez [fish gill]’; Yq séeka ‘armpit’; My séeka-m ‘armpit’; Wr seká ‘hand, arm’; Tr seká ‘mano, brazo’; Cr ’ískwa’a-ri / ’ïskwe’i-ri ‘armpit’; CN siyaka-tl / siaka-tl ‘armpit’; TO hïk ‘armpit’; PYp he’ekado ‘armpit’; NT ïkáádï ‘arm, hand’ (remember *s > Tep h/ø; Tep final syllables are other morphemes).
UACV-1967b ***sïkuN / *sïkkuN** (Num) ‘shoulder’: Mn sikkuppï ‘shoulder blade’; Sh sikkumpï ‘shoulder blade’. TSh sikkum-pï ‘shoulder blade’; Kw sïgu-pi ‘shoulder meat (of an animal)’; WMU skumpï ‘shoulder’; CU sïku-pï ‘scapula bone’. So we have Num *sikkuN-pï ‘shoulder’; Tak *sïk(’)a ‘shoulder’; Hp; Tb; Tep *hïka ‘arm, armpit’; TrC *sïka ‘armpit’ in Cah, ‘arm, hand’ in Tr/Wr; Cr ‘armpit’; CN si(y)aka-tl ‘armpit’; and -cikora in Eu macíkora ‘shoulder blade’—a reflex in every branch and in most languages. Note also the clear nasal in WMU, TSh, and Sh. [CN iya; Gb o]
[NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

57 A Hebrew word for ‘squirrel’ does not occur in the Hebrew Old Testament text; nonetheless, Arabic **singaab** ‘squirrel’ would correspond to Hebrew ***siggoob** ‘squirrel’ to which UA ***sikkuC** ‘squirrel’ corresponds perfectly (C means the doubling effect of an underlying consonant). All is as expected: the doubled consonant devoiced (-gg- > -kk-), the vowel rose from o > u, with final gemination: SP sikkuC- ‘squirrel’; Ch siku-ci ‘squirrel’; Sr hikaau-t ‘chipmunk’ (Sr h < *s); other forms in SUA show a semantic change to ‘mouse’ as squirrels, chipmunks, and mice are all fast, darting little animals:
UACV-2144b ***sikkuC** 'squirrel': Ch sikú-ci 'squirrel’; SP sikkuC-(cci), sikkuN- 'squirrel’; WMU aqqá-skuči ‘squirrel’ is a fairly nice preservation of PNum *aNka-sikkuC-ci (< red-squirrel). [NUA: Num]
UACV-2143b ***ciku** 'mouse': Eu zikúr/cikúr; Yq číkul; My číkkul; Tr čikuri; Wr ci’kurí. Are these affrications of the above? [SUA: TrC]
UACV-2144a ***sikka(-wV)** 'chipmunk': BH.Cup *sVká 'chipmunk'; HH.Cup sVkáawət 'chipmunk'; M88-sï20; KH.NUA; KH/M06-sï20; Jane Hill 2007-46: Cp sekáwet; Ca síkawet 'tree squirrel'; Ls ṣukáa-wu-t 'tree squirrel'; Sr hikaawt 'chipmunk’; Ktn hikaï-t ‘flying squirrel’. Miller includes Hp sakïna 'brown squirrel' with a question mark. Matching fairly well, however, is Tb ’ïšï’ïga-l 'blue squirrel’. The non-descript V in HH.Cup’s reconstruction is a good choice for an unaccented V becoming the schwa-like possibilities, but in Ca í is accented and is found in two of four, so let it be our best guess. Jane Hill (2007) notes Rio Grande Tewa sá’wɛ́ ‘squirrel’. [Tak V’s; i-a > Ls u-a] [NUA: Tak, Tb, Hp]

58 Hebrew **škr** ‘be/become drunk’; Hebrew **šikkoor** ‘drunken’; Ethiopic sakkaar ‘addicted to alcohol’; Hebrew šekaar ‘intoxicating drink’; Arabic sakira ‘be drunk’; Arabic sikkiir ‘drunkard’, and other Semitic forms, but note that UA *sikuri < Hebrew **šikkoor,** pl: **šikkoor-iim** ‘drunken’:
UACV-11 ***sikuri (>** Tep *hikuri) ‘peyote, intoxicat-ed/ing’: Fowler83: PUA ***sikuri*** ‘peyote’ (an intoxicant): NT ikuli ‘peyote’; PYp hikeri ‘peyote.’ The Tep forms point to PUA *sikuli, because PUA *s > Tep h/ø. Therefore, Tr hikuri, Cr ikuri, and Wr ihiguri, all meaning ‘peyote’, may be borrowed from Tepiman. Eu ba-hiskor ‘drinker’ contains hi-skor, and Tr sugí ‘tesgüino, bebida fermentada hecha de maíz [fermented drink made of corn]’ also belongs with a vowel shift, which is common in Tr. Keeping in mind *s > TO h, note Fowler’s inclusion TO hikugđam ‘saguaro cactus button’; TO hikug ‘for a tree to drop its blossoms’; TO hikug-t ‘to form fruit’.

Some NUA reflexes may belong as well: Tb(V) šo’ogonhn-(ït)~’ošogonh ‘be drunk’; Tb(M) so’goonït~’oso’goon ‘be high on Indian tobacco, drunk’. Also note the same three consonants (s-k-l) in CN meškal-li ‘mezcal, distilled alcoholic drink’, though other etymologies for the CN term have been proposed. Note also AYq sankora ‘drunk, n’ with nasalisation of the velar and a vowel change; and PYp suusekar ‘drunkard’—borrowed from a non-Tep langauge, since *s > h in Tep.
[loans; NUA o vs SUA u; *L > NUA n; Tr V shift] [NUA: Tb; Tak; SUA: Tep, TrC, CrC]

59 Hebrew **šakuur** ‘drunk’ or Hebrew **šikkoor** ‘drunk’ from Semitic škr ‘drunk, intoxicating drink’; the UA forms either lost the first syllable (*šikur > *kuru) or are from the infinitive škor; Nahuatl mescal is an alcoholic drink made from agave and such cacti juices, and so some UA terms mean the plant vs the drink:
UACV-5 ***kuru** ‘mescal, agave’: Fowler83-3:8; L.Son109 *kuru 'clase de mezcal'; M88-ku25; KH/M06-ku25:
Wr kuru; Tr guurú-(bari) 'palmilla'; Tbr kurú-t 'sotol'. Cahitan(Cah) ku’u fits *kuru well, since intervocalic liquids > -’- in Cah: My kuú'u 'mezcal, maguey’; Yq kúu'u 'mescal plant for making alcohol’; Eu kuút/ku’út 'cierto mezcal grande’. Fowler includes Wc kïveri 'lechuguilla, agave sp.’, of which the first syllable may belong, and lists NT, which form I cannot find in Bascom’s NT dictionary. Add Tb(M) kuuk-t 'mescal'; perhaps Tb(V) kuya-t 'yucca whipplei’.
[r > y in Tb, r > ’ in Cah, > ø in Eu] [NUA: Tb; SUA: TrC, CrC]

60 Arabic **muskir** ‘alcoholic beverage’; Hebrew nouns are frequently formed by prefixing ma- or mi- to roots; in this case for an unattested *ma-škar or *mi-škar:
PUA ***maskal** ‘mezcal, an alcoholic drink’; CN meškal-li ‘mezcal, distilled alcoholic drink made by cooking the heart of the maguey plant’.

61 The following SUA forms could easily derive from reductions of *maskal in -sk- reducing to -h- or to -k- > -h-, and then the 2nd vowel rising in anticipation of the alveolar (high front) consonant -l:
UACV-4 ***maC(C)i / *mahi** 'agave, mescal': M67-3 *ma 'agave'; Fowler83; L.Son133 *mahi 'mezcal'; M88-ma25 'agave, mescal'; KH/M06-ma25: Eu meit 'mezcal ya tatemado' (see ‘bury, cook underground’); Wr mahí 'agave, mezcal'; Tr mé/ma-/mi-, méke 'maguey, mezcal'; Tbr mañí-t ‘maguey’; TO ma’i ‘a pit roast’; Wc mái 'mezcal'; Cr mwáih / mwéih 'agave'; CN me-tl 'century plant, maguey, member of agave family’; NT maí 'maguey, mescal'; PYp mai ‘corn, maguey, mescal’. From CN meškal-li 'mezcal, distilled alcoholic drink made by cooking the heart of the maguey plant’, then *maskal > *maki/meke/mahi is a typical kind of reduction in UA, with rising vowels before a liquid; and where does the *-ke come from in Tr meke ‘agave, various species’? In any case, the variety of 2nd consonants—h/’/ø/x/k/ Tbr ñ (< *y)—suggests a medial cluster. [clusters; medial h/ø/x/k; Tr k vs. k > h/ø elsewhere] [SUA: TrC, CrC, Azt, Tep]

2.6 Semitic-kw intervocalic -r- became -y-/-i- in non-initial positions

Similarly, Proto-Mayan *r > y in most of Q’anjobalan, Tzeltalan, Cholan, and Yucatecan (Campbell 1977, 97-100). Besides examples above (5 baaśaar, 19 brr, 27 brm), additional examples of -r- > y/i follow:

62 Hebrew śrq / srq / śaaraq ‘to comb, v’; Syriac srq / səraq ‘to comb’:
UACV-518a ***siyuk** / ***ciyuk** ‘to comb, v’: Tb siuk ‘comb, v’; WMU čiyu’wa-y / čii’wa-y ‘comb (hair), vt/vrefl’; CU čiyu’wey ‘comb, vt’; Hp sööqa ‘card (wool), v’; Ca suyavis ‘comb, n’; Tb(V) ’iišiug- ~ šiuk ‘comb one’s hair’; Tb(M) ’išyuugat ~ ’išyuuk ‘comb one’s hair, v’; Tb(M) šiuugišt ‘comb’; Tb(H) šiwk ‘comb, v’; Ktn šeahk ‘to part hair, vt’. As for CU č, sometimes ś / š / s > c, especially in SNum; see SP at 10 above (Hebrew šabber) and SNum at 93 ‘head’ (Hebrew roš). Note also the nasal V in WMU relating to Sem-kw q > ŋ. [NUA: Tb, Hp, Num]

63 Syriac **sirq-aa** ‘comb-the, n’; UA shows a denominalized verb from the noun, as it often does:
UACV-518b ***cika** ‘to comb, sweep': CL.Azt30 *cikaawaas 'comb’; L.Son31 *cika ‘peinarse’; M88-ci9; KH/M06-ci9: Yq čike ‘peinarse’; Yq híčike ‘sweep’; Yq híčikia ‘broom’; My čikke 'peinarse'; Eu atecíka 'peinarse'; Wr cí’ihká 'comb, n (Lionett), note -’- where -r- is; Wr ci’iká 'type of cactus (Miller)'; Tr(S) tičí ‘peinar’; Tr(S) tičíkari ‘comb’; Tr tičí, čiká, ti-čík; Tbr cikát; CN cikawaas-tli 'comb, n’; CN cika-waas-wiaa ‘comb hair, v’; Pl ciikuwas 'comb'; Pl ciikwastia 'to comb'; HN cihwaas-tli’ ‘comb’. To Miller’s collection, add the latter part of Cr muacikï 'comb, n’ and possibly the -cih- segment of Cm nacihtu’ye’ 'comb, hairbrush'; but most interesting is NT šikiúúmai 'peinar con el chino'—a reflex among the Tep languages to match the rest, since NT š < *c; NT ikiúúmai 'peinar, vt' appears to be an alternate form.
UACV-518c ***hi-cikï** 'sweep’; ***hi-ciki-ta** ‘broom': Yq híčike’ sweep’; AYq hičike ‘sweep’; AYq hičikia ‘broom’; My híčike ‘sweep, v’; My híčikia ‘broom’; and Wr icikíla ‘broom’. These have a hi- prefix. [reduction] [NUA: Num, Tb; SUA: Tep, TrC, CrC, Azt]

64 Semitic **krr / krkr** ‘go in circles, dance’ (see variety of Semitic forms in Hebrew(KG) 2001, 300; and in Brown et al 1975, 502-3): SP kiya ‘have a round dance’. [NUA: Num]

65 Arabic **mrr** ‘pass, go, walk’:
UACV-1009 ***miya** ‘go’: M67-197 *miya/*mi; I.Num101 *mi’a ‘go, walk’; KH.NUA; M88-mi6 ‘go’; KH/M06-mi6 *miyaC (AMR): Mn miya ‘go’; NP mia ‘go’; Sh mia ‘go’; Kw miya ‘come, go, walk, pl’; SP mia ‘travel, journey, vi pl’; CU miyá-y ‘move away from, be far from’; Cm mia/mi’a; TSh mia/mi’a; Gb mya; Sr mi/miaa; Ktn mi; Tb miyat~iimiy ‘go’; Tb(H) miyyat ‘go, take leave’. Add WMU -mi ‘while going/moving, do s.th. while going, v’; Kw mi ‘move while V-ing’; Kw miya ‘go, walk’. [NUA: Num, Tb, Tak]

Besides krr > *kiya (64) and mrr > *miya (65) and brr > *kwiya (19, 20), other examples of -r- > y/i follow.

66 Hebrew ’mr / **’aamar**, impfv: **yoo-mar / yoo-mer** ‘say’
UACV-1880 ***umay / *may** ‘say’: Kw mee ‘say’; Ch mai ‘say’; SP mai / mwai / umai / ïmai ‘say’; WMU may / umway ‘tell, say’ (past: may-kye); CU may-ka ‘say, tell, order’; Sh me ‘quotative particle’. WMU past tense suffix -kye (vs. -qa) shows that there is a final -y in the stem. [NUA: SNum]

67 Hebrew ṣaará‍ʕat ‘skin disease’; Hebrew(BDB) ṣaará‍ʕat ‘leprosy’:
CN siyo-tl ‘rash, scab, leprosy’ shows both -r- > -y-, and ʕ > o.

Other examples of **Hebrew *-r- > UA -y- / -i-** abound throughout.

2.7 Hebrew/Semitic non-dageshed b, d, and g generally devoiced to p, t, k:

Three Hebrew forms for ‘locust’ derive from the Semitic root gb’/gby: Hebrew **goob** ‘locust’;
Hebrew **gebiim** ‘locust’ (BDB) occurs only in the plural, ‘swarm (of locusts)’ (KB);
Hebrew **gobay** ‘locusts (a collective, swarm, multitude) (BDB)’, ‘swarm of locusts (KB):

68 Hebrew **gebiim** ‘locust’: SP qïïvi ‘grasshopper’;

69 Hebrew **goob** ‘locust’ and Hebrew **gobay** ‘locust’: Eu okoboi ‘grasshopper’; Kw haakapayni-ži ‘grasshopper’; and ST kavak soi ‘grasshopper’. Eu and Kw both have an initial prefix much like the definite article ha- ‘the’ and assimilated in the Eu form. Semitic b and g devoiced to p and k. [NUA: Num; SUA: TrC]

70 Hebrew **dɛgɛl** ‘standard, banner’; Aramaic(J) digl-aa ‘carrying pole in the shape of a banner’:
Wr **tekela** ‘stripe, hat band, pole at the bottom edge of the roof’. Hebrew d and g are devoiced to t and k. [iddddua]

71 Hebrew **daayeq** ‘bulwark, siege-wall’; Assyrian dayyiqu ‘bulwark’; Syriac dawq-aa ‘watch-tower, look-out, wooden tower (for besieging a city)’; Syriac dwq ‘gaze (from far)’:
Hopi **tïyïqa-** ‘wall’ in Hp tïyïqa-va’ ‘along the front of the wall’ (Seaman); Hp tïyïqa-nawit ‘along the front of the wall’ (Voegelin); Hopi tïyqa ‘projecting point of a mesa, external corner of a structure’ (Hill). The latter Hopi dialect lost a vowel, but the idea of a wall or high barrier / overlook is in both Semitic and UA.

72 Hebrew **dqr / daaqar** ‘pierce, v’; Hebrew **dɛqɛr** ‘sharp tool or weapon, pick, mattock’;
Syriac dqr / dəqar ‘dig, break, pierce through’:
UACV-615 ***tïka / *tïkï / *tïkiy** ‘cut, stick in’: Sapir; VVH113 *tï$_s$kï/*tï$_s$ka 'to cut'; M67-117 *tek 'cut'; I.Num240 *tek 'cut'; L.Son289 *tïk-so 'picar'; CL.Azt218 **tïk- 'cut'; M88-tï23; KH/M06-tï23 *tïkat: TO -čk/-čïk ‘pointed object’; TO cïkiđ ‘vaccinate, put down a stake’ (< *tïkiy); Hp tïkï 'cut'; CN teki 'to cut s.th.'; Tb tïdïha, perfective: ’ïtïdïha ‘be cut up’; SP tïxánni 'to cut up meat'; Mn tïhee’na 'scissors'; Sh tïkoa 'scissors'; latter part of NT ikíítïïkïi ‘cortar [cut]’; Eu mé-teka 'cut with an axe' (Eu mé-teki pret); Eu síteka 'cortar' (Eu sí-teki pret); Wr & Tr me’te-. Sr tïhtïi 'to work’ and Ktn tïk ‘break ground with a stick’ and CN teki-panoaa 'work' show this stem (tïkiy ‘cut’) also as work, tilling, or agriculturally digging/cutting the ground. TO cikpan ‘work, v/n’ may be a Nahuatl loan. SP forms differ in SP tïkka 'eat' vs. SP tïganni ‘cut up meat’; Kw tïhani ‘dry meat, jerky,butcher’; WMU tïánni ‘butcher animal, cut up meat, skin (an animal), vt’; CU tïáni ‘skin, vt’. [*-k- > Tb -h-] [NUA: Num, Hp, Tb; SUA: Tep, TrC, CrC, Azt]

73 Akkadian(KB) dašuu > diišu ‘grass, spring’; Hebrew **dɛšɛ’** ‘grass, vegetation’:
UA ***tïsï** ‘grass, weeds, meadow’: Hp **tïïsï** ‘weeds in a cultivated field’; Hp tïïsï-ti ‘become weedy’; Ch **tïsï**-vi ‘grass’; Kw pa-rasii-vï ‘meadow, grass’.

In the next two items, the 2nd consonant Hebrew -b- devoices to PUA *-p-, then to -v- or -b- between vowels.

74 Hebrew **təbuu’at** ‘produce, yield from the land, literally: what comes in (of harvest, to be stored)’:
UACV-1630 ***tïpï’at / *tïpaC / *tïpat** (AMR) ‘pinion nut, conifer sp.’: BH.Cup *tevat ‘conifer sp.’; M67-319 *tepa ‘pine nut’; HH.Cup təvat ‘conifer sp.’; I.Num245 *tïpah ‘pine nut’; Fowler 83; KH.NUA; M88-tï29 ‘pine nut’; M88-tï30 ‘conifer sp.’; AMR1993a *tïpat; KH/M06-tï29 *tïpat (AMR): Munro.Cup29 *təvá-t / təvé-t / təəvá-t ‘conifer sp.’: Ls tóóva-t / tuvá-t ‘pinyon’; Cp təvə-t; Ca téva-t ‘pinyon’. Gb tová’at piñon; Mn tïbá’; NP tïba ddabbui; NP tïpape ‘pinenut tree’; TSh tïpaC ‘pine nut’; Sh tïpa/tïpaC; Kw tïva-ci; Kw tïva-pï ‘single-leaf pinyon’; SP tïv^{w}aC-ppï ‘pinion’; SP tïva-ci ‘pine nut’; CU tïvïá-ci ‘nut, kernel’; Hp tïva ‘pinion nut’; Hp tïve’e ‘pinion pine’; Tb tïba-t; Tb(H) tïpat-t ‘pine nuts’; Sr tïvat ‘pinion’; Ktn tïva-t; Kw tïpa-ppï ‘single-leaf pinyon’. Miller lists HN tepeewa’ ‘to broadcast seeds’; HN tepeewi’ ‘to fall (seeds, leaves, etc.)’. Note the glottal stop in the same position for Mn tïbá’; Gb tová’at; and Hp tïve’e. Also the final gemination in Num and final -t in Tak and Tb, both align with that glottal stop. The CU voweling tïvïá (< *tïvu’a) since often Num ï < *u. All those facts lead to the first reconstruction *tïpï’at / *tïpu’at, though the latter two fit many also. [*ï > Ls o/u; Gb V] [NUA: Num, Hp, Tb, Tak; SUA: Azt]

75 Hebrew **teebeel** ‘firm (dry) land’; Assyrian taabal ‘land’:
UACV-757a ***tïpaC / *tïpal** 'earth': Sapir; I.Num247 *tïpi(h) 'earth, land, ground'; M88-tï36; KH.NUA; KH/M06-tï36:
Mn tïpi; NP tiipï 'earth, land’ (vs. NP tïbbi 'rock, stone’); Sh tïpia 'home country, land, property'; Kw tii-pï (< *tiip-pï) ‘dirt, earth, world, year' (vs. Kw tï-bi/tï(m)bi/ tï-bi-ci 'stone, rock, earth'); SP tïviC-/tïvi-ppï ‘earth, ground, country’ (vs. SP tïmpiC 'stone, rock'); CU tïvï-pï 'earth, world, soil, dirt, ground, country, land’ (vs. CU tïpïy-ci / tïpï (< *tïppï) ‘stone’); Gb tová-r 'tierra'; Ls tóóva-l 'white clay'; Ls tóvki-š ‘storage cave’ (earth-house?); Sr tiïva-ţ 'earth, ground, land, world, country, floor, dirt, dust'; Ktn tïva-č ‘dirt’. Add Op teve ‘earth’ (Shaul 2007) and Ch(L) tïvi-pï ‘earth, land, territory’. Though Miller often brought some of both together, Numic words for 'earth' vs. 'rock' (603) differ in both the middle consonant and the final consont, so some are included for contrast.

For example, *tïmï-pï ‘rock’ > tï(N)pï has SNum showing nasalization (at times medial -m-) or gemination (a definite medial cluster), while *tïviC- (< *tïpaC) ‘earth’ shows no nasalization and no medial cluster and thus the usual spirantization. In SUA, the distinction is less discernible. Miller includes CN tepee-tl ‘hill, mountain, precipice’ which is listed at *tïpï ‘long, tall’ in this work. Cf. rock and tall. Sapir also ties the above *tïpaC 'earth' with *tïpï ‘mountain’, but Ls tavu- ‘long’ (97) vs. the above Ls term and differing semantics (earth vs. long) and a final consonant in *tïpaC all suggest differing stems. That the 2nd V is *a* in Ls, Gb, Ktn is strength enough to reconstruct it, as any V > ï/i is common in UA unstressed syllables. This may be Sem-p as -l raises not the V.
UACV-757b ***tal (< *tïpal)** ‘land, earth’: CL.Azt 96 *tlaal ‘land, earth’; 130 tlaalia ‘put, place’; M88-ta39; KH/M06-ta39: CN tlaal-li; Pl taal; Po tal; T tlolli; Z taal. The frequent loss of *-p- in Azt and Azt’s anticipation of following vowels ties *tïpaC ‘earth’ with Azt *taal ‘earth’: *tVpal > tapal > taal (Azt). [NUA: Num, Tak; SUA: TrC, Azt]
UACV-773 ***tïpoN** ‘flat land’: Mn tïbóópï ‘countryside’; TSh tupoompi/tupoon ‘desert, flatland’. [NUA: Num]

76 Hebrew **’aadaam** ‘man’:
UACV-1419 ***otami (< *wVtam?)** ‘man, person’: B.Tep325 *’o’odahami ‘person, Indian’; KH/M06-’o29: TO o’oḍham ‘person, tribesman’; NT óódami ‘person, people’; ST odam/o’dam ‘Tepehuano, indigenous person’. Add TSh otammani / otammana ‘old man’. Whether borrowed from Otomi is hard to say, but if we start with s.th. like *otami, then intervocalic voicing (*t > d) would yield the Tep forms and agree with TSh. In Bascom’s reconstruction of Tep *’o’odahami ‘person, Indian’, the extra syllable seems solely based on TO dh, while all others show only d, and even TO shows no vowel between and may simply be a devoicing mechanism. Note also -wetam in Cp mulu’-wetam ‘first people’ and the first half of Ch(L) ’ontokwavï ‘male cousin’. These may belong to Semitic-p rather than Semitic-kw. Gb woróyt, pl: worórom ‘man’. However, note both here and at ‘believe’ the loss of intervocalic m in Gb and clear rounding for initial glottal stop. What of Tb(H) waattam ‘soldiers’ and Hopi wátamri ‘good-for-nothing, stupid one’? Likely of a separate set are Sr wïţïʳ|ṣṭ ‘man’ pl: wïţïʳham; Sr wïţi’vïʳṭ ‘old man’ pl: wïhwţi’vïʳm and Ktn wïčïha-č ‘old man’, listed at *wïti of UACV-1420, as M88 and KH/M06-wï10 have the Sr and Gb forms. [NUA: Tak, Num; SUA: Tep]

77 Hebrew ’dm ‘be red’; Hebrew ’aadom ‘reddish-(brown)’; Arabic ’aduma / ’adima ‘be tawny’; Samaritan ’adem ‘red’; Hebrew ’odem ‘precious stone, redness’:
UACV-312 ***oNtam / *o(N)ta(N/C)** 'brown': NP otï-ggwiddadï ‘sorrel colored, brown’; TSh ontïmpi(tïn) ‘brown’; Sh(M) ontïn ‘brown’; Sh(C) onton ‘brown, orange’; Kw odo- / ondo- ‘brown’; Ch ontó-ka ‘brown’; Ch(L) ontokwarïmï ‘woman’s name referring to brownish color of hair’; SP ontoC ‘reddish brown’; WMU *attoC-* in *attó-qqwa-rü / attőőqqwarü* ‘brown’; CU ’ötó-qwa-rï ‘brown’; TO o’am ‘brown, orange, yellow’. The -t- (vs. r/d) of CU and WMU, Kw, NP, and SP suggest a cluster, besides all the other forms showing a cluster *-Nt-. Nasalizations or nasal anticipation, such as ’adam > ’andam, occurs in some Semitic dialects as well. [-(N)t- > ’ in TO] [NUA: Num; SUA: Tep]

2.8 Semitic Voiceless Pharyngeal ḫ > *hu/ho in Uto-Aztecan in initial position

Hebrew’s voiceless pharyngeal fricativce **ḫ** is reflected by PUA ***hu/ho*** in initial position. Sometimes it lacks the h, and only an initial round vowel (o/u/w) is apparent. Similarly, in non-initial positions, ḫ is regularly reflected by the round vowels **o/u** or the semi-vowel **w**.

78 Hebrew **ḫeṣ** / **ḫeṣi** ‘arrow’; Arabic **ḫaẓwat / ḫuẓwat** ‘arrow’; Aramaic ḫeṭy-aa / ḫeṭ-aa ‘arrow-the’:
UACV-63 *huc(a) > *huC ‘arrow’: Sapir; VVH78 *hu ‘arrow’; BH.Cup *hu ‘arrow’; B.Tep334 *’u’ui 'arrow'; M67-9 *hu ‘arrow’ and 474 *hu ‘wood’; I.Num35 *huuh ‘arrow’; L.Son64; M88-hu3 *hu; Munro.Cup6 *huu-la ‘arrow’; M88-hu3; KH.NUA; KH/M06-hu3 (*hu AMR) and hu22: Ls húú-la; Sr hooṭ; Hopi hoo-hï; Hopi hooŋavi ‘arrow material’; Tb paa-huu-l ‘war arrow’; Kw huuwa-zi; Ch húu; SP uu / u; WMU uu / úu / huu; CU 'úu; Yq hú’iwa; My hú’iwa; Wr úa; Tr wa. Ken Hill (KH/M06) includes several other viable forms at hu3: NP huwa /howama; WSh hua ‘bow’; WSh huukkuna ‘quiver, lit. arrow bag’; WSh hua’aiti / hoa’aiti/huu’aiti ‘bow and arrow’; Gb hur; Tb uut ‘stick, pole’; Eu humát ‘quiver’; and others yet at hu22: NT úúši ‘tree’; ST uuš ‘tree’; NP huuppi ‘stick’; Sh huuC ‘wood’; Sh huuppin ‘stick, wood, log’. Add Ktn hu-č ‘arrow’; and Tepiman: Nv ’u’u; PYp u’u; NT úyi / ui / úúyi; ST ’u’uu. A few forms (like TO uuš; NT úúši ‘tree’; ST uuš ‘tree’) show *c as a second consonant, not likely a residual absolutive suffix in Tepiman. Munro and Hill both note Ca húya-l 'arrow' and Cp húya-l 'arrow' in contrast to Cp hú-l 'arrowhead' and Ca hú-l 'bow and arrow’. The *huya- forms fit *huca (like TO uuš), since *-c- > -y- in NUA and *-c- > -s- in TO. However, several UA languages have an initial *hu… form for ‘arrow’ and another initial *hu… form for ‘wood, stick’. But the two lists show *hu and *huc forms on both sides, again suggesting a need for more work. Where do Yq húya ‘árbol, monte’ and My huyya ‘árbol, monte’ fit? CNum *huuppi ‘tree’ (< *huuC-pi) may also derive from this stem. The strength of the initial pharyngeal overpowers the adjacent vowel—ḫee > hu—which is usual in UA; and though some UA languages do not show the final c well, some do, i.e., the expected reflexes for c do appear in TO, Ca, Cp. Cr and Wc ï < *u, so they also show *u. Reflexes of UA *huc appear in every branch except Azt. [*c > s in Tep] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC]

79 Hebrew **ḫmr** ‘to pitch’ [i.e., cover with pitch]’; Hebrew(BDB) **ḫmr** ‘to cover or smear’ (with s.th.); Arabic ḫammar ‘to color or dye red’:
UACV-2381a ***humay / *humar** ‘smear, spread, rub, paint’: Ca húmay 'smear, paint, vt’; Cp hume- / hum-ine ‘spread a liquid or s.th. fine like sugar’; Cp hume-yaxe 'be spread out'; Tr na’oma 'erase, cloud up' (with na- prefix); PYp huhul ‘rub, paint’ (if *humal > huml > hul); and perhaps Wc -maa in šúurí.maa 'smear blood' (Wc šuure 'red'). The Cah languages compound *pa- ‘water’ with this for ‘swim’ perhaps in ‘water-spread/be prone’: My bahume ‘nadar’; AYq vahume 'swim'. [r > y] [NUA: Tak; SUA: TrC, CrC, Tep]

80 Hebrew ḫpp ‘to rub off, wash’; Arabic ḫaffa (< *ḫappa) ‘to remove hair’:
UACV-2494 ***up(p)a** 'bathe, wash, rub’: M67-27 *u-pa; L.Son25 *’upa; M88-’u2; KH/M06-’u2: Op uva; Eu úva/huba; Yq úba; My úbba; Wr u’upá; Tr úba; Cr -ï’ïwá; Wc -’ïïva/’ïïya. As ‘rub’ and ‘wash’ often relate, Ktn hïpïpk ‘rub buckskin between hands to soften it’ may belong, and Tb hip ‘rub, massage’. The -wpa of Hp màwpa ‘rub along the length of, stroke with the palm of the hands’ < ma ‘hand’ + *huppa ‘rub’. [*-p- > -w/v- in CrC] [1h2,2pp] [SUA: TrC, CrC; NUA: Hp, Tak, Tb]

81 Hebrew **ḫaaber** ‘companion’; Hebrew ḫabéret ‘marriage companion (feminine), wife’:
UACV-2572a ***hupi** 'woman, wife': VVH79 *hu$_{s}$pi; B.Tep332 *’uvi 'girl, female'; M67-471 *hupi; I.Num45 *hïpi 'woman'; M88-hu4 'woman'; L.Son68 *hupï 'to marry'; KH/M03-hu4: TO uwi 'female, woman'; Nv ubbi; NT úvi 'female, girl'; ST ’uvii 'female, girl'; Eu hoít ‘mujer de edad, aunque no muy vieja [mature woman]’; Eu huhwa ‘mujer [wife], esposa [woman]’; My húúbi 'esposa'; Yq húubi ‘woman, wife’; Wr upí 'wife'; Tr upí 'wife'; Cr ïita’a 'woman'; Cr nya-’ïh 'my wife’; Wc ’ïya 'woman, wife’; Tb hu’ubanah 'widow, widower’. Usual in Cr ïita’a 'woman' are PUA *u > Cr ï and loss of *-p-: *hupi > (h)ïi-, and similarly for Wc. Numic often changes *u > ï, so Numic *hïpi ‘woman’ is cognate also:
UACV-2572b Numic ***hïpi** 'woman': I.Num45 *hïpi 'woman'; M88-hï8; KH/M03- hï8: Mn hïïpí’; TSh hïppicci(cci); Sh hïpi; Cm hïbi. [Cr, Num *u > ï; p > ø in CrC] [NUA: Num, Tb; SUA: Tep, TrC, CrC]

82 Syriac **ḫz’ / ḫzy** ‘see, perceive, notice’; Hebrew ḫzy / ḫazaa ‘see, behold (originally ‘look’ says Baudissin in KB); all Aramaic dialects have this most common word for ‘see’:
UACV-1915 ***husi / *h^{w}asi** ‘look, peek at’: Kw huzi’a ‘look, peek’ and NP wazipunni ‘peek at’; Kw variants –Kw wazi’a / huzi’a / huziya (< *huci’a/*huciya) ‘look, peek’—are interesting on a number of levels. First, why Kw z? (< PUA *s or *c?), yet interestingly Kw z matches exactly Semitic z, but neither UA *s or *c exactly. Second, Aramaic dialects have both forms ḫz’ / ḫzy, varying in the 3rd consonant, and Kw shows both variants in the 3rd consonant. Third, while this verb generally came to mean ‘see’, some authorities suggest it originally meant ‘look’, which is its meaning in Kw. [1h2,2z,3’,3y]

83 Hebrew **ṣrḫ** ‘cry, roar’ > UA ***cayaw** ‘yell’: Tb cayau ‘yell’; Tb(H) caayaaw ‘yell’. [Tb]

84 Hebrew **ṣmḫ**, impfv: **yi-ṣmaḫ** (< *ya-ḍmaḫ) ‘sprout’ > UA ***icmo** ‘sprout’: CN icmo-liini ‘sprout, grow’.

85 Hebrew **ṣlḫ** ‘rush, v’ > UA ***coloa** ‘flee, run’: CN coloaa ‘flee, run swiftly’. [Azt]

Many other examples of pharyngeal ḫ are in part 5, the sorting of Semitic-p from Semitic-kw.

2.9 The Semitic Voiced Pharyngeal Fricative ʕ (ʕayn) Reflects Rounding w/o/u

The voiced pharyngeal fricative, the Semitic **ʕ (ʕayn**), emerges as a round vowel or semi-vowel—**w/o/u**—or as a dipthong—oa. I have heard native speakers of Arabic pronounce the pharyngeal **ʕ** with enough rounding to sound like w, while the back or root of the tongue is doing its pharyngeal at the pharynx. Also relevant to this sound change is that when the Greek alphabet was being developed from the Phoenician / Hebrew alphabet, the Semitic consonants seemingly nearest the vowel were used for the Greek vowels: glottal stop or ’aleph > a, h or he > e, y > i, and ʕ > o (Goldenberg, 35). So the symbol for the Semitic consonant pharyngeal ʕ (ʕayn) became the Greek vowel o, which suggests there was rounding associated with the ancient Semitic ʕ. Round vowels also share low tonality with the pharyngeal ʕ.

86 Hebrew ṣʕq / ṣaaʕeq ‘shout, call out, cry (out)’; Hebrew *ṣaʕaq ‘scream, n’; Hebrew **ṣəʕaaqaa** ‘yelling, screaming, call for help, n’; Arabic ṣʕq ‘thunder, bellow (of bull)’; UA again shows a denominalized verb:
UACV-605 ***coaka (< *cuwaka)** ‘cry’: M67-114 *coak; B.Tep204a *suakai 'to cry, sg’; B.Tep205a *suaha’ni 'to cry, pl'; CL.Azt40 *čooka; CL.Azt304 *coaka; M88-co10 'to cry’; KH/M06-co10: TO šoak; LP šoakï; PYp soakim; NT súákai; ST suak; Wc cua-/cuaka; CN čooka; Pl čuuka; HN čooka’ ‘weep’; HN čook-ilia ‘weep for s.o.’ Ls čááqa 'weep, cry' assimilated the first *o* to the following *a*'s (*coak(a) > *caaka), while the Aztecan languages (CN, Pl, HN) assimilated the 2nd V to the 1st: *coaka > cooka. [*oa > oo/aa; no w in Tep] [NUA: Tak; SUA: Tep, Azt]

87 Arabic ʕgz / **ʕagaza** ‘to age, grow old (of women)’:
Tr **wegaca-** 'grow old (of women)’. Identical! Not only grow old, but specifically grow old of women in both Arabic and Tarahumara: ʕ > w, g > g, and z > c; initial wV > o occurred the following noun:
UACV-2571 ***okaci** ‘(old) woman’: Sapir; B.Tep319 *’okisi 'woman, little girl'; CL.Azt104 *okïc ‘male’; M67-473 *’ok ‘woman’; M88-’o8 'woman' and o14; KH/M06-’o8 and ’o14: TO oks 'adult female, lady, woman'; LP(B) ’okš; Nv oksi; PYp okasi; NT okíši; ST(B) ’o’okiš ST(W) o’kiš ‘aunt, mos’; Eu hokíci 'muchachita'; Op (’)oki ‘woman’; Cr úúka 'women'; Wc ’úúkáá 'woman’. Note NT oóki 'woman’; NT ookímuturui ‘hacerse anciana [become old (of a woman)]’; NT ookíši 'niña'. CN okič-tli and other Azt forms also belong. Tepiman *okisi 'woman’ and CN okič- 'man' both < PUA *okic; and if we consider the Tr form whose 2nd vowel (*a*) matches the PYp, Cr, and Wc forms *oka 'woman’, then Tr wegaca- 'grow old (of women)’ provides the semantic key to these similar forms for men and women, such that *okac originally meant ‘old woman’ then ‘old one, old man’ in some languages. English 'guy' is now changing from masculine to genderless and 'girl' went from genderless to feminine (Stewart and Vaillette 2001, 410), so semantic gender changes happen too and cost nothing. I’ve heard men called ‘woman!’ at politically incorrect construction sites where attempts to highlight ineptitude at the male-dominated occupation revealed a lack of sensitivity that surely permeates all construction crews by now, though perhaps not all of UA prehistory aligned with such sensitivities. Note 2nd V (a vs. i) in PYp okasi ‘father’s older sister’, Cr, Wc, and NT ookáli ‘father’s older sister’ (-li is non-stem) and Tr wegaca, in three branches, no less, all of which suggest *a* as the 2nd vowel: *okaci > okVci 'woman’. Assimilation *a-i > i-i is natural, especially with an alveopalatal between the two. No chance of *i-i > a-i for the 5 languages showing *a*. [*a-i > i-i in CN, most Tep, Opatan] [SUA: Tep, TrC, CrC, Azt]

88 Hebrew ʕaluqaa ‘leech’; Arabic **ʕalaq** ‘leeches’; Arabic **ʕalaqat** ‘leech’;
Syriac **ʕalqaa**, **ʕilaq-taa** ‘leech, anything clammy or sticky, n.f.’ from the root ʕlq ‘stick, adhere’;
UA *walaka ‘snail’ is a perfect phonological match, and leeches resemble snails in slimy adhering texture:
UACV-2057 ***walaka** ‘snail’: CN wilaka ‘caracol de monte [snail sp.]’; Tr warákoara ‘caracol [snail]’; Ls muvílaqa 'snail’; Wr nalágeloci ‘snail’; Tr narákuri ‘snail’. NUA liquids (Ls) and SUA liquids; Ls and Wr add prefixes eliminating initial w-. Wr alágaloci ‘snail’; and Tr narakuri show V transposition. [iddddua] [NUA: Tak; SUA: TrC, Azt]

89 Hebrew **śeeʕaar** ‘hair’; Arabic **šaʕr / šaʕar** ‘hair’; Arabic šaʕira ‘be hairy’:
UACV-1106a ***suwi** ‘body hair’: B.Tep70 *hogi ‘hide’; M67-211 *suwi ‘hair’; M88-su18 ‘hair’; KH/M06-su18: LP hog ‘hide’; NT ógi ‘hide’; ST ho’ ‘fur, leather’; PYp hogi ‘hide, skin, leather’; Tb šuuwi-l ‘pubic hair’; Hp sowícmi ‘facial hair’; NP musui ‘beard’ (< *mu-suwi ‘mouth/face hair’); Ls suuwi-l ‘pubic hair, body hair’; TSh suwii ‘pubic hair’. Tepiman *hogi ‘hide’ matches NUA *suwi ‘hair’ consonant-wise, whether u or o; I side with *u, like Miller and Hill. The close but not perfect match in o vs. u may be due to the influence of *-w-. [NUA u; SUA o]
UACV-1106b ***suhi**: Mn suhi ‘body hair’ and Ktn suhi-c ‘genital hair’ show *suhi.
UACV-1106c ***soho > *soo** ‘armpit (hair)’ (in SNum): Kw soo-rokwa ‘armpit’; Ch(L) sohorah ‘post with U-shaped fork, notched post’; SP soor’oaa ‘armpit’; WMU kiyæ-söö-v*ü* (lit: armpit hair); aá-söö-v*ü* ‘underarm, armpit (lit: arm hair), n’. Note that Ch(L) sohorah, Mn suhi ‘body hair’, and Ktn suhi-c ‘genital hair’ all show medial -h-. What of Tb šuu’itt ‘jackrabbit’ and Tb šuuwi-l ‘pubic hair’? [NUA: Tak, Tb, Hp, Num; SUA: Tep]

90 Hebrew **naʕar** ‘boy’:
UACV-1426 ***nowa** ‘son’: M67-389 *no ‘small’; L.Son177 *no ‘hijo del padre’; M88-no5; KH/M06-no5: Eu nówat; Tr no/nowa ‘hijo [son]’, pl: hinowa; Tr nowi ‘have a son’; Wr nolá /noló ‘son’; the two Wr forms align with fossilized vowel suffixes: **naʕar-á** ‘son-her, her son’ and **naʕar-ó** ‘son-his, his son.’ [Sem-p] [SUA: TrC]

91 Hebrew **naʕ^{a}ra(t)** (< ***naʕrat)** ‘girl’:
UACV-2586a ***nawiC** 'girl': M67-389 *no 'small’; BH.Cup *nawí girl; HH.Cup nawíi girl; Munro.Cup49 *nawi-l/*nawii-l 'girl, young woman'; M88-na21; KH.NUA; KH/M03-na21: TSh nawi 'girl'; Tb ’aanaawiš-t ‘girl’; Cp nawí-l^{y} 'young lady'; Cp nawíšma-l 'girl'; Cp nawíka-t 'woman'; Ca náwišmal 'girl'; Ls nawíí-l 'young woman'; Ls nawí-t-ma-l 'girl'; Sr naašt ‘girl’; Wr nu’iti /nu’inti ‘little, child’. Some terms suggest a final -C (Tb, Cp, Ca). [r > š adjacent to voiceless C; Fem -aa/-at > -i, as at ‘back’ (7)] [NUA: Tak, Tb, Num]

92 Hebrew **yáʕar** ‘wood, forest, thicket, wooded heights with trees to be felled’ (BDB); Hebrew yáʕar ‘thicket, undergrowth, wood’ (KB); Arabic waʕr ‘rock debris; rugged, roadless terrain’:
UACV-1627a ***yuyi** ‘evergreen sp.’: BH.Cup *yúyila ‘spruce’; M88-yu16; Fowler83; Munro.Cup29 *yúúyi-la ‘conifer sp.’; KH.NUA; KH/M06-yu16: Cp yúyi-ly ‘fir’; Ca yúyi-ly ‘California juniper’; Ls yúy-la ‘spruce’; Sr yuhaaţ ‘pine’.
UACV-1627b ***yuwiN (> *yuviN)** ‘ponderosa pine’: KHM/06-yu16: Kw yïvi-bï ‘ponderosa or yellow pine’; Ch yuvimpï ‘pine sp.’; CU yïvï-pï ‘pine tree’. I agree with M88 and KH/M06 that Tak *yuy/*yuwi(l) and SNum *yuviN are related, perhaps both deriving from s.th. like *yuwiN, for *w would be quite hidden in the environments of Tak, and if so, then w > v happens enough in Num. In addition, both show a final consonant. Ls absolutive suffix -la suggests a final liquid or nasal and Numic suffixes also suggest a final nasal or liquid. [w > v; Kw ï < u] [NUA: Tak, Num]

Note three terms—śʕr (89), nʕr (91), yʕr (92)—all have 2nd and 3rd consonants (-ʕr), and in UA are reflected as -ʕr > -uwi/-uy, while 90 may be of Sem-p in which final -ar > -a, instead of Sem-kw's -ar > -i.

2.10 Hebrew r- > UA *t- in Initial Position

Hebrew r- > UA *t- in **initial position** (at beginning of word), but in Tr it remained Tr ŕ. This change is similar to changes in other language families as well. Proto-Mayan initial *r became t in four Mamean languages: Ixil, Awakateko, Mam, and Teco (Purse and Campbell, 181). Wr(MM) re'te as a reduplication of re'- is similar to r > t, whether initial position or after a stop consonant.

93 Hebrew **rooš** 'head' (< *ra'š); Arabic **ra's-** 'head':
UACV-1157 SNum ***toCci** 'head': Kw toci-vü; Ch tocí; SP tocci-vi; WMU č*ih*čči-vi 'head'; CU tüčí-vi. As in Kw pika-roci 'bald', the -rusi of Tr po-rusi 'bald' likely belongs also. Notice *o > ï in CU's unaccented syllable and *o > i with palatalization of *t > č in WMU. All show an underlying doubled consonant; otherwise, we would see a lone *-t- > -r-, or *-c- > -y-. For ***'s >** UA ***c:** an affricate (c / ts) is a stop (t) plus fricative (s); in UA a glottal stop (thus, a stop) plus s (a fricative) often yields the affricate c: thus *-'š- > -cc-. [NUA: SNum; SUA: TrC]

94 Hebrew **ršʕ** 'act wickedly, be guilty':
UACV-101 ***tasawa** 'be/do bad': Tb tïsï 'be bad'; Tb tïsawiin 'cause s.o. evil'; Tb(H) tïššawiinat 'cause one evil'; Tb(H) tïšwan 'bad'; Tb(H) tïššït 'be bad, ill'; Tr rasewa 'fornicate'; Tr rasewa-me 'permissive person'; SP -rïssu'ai-na'ai 'not heeding, paying no attention'. Tr is the only UA language that retains initial r as r (SP -r- is non-initial). [SUA: TrC; NUA: Tb, Num]

95 Hebrew **rbb / *rabba** 'shoot (an arrow)':
SP tokwa 'snap (of bow)'; the following 'throw/hit' verbs derive from hurl/hit with or shoot (an arrow):
UACV-2310 ***tïkwa** 'hit by striking or throwing, shoot (arrow)': TSh tïkwan 'hit, strike, vi'; Sh tïkwa 'hit, knock down, vt'; Cm tïkwïrï 'shoot, propel (arrow)'; Cm tahtïkwarï 'throw at, vt'.
UA *tïkwï 'throw (away): Ls tokwi 'throw away' (Ls o< *ï, and Cp/Ca e<*ï); Cp tekwe 'throw away'; Cp tekwe-le 'brush off'; Ca tekwe 'be shaken off/down'. [NUA: CNum, Tak]

96 Hebrew **rby / raabaa** 'shoot (bow and arrow)'; Aramaic(J) rəba' / rəbee(y) 'to stretch the bow string, shoot'; Hebrew participle robe 'archer'; the difference between 95 rbb/rabba and 96 rby/rabaa is that the *-bb- > -kw- in 95, but a single non-dageshed *-b- > -p/v- in 96:
UACV-2309a ***tapa / *tapi** 'throw, hit': Mn tabi 'strike'; Mn tabipa'i 'strike repeatedly'; NP tabi 'throw'; NP tïtabi'hu 'throw, vi'; Kw tavi 'throw, hit'; Kw ta-tavi 'throw, hit, redupl'; Ch tïrávi 'throw down'; SP tïravi 'throw'; SP tavi 'hit by throwing'; CU tïrávi 'throw at, vt'; Eu mútava 'hit'; CN tepiiniaa 'punch, hit, strike, vt'. Below *tapa > *tïpa due to stress, and in SUA, consonants harmonize *tïpa to *pïpa / papa:
UACV-2309b ***tïpa** 'throw, hit': Hp tïïva 'throw'; Hp tahtïva 'hit with thrown obj'; Hp tatatïpna 'throw stone';
UACV-2309c ***pïpa / *papa** 'throw' (< *tïpa): Yq hibéeba 'hit, throw'; AYq veeva 'hit, strike'; AYq hiveva 'hit, strike it'; My béeba-k 'throw out'; Wr paba-ní 'throw pl objs'; Wr ihpába-ni 'throw, drop pl objs'; Wr ihpa-ní 'throw, drop sg obj'; Tr pa, apa, iba; Tr ne-pabá 'throw rocks'; NP pibu'a 'throw pl objs'; Ls píva(n) 'throw stones'; NT vúúpai 'throw'; NT vúúpakaroi 'sling'. This stem is a consonant harmony of *tïpa/tapa 'throw'. M88-pi22 and KH/M06-pi22 list Tak forms of *pi'a 'throw, bewitch' (see at bewitch) which may be a different stem or perhaps a sort of reduction of a harmonization: *tVpa > pipa > *pi'a 'throw' (Sr pii' 'throw sg obj'; Sr piivi' 'throw pl objs'). [NUA: Num, Hp, Tak; SUA: Tep, TrC, Azt]

97 Hebrew rab, rabbaa (f.) 'great, large, many'; Hebrew rby / raabaa 'be(come) numerous, powerful, grow up'; Syriac rab 'great, loud, large, long, strong': Aramaic rab/rabbaa 'large, great, numerous, senior':
UACV-1386 ***tïpï / *tapu** 'long, tall': B.Tep248 *tïvï 'long'; M67- 268 *tep/*te 'long'; L.Son294 *tïpï 'largo'; M88-tï11 'long'; KH/M06-tï11: My teebe 'long, tall'; AYq teeve 'tall'; Yq téebe 'long, tall'; Wr tepihkúma / tehpekúma 'long' (Hebrew qoomaa 'height'); Eu tevéi 'long'; TO cew 'tall, long'; UP čïwï; LP tïv; NT tïvï; NT tïvïïdu 'be long, tall'; ST təv; Wc téví / téwí 'long'; Cr áh-tyee 'he is tall'. Add Nv tubu/tubutu 'eminente' (u for ï); Tbr tepe 'tall, hill' and CN tepee-tl 'hill, mountain, precipice'. Add Ls tavú-lvu-š 'long' whose vowels are more original, in fact, agree with Semitic, while the others did a typical leveling, as *a* > ï, and u > ï both occur in UA. Jane Hill (p.c.) adds Ktn tïpuck 'thick (like a board)' as a cognate, with the same 2nd V. This may be of Sem-p. [NUA: Tak, Tb; SUA: Tep, TrC, CrC]

98 Hebrew **rqʕ** ‘beat, stamp, beat out, spread out’; Hebrew **raaqii^{a}ʕ** ‘extended surface, expanse, firmament, sky’ is the source for UA *tukuN- in * tukuN-pa ‘sky’. Consider UA terms for ‘**SKY**’:

Mn	--	Hp	tokpela	Eu	tewíka / tevíka
NP	kumiba (pidaggwabaatï)	Tb	tuguumba-l	Tbr	tamwa-kalí-t / tamokalít
TSh	tukumpana(pin)	Sr	tukuhpţ	Yq	téeka
Sh	tukum-pin; tukumpana	Ca	túkva-š / túkwi-š / túki-š	My	téeka/ téweka
Cm	tomo(ba’atï)	Cp	túkva’a-š	Wr	teweká
Kw	tugu-bayaa-vi-dï	Ls	nááxuyni-t; túúpa-š	Tr	ŕe’paní ‘sky, up’
	tugu-na-paya=aka	TO	daam kaačim ‘over-lie lifeless’		se’pótare ‘starry sky’
Ch	tugúmpa	PYp	tevagi	Cr	tahapuá
SP	tukuN	Nv	damakatuma	Wc	múuyúavi
WMU	tuku(m)paya	LP	tïvïg/tïvgï/tïvg (B.Tep)		
	tuġúppaya	NT	tïváági		
CU	tugú-payá	ST	tïvaa’; hiš dyaam	CN	ilwi-ka-tl

In short, UA terms for ‘sky’ are NUA *tukuN(-pa); SUA *tukuN-pa > SUA *tïkopa or *tVkpa after V syncopation. SUA *tawa-kali ‘sun-house’ mostly in TrC, but in Azt *ilwi-ka, as well.

UACV-2032a ***tukuN-pa** ‘sky, up, above’: Sapir; M67-383 *tuku ‘sky’; I.Num229 *tukuN ‘sky’; M88-tu16 ‘sky’; KH.NUA; KH/M06-tu16: **NUA *tukuN-pa**(ya) ‘sky’ (in Num); Tb tuguumba-l; Hp tokpela; Tak *tuk(u)pa-. The NUA unity is clear and a compound of *tukuN- + *-pa ‘sky-in it’. UA *tukuN- ‘sky’ < Hebrew ***raqiiʕ** ‘sky’, all vowels assimilating to the two rounding influences: the uvular and the pharyngeal. The Tak forms lost the 2nd vowel, and in Ls the C also: *tukuN-pa > tukpa > tupa (Ls). Yet in spite of Luiseño’s loss of -ku-, the *p remains a stop, due to an underlying -kp- cluster—*tukupa > *tukpa > *tuupa—otherwise, we would expect intervocalic -v- or tuva. Of interest is that Hebrew *raqiiʕ literally means ‘beat broad or flat’, used in beating metal flat, but also means sky, as a broad expanse, and the Ca, Cp, Sr, and Ls forms all mean both ‘sky’ and ‘iron/knife’: e.g., Cp tukva’a-š ‘sky, iron’ (see b). Note also Sr tukuhp|ţ 'sky' (dative: Sr tukuhpakya’ 'up, above'; ablative: Sr tukuhpanu’ 'from above'); Cp túkuči 'high'; Gb tokúpar; Ls túúpaš ‘sky’; Hp tokpela ‘sky’; Mn túgupaa 'above'; NP; TSh; Sh; Kw; Ch; SP; CU; Tb; Cp; Ca; Ls; Sr; Hp. Sapir lists Gb tuku-pa-r ‘sky’. Other forms show only *tukuN: TSh tukun ‘straight up, directly above’ (vs. TSh tukumpin/tukun- ‘sky’); Sh tukun ‘straight up, straight down’ (vs. Sh tukum-pin ‘sky’); Cm tukuhputï ‘upward’. Add Ktn tukuhpa-č ‘sky’. Perhaps PYp tuuk ‘uphill’. This may be a Semitic-p term.

UACV-2032b ***tïk(V)pa (< *tukuCpa)** ‘cutting tool: obsidian, knife, flint, metal’: KH.NUA notes the dual meanings in most Tak languages of both ‘iron/knife’ and ‘sky’: Cp túkva’aš ‘iron, sky’; Ca túkvaš / túkwiš / túkiš ‘sky’; Ca túkvaš / túkwaš / túkiš ‘iron, knife’; Sr tukuhp|ţ ‘sky, iron’; Ktn tukuhpa-č ‘bead, metal, sky’. Relative to the metal beat flat as tool dimension, note Kw paha-rïka-dï ‘pounded metal’; Cr tehka ‘obsidian’; Tr ŕikibara ‘knife’; CN tekpa-tl ‘flint’. Ktn’s vowel could suggest original *-u-, with which Kw (*u > ï in Num) may agree. In Azt, *u > CN i, then *i-a > e-a, and some others may be Aztecan loans. Though Yq has another term for ‘sky’, Yq tepohtim ‘fierro, hierro [iron]’ is cognate (tepoh- < *tïkpoh < *tukuNpa) with only the one meaning ‘metal’. While above reflexes for ‘sky’ are in all 8 branches, those with ‘flint, knife, metal’ meanings remain in 5, with loan or dialect recycling. Perhaps Ktn toq-šiva-t ‘flint, flint tip of arrow’ and Ls tiqé-t ‘arrowhead’ as recycled loans. [NUA: Num, Tak; SUA: TrC, CrC, Azt]

UACV-2032c ***tïkpa-wa** ‘up, above, sky, on’: B.Tep246 *tïvagi ‘sky, cloud’: SUA ***tï’pa** ‘sky’ < NUA *tukuN-pa. The non-Numic reductions *tu(k)pa approximate ****tï’pa*** with a slight vowel change (u > ï) and k > ’/ø in a cluster, as the k disappears in Ls also. So Tr ŕe’pa and similar TrC forms, and the Tep forms *tïvagi (< UA *tïpawi < ****tï’pawi**) are cognate: Tr ŕe’pá; Tr ŕe’paní 'sky, up'; Eu téva(n) / téwa ‘(por) arriba’; Cr tahapuá 'sky’; and Tep *tïvagi (< *tïpawi) likely belongs too, from *tïkpa-wa, and note Hp tokpela (with Hp l < *w). [k > h in Cr; -kp- > -’p-] [NUA: Num, Tb, Hp, Tak; SUA: Tep, TrC, CrC, Azt]

99 Hebrew **rakb-uu** ‘they mounted, climbed’ or rokb-im/-in ‘mount, climb up’ (pl participle); Hebrew **rakb-o** ‘mounted it’; K&B note that “the most prominent meaning of the root rkb in other Semitic languages (Ugaritic and Akkadian) is to mount, to climb up”; Syriac pl participle: **raakb-iin** ‘climbing/ers’; Syriac **rakb-uu-hi** ‘they climbed it’; Syriac rakbaa ‘upper millstone’; Aramaic(J) rikbaa’ ‘upper millstone’ (what rides on the lower grinding stone); -p- (instead of -kw-) suggests these are of Semitic-p instead of Semitic-kw:

UACV-461a ***tï’pu** ‘climb up’ (< **rakb-uu)**: NP tïbbu’ya ‘climb up’; Wr mo’tepú-na ‘climb up s.th.’.

UACV-461b ***ciCpuhi** 'climb’ (< **rakb-uu-hi)**: Mn cibuhi 'climb with arms and legs'; NP cibui 'climb up on s.th.’ These Western Numic forms align perfectly with Semitic rakb-uu-hi/ha ‘climb up on it’ (rakb-uu-ha/hi ‘ride-pl-it), considering initial r > t, then t > c with palatalization before the high-front vowel.

UACV-461c ***tiCpiN > *cippiN** ‘climb or come out or onto’ (< **raakb-iin** ‘climbing/ers): Kw čipii- ‘climb’; Ch cipí- ‘come out’; SP cippiN ‘come out, appear, ride’; WMU č*ih*ppí-y ‘come out, bubble out (like a spring), climb into (car), onto (horse)’; CU čipí ‘mount, climb on, get on top’. Also related are Ca čípi ‘get covered (hole), vi’ and Ca čípi-n ‘cover, vt (causative)’ which also show geminated *-pp-, and covering (a hole)

is causing s.th. to get on top of, and a hole getting covered is as a spring bubbling out, its hole being covered by water' or 'surfacing to the top'. SNum -p- instead of -v- means a cluster, and these are a palatalization of the above *tï'pu > ciCpu. CN tlakpa-k 'above, on top' fits the Semitic f sg verb rakbaa or a mecial vowel loss; CN -ikpa-k 'on or at the head of, above'. [SNum –p- vs. –v-; redtn] **UA**CV-2032d ***tïko / *tïku**: CL.Azt131 *təhko 'raise, ascend'; M88-tï45; KH/M06- tï45: ST tï'kov 'alto, arriba'; CN tle'koo 'ascend'; HN tle'ko 'climb, ascend'; Pl tehku; PYp teik 'upriver, above'; Wc téikï 'allá arriba' (Wc ï < *u). These perhaps with loss of -p- (tVkpu > tVku), since the three branches it appears in (Azt, CrC, and Tep) all lose -p- readily. Differing PYp teik 'upriver, above' vs. PYp tuuk 'uphill', and differing Nahuatl forms may mean recycled loans. [1r,2k,3b] [NUA: Num, Tak; SUA: Tep, TrC, CrC, Azt]

100 Hebrew ***ra'oot(-aa)** 'seeing (it), to see (it), infinitive/ verbal noun':
UACV-1912 ***ta'uta** 'find': TSh utaa 'find'; TSh ta'ota 'find'; Sh ta'uta 'find'; Cm ururï 'find';
Cm to'ururï 'meet someone, find something being looked for'. [*-t- > -c-, *uta > uci; *hu > wV?] [NUA: CNum]

3 Pronouns of Uto-Aztecan

In comparative work, pronouns are always an important consideration. Most UA pronouns align with Semitic, and two 3rd person singular pronouns align with Egyptian. All basic pronominal slots (sg: 1st, 2nd, 3rd; pl: 1st, 2nd and 3rd) are well represented in this tie; and a good 1st pl (we/us) possibility is last at 1528.

101 Hebrew -i 'my' is a possessive suffix pronoun, and like other Semitic suffix pronouns came to serve as prefix pronouns in UA, and so Hopi i- 'my' is identical to the Semitic 1st sg possessive, with adjusted syntax.

	1st sg: independent pronouns (I)		suffix (object and possessive: me, my)	
	Aramaic 'anáá'	Hebrew 'anii, 'anoki	-nii,	-iy
Ch	nïï			
SP	nï			
WMU	nïï'			
Tb		nik		
Hp	nï			i-
Ca	ne'			
Tr	ne			
TO	a-ni		-ni	
CN	ne'			

102 Hebrew 'anii 'I'; Arabic **'anaa** 'I'; Aramaic **'anaa'** 'I'; Syriac **'inaa' / naa'** 'I':
Uto-Aztecan *nï' 'I' does not align with Hebrew (except possibly TO aañi), because final -i is Uto-Aztecan's favorite final vowel, so if Hebrew 'anii 'I' were the source, there would not be a change in the final vowel. However, Uto-Aztecan *nï' 'I' aligns well with Arabic / Aramaic / Syriac 'anáá, and the 2nd vowel, long and stressed, was retained. Relaxation of the vowel a > ï is common in the Semitic-to-UA data and loss of an unstressed vowel is also common; thus, 'anáá > nïï is expectable, doing like Syriac **'inaa' / naa'** 'I' in its schwa-like behavior of 1st vowel (a > i) or complete loss of it (as in UA) for lack of stress:
UACV-2658 ***nï'** 'I, me, my': Sapir; B.Tep 295 *'á:nï'i/'á:niï; BH.Cup *nə; I.Num 118 *nï; CL.Azt 89 *nəh' CL.Azt 247 *nï'; M88-pr1; KH/M06-pr1: WSh nï (acc. nïi); TSh nï (acc. nïa); Hp nï' (acc. nïy); Sr nï:' (acc. nï:i); Ktn nï' (acc. nïy); Ca ne'; Cp nə' (acc. nə'iy); Ls no: (acc. ney); Gb nóma'; TO aañi('i); NT aáni; ST aañi'; Nv ani; Eu nee (pospuesto ne, gen. no, acc. nečt); Tr nihé (Ht); My ne (clítico) (acc. ne:); Wc né; CN ne' / ne'wa(tl), acc v pref: neeč; Pl naha. [NUA: Num, Tak, Hp, Tb; SUA: TrC, Tep, CrC, Azt]

103 While Hebrew -i is the 1st sg suffix possessive pronoun 'my' as in Hopi (101) but changed to a prefix, Hebrew -ni is the object 1st sg pronoun 'me' and UA *-ni 'me' is also in several UA languages and remains a suffix: Tb -ni 'me' (Voegelin 1935a, 37); Ch -ni 'me (1 sg pronoun postfix)' (Press 1979, 48); -ni 'me' (Langacker 1977a, 37); Tr -ni 'I'; Sh -nia 'me' has the -a 'accusative suffix' added to -ni 'me'.

Second person pronouns, Semitic *-ka 'you/your, masc sg' and Semitic *-ki 'you/your, fem sg' and Hebrew *-kem 'you/your, pl' (Arabic -kum) parallel UA *-'ï 'you, your, sg' and UA *-'ïm 'you, your, pl' respectively (also Egyptian -k 'you/your). These Semitic pronouns were originally suffixed, so -k was usually in a cluster, thus loss of k, or *-k > -' or ø in a cluster, as in English: him > -əm when suffixed (feed-im, love-im). Then they changed from suffix to independent and subject pronouns, for even in Hebrew the possessive pronoun can be subject of a verb: ra'ot-ka 'seeing-you (obj)' or 'your seeing (as subj)'. Yet given *-k > -'/ø, some UA languages show a similar sg and pl distinction as in Semitic/Hebrew.

104		**105**
Semitic	-kV ‘you sg’	-kVm ‘you masc pl’ (suffix/possessive/object pronouns)
	you sg	you pl
Cp	e / e’e	eme / emem
Ca	’e	’em
Hp	’ï	’ïmi- (possessive pronouns)
Cr	mu’e	mu’en
Yq	-a’e	-a’em (enclitic pronouns)
My	-’e	-’em (enclitic pronouns)

UACV-2659a ***’ï** ‘you sg’ (sometimes *’ïm(ï) ‘you pl’ > ‘you sg’ as happened with English ‘you’ (pl) replacing ‘thou’ (sg): Sapir; BH.Cup * ’ə; I.Num 22 *ïh; M88-pr4; KH/M06-pr4: Mn ï: NP ï; TSh ï; Kw imi; CU ïmï; Hp ïm (acc. ïŋ; dl./pl. ïma, acc. ïmïy); Sr ïmi’ (pl. ïm, acc.sg./pl.ïmï); Ca ét/’e (pl ’em); Cp ə’ə ‘sg’ (pl əmə / imi / əm’əm); Ls óm; Gb ó; Tb imbi; Yq -a’e (pl -a’em); My -’e (pl -’em); Tr eme / muhé; Cr mú’ee. Sapir (1930, 183) says, “the (SP) -’ of the 2nd sg is entirely peculiar” but it matches the Semitic well.

UACV-2659b ***’ïm(ï)** ‘you pl’: Sapir; Kaufman 1981 *’ïïmV ‘ye’: Ca, Cp, Yq, and My (see above) show *’ïmï in contrast to *’ï ‘you sg’. Hp shows the distinction in its possessive pronouns: Hp ’ï- ‘your, sg’ vs. Hp ’ïmï- ‘your, pl’, but not in its independent pronouns. Op emo / eme ‘you, sg and pl’ (Shaul 1990, 568).

Though SNum generally shows s.th. like *’ïmm(w)i ‘you sg’, Sapir (1930, 183-5) called SP -’- ‘you sg’ (2nd person sg suffix flanked by echo vowels) “entirely peculiar to the enclitic series” yet it is the expected 2nd sg reflex of Semitic 2nd sg suffix pronoun, without the -m of the other UA forms above.

The other UA languages that have ’ïm for the 2nd person singular pronoun, underwent a change like in English. English used to distinguish *thou* (sg) and *you* (pl). However, later, the plural *you* replaced singular *thou*, such that now both sg and pl 2nd person pronouns are *you / your*.

Many languages—English you, Spanish vos, French vous, German Sie—have changed 2nd pl > 2nd sg in an honorific or polite pl coming to be used for sg. Likewise, the UA languages below appear to derive both their sg and pl forms from the Semitic pl, as seen by an abundance of -m, which signifies plural in Hebrew (and in UA).

	sg	pl
Tb	imbi	imbuumu
Ch	ïmi	mïmi
Hp	’ïm	’ïma
Yq	’empo	’eme’e
SP	immi	mwïmmwi

106 Most UA languages use their variant of the Hebrew suffix/possessive/object pronouns (-kV, -kVm) as subject pronouns also, but Tarahumara has 2nd person plural *subject* **tumu** ‘you’ like Semitic -tem / -tum ‘2nd pl *subject* pronoun; and Tr emi is the dative/object 2nd pl as in Hebrew. Note Tr **tumuhe** (subject pronoun):

	subject pronouns ‘you, plural’	object pronouns ‘you, plural’
Arabic/Sem	’antum (independent pronoun)	-kum (obj/suffix pronoun)
Hebrew	’attem (independent pronoun)	-kem (obj/suffix pronoun)
Arabic/Sem	-tum (subject pronoun on a perfect verb)	
Hebrew	-tem (subject pronoun on a perfect verb)	
Tr	**tumu / tumuhe** (ustedes, vosotros, subj)	**emi** (dative/object pronoun)
SP		ŋumi ‘you, your, pl obj pronoun’

So Tarahumara has both the 2nd person pl *subject* pronoun matching the Semitic 2nd pl *subject* pronoun, and the 2nd person pl *object* pronoun matching Semitic’s 2nd pl *object* pronoun. Note also Southern Paiute **ŋumi** ‘you, your, pl obj pronoun’ with a velar ŋ aligning with the Semitic velar -k-. The Aramaic vowels are -kum and -tum, so SP ŋumi and Tr tumu are likely from the Semitic-p and -’em from Semitic-kw.

Third person UA pronouns also contain numerous reflections of Semitic 3rd person pronouns:

107/108	Sg: he/she, him, his	109/110	Pl: they/them/their
Hebrew/Semitic	hu/huwa ‘he’; hi/hiya ‘she’; -o ‘him/his’		hem, hum, -am
SP	huŋwa		humwi
Yq	hu ‘that’		hume ‘those’; ’am, -ame
Ca	he-, hi-		hem
Tr	hu / u	Hopi	-’am

107 Hebrew/Semitic hu’/huu/huwa ‘he’

UACV-2668 ***hu** ‘that’: I.Num018 *u(sï(N)) ‘that’; KH/M06-dm2: My hu’; SP uŋwa ‘he, that one’; first u- of NP usu; Cm usï ‘that, that one (removed, definite)’; CU u/uru ‘that, those, it’; Tb undugal ‘that, that one’; Pl uni (vowel is wrong, notes Hill). Add Op hu (ju in Spanish orthography) ‘that one’ (Shaul 2007).

108 Hebrew huu ‘he’ is also used as a copula verb in a position to make it seem like ‘is’ of English: e.g., Hebrew ha-’adam huu ’ab-i (literally: the-man he father-my) or ‘the man is my father’. Tr and other UA languages have this *hu* doing both roles: ‘he/that’ and ‘is’ between nouns. Tr **hu / u** ‘is’ is thought to be a participle of ni-ma ‘be’ but between nouns it was reinterpreted from ‘John he the man’ to ‘John is the man’.

109 Hebrew hum / hem ‘they, subject pronoun’:

UACV-2666a ***(h)ïmï** ‘they’: M88-pr8; KH/M06-pr8: NP ïmï; Kw imï; CU umïs; Pl yehemet. Two forms exist—hum and hem—but -am (below) has a distinct vowel, no h, and must be a suffixed object or possessing pron.

110 Hebrew -am ‘them/their, object suffix, or possessive suffix’:

Hopi -’am ‘their’ is analyzed as -’a-m the -m being a pl suffix; My -am ‘them’; Yq ’am- ‘direct obj [them], de la 3rd pl [their]’; Yq -’ame-u ‘a ellos [to them]; Yq -’ame-mak ‘con ellos [with them]’.

Note also that CN pronouns align well with Semitic pronominal impfv verb prefixes, of the verb ‘be’ no less:

	Hebrew/Semitic sg		Hebrew/Semitic pl	maghrib Arabic	Classical Nahuatl
1st	’e-/’a-	‘I (verb)’	ni-/na- ‘we (verb)’	n- ‘I verb’	ne’wa / nehwa ‘I’
2nd	ti-/ta-	‘you sg (verb)’	ti-/ta- ‘you pl (verb)’	t- ‘you verb’	te’wa / tehwa ‘you, sg’
3rd	yi-/ya-	‘he (verbs)’	yi-/ya- ‘they (verb)’	y- he verbs’	ye’wa / yehwa ‘he’

The Classical Nahuatl (CN) singular pronoun series—nehwa (I), tehwa (you), yehwa (he)—parallels the imperfective of the Aramaic ‘be’ verb—’ehwe, tehwe, yehwe. Though the Nahuatl 1st person (nehwa ‘I’) differs from Semitic ’e-, the n- of the CN form is analogically like the fundamental n- of most Semitic ‘I/me’ forms. In fact, the maghrib Arabic dialect did the same thing, that is, analogized the impfv verb prefixes to be n-, t-, y- (Goldenberg 2001, 86), like the Classical Nahuatl singular series did also—nehwa, tehwa, yehwa.

111 Aramaic **tehwe** ‘you are’: **UA**CV-2661 ***tï / *tïhwa** ‘you sg’: KH/M06-pr2: CN te’ / te’wa(tl) / tehwa(tl); Pl taha. Add Sr t ‘you sg’ (Ken Hill, Serrano Sketch, 2001). [NUA: Tak; SUA: Azt]

112 Aramaic **yehwe** ‘he is’: **UA**CV-2663 ***yïhwa** ‘that, he, she’: CN (y)e’ / (y)e’waa / yehwaa / (y)e’waatl (pl. (y)e’waan /(y)e’waantin ‘that one, he, she, they’); Pl ya, yah ‘he, she, it’; Pl ye(e)met ‘they’. [SUA: Azt]

113 Semitic/Aramaic lik ‘to you, for you’: Tb liŋ ‘I (subject) + you (sg, object)’

114 One UA 3rd person sg pronoun appears similar to the Egyptian demonstrative Egyptian **p’y** ‘this, that’ (Allen 2000, 54): **UA**CV-2669 ***pa / *pï/pï’/pï’ï** ‘he/she/it, that, 3rd person sg’: BH.Cup *pə ‘that’; KH/M06-dm3: NP pï ‘him, her, it’; Cm pï ‘him, her, it’; Ca pe’ ‘he/she/it’; Cp pə/pə’/pə’ə ‘he/she/it’ (pointing to s.th. remote from the speaker); Sr vï’ ‘3rd person sg subject element in compound subj-obj pronouns’; Sr pat; pï- ‘3P prefix on postpositions’ (e.g., pïhpa’ ‘on him/her/it’; pïmia’ ‘with him/her/it’); pïï-/pïïr-/puu- ‘their’ (possessive prefix); pana’ ‘like that, that way’; Ls póó’ (acc. póy, pl. pumóm) ‘that; he, she, it’ (Ls o < *ï; thus Ls po’ < *pï’); Gb paráma’ (acc. pára, pl. pámo) ‘aquel’; Tb -p ‘3rd person pl possessive pronoun’; Tb also has other 3rd person hints of initial p- pronominal elements, like Tb paaim ‘some, others’ (Voegelin 1935, 180); Hp pan ‘like that, that way’ and also

Hopi:	subj	obj
Sg	pam ‘he/she/it’	pït ‘him/her/it’
Pl	pïma ‘they’	pïmïy ‘them’

Add Wc p- ‘it, obj, e.g., p-áine ‘lo dice’ vs. (h)áine ‘dice’. It is common, by the way, for demonstratives to become 3rd person pronouns and vice versa, as happened in Latin, etcetera. [NUA: Tak, Hp; SUA: CrC]

4 The Egyptian in Uto-Aztecan

I am not the first to suggest similarities between Egyptian and Uto-Aztecan. Cyrus Gordon, the internationally renowned Semiticist and pioneering authority in Ugaritic (a Northwest Semitic language), published the nearly identical words for crocodile in Egyptian and Nahuatl (Gordon 1971, 135):

115 Egyptian **sbk** 'crocodile, the crocodile-god **Sobek**' and Classical Nahuatl **sipak**-tli 'crocodile' (Gordon 1971, 135). The two are impressively similar enough; however, what Gordon did not know is that because UA *u > CN i, the first vowel (CN i) could be from either UA ***supak** or ***sipak**, the first of which is identical to the probable original Egyptian voweling. Egyptian, like Semitic, originally had only three vowels—a, i, u—so the Greek transcription Sobek points to an original Egyptian voweling of ***subak**, or exactly the one proto-Nahuatl option. In addition, dozens of other examples establish the sound change of Egyptian and Semitic b > UA p. So the match was closer than Cyrus Gordon ever knew:
Egyptian **sbk**, Greek **Sobek**, and UA ***supak** / *sipak. 400 more Egyptian-UA similarities follow. [e1s,e2b,e3k]

In considering the lexical similarities between Egyptian and UA, it is important to keep in mind that ancient Egyptian only wrote the consonants, not the vowels. So when we compare the Egyptian passive suffix -w and the UA passive suffix -wa, they are as close a match as can be expected.

Before moving to more lexical (word) parallels, consider first some grammatical parallels.

4.1 Uto-Aztecan Morphological and Grammatical Parallels with Egyptian

Passive/stative structures in	**Egyptian**	**Uto-Aztecan**
		verb-a 'active or transitive verb'
116 Egyptian old perfective/stative	verb-i	verb-i 'intransitive/ passive/ stative verb'
117 Egyptian passive	verb-w/-iw	verb-wa/ verb-iwa
118 Egyptian passive	verb-tw	verb-tu / verb-tuwa
119 Egyptian stative suffix	verb-ti	verb-ti (WTr, Numic, others)

Passive and stative (the existing state that follows or results from a previous verbal action) are often overlapping and closely related concepts: e.g., 'it was done' (passive) and 'it is done' (stative). There is also an association between a present state (stative) and past action (sometimes transitive): e.g., the little boy is now seated, because he sat down or his mother sat/set him down.'

116 Consistent with such phenomena, the Egyptian stative was also called the old perfective, in fact, was originally a perfective which became a stative (Allen 2010, 206-7; Gardiner 1969, 234-8). The stative of Old Egyptian 3rd person masc sg and pl verbs ended with -i, whether it was a suffix or a change of the last vowel to **-i** to make it stative. That final -i later changed to suffixed -w, but was originally -i. This suffix was more stable on verbs that already ended with -i, caused a fusion of the two for a longer stronger i + i = y: mry/mrii '(be)loved'; iry/irii 'done'; msy/msii 'born.' (Allen 2000, 202-3; Loprieno 1995, 65,67; Gardiner 1969, 235, 237).
Like the final -i of the Egyptian stative, UA languages in every branch exhibit final -a for transitive or active verbs and final -i for intransitive, passive, or stative verbs (Langacker 1977, 132):
UACV-2703 ***-a/-i** 'vowel alternation on the end of verbs such that *-a 'transitive, active' and *-i 'intransitive, passive, stative' (Sapir 1930, 73, 143; Whorf 1935; Langacker 1977, 132; Dakin 1982):
Cr -i 'stative suffix' (Casad 1984, 159);
Wc sana 'romper [break]'; Wc sani 'roto [broken]';
Yq -i 'stative suffix' (Estrada Fernández et al 2004, 399);
Wr has transitive verbs ending in -a with corresponding intransitive verbs ending in -i (Miller 1996, 130):
Wr co'a 'put out fire'; Wr co'i 'be no fire';
Wr wela 'put upright/standing'; Wr weri 'be upright/standing';
Wr mo'a 'put pl obj's inside'; Wr mo'i 'enter, pl subj's';
Wr sa'wa 'cure s.o., alleviate s.th.'; Wr sa'wi 'be alleviated, go away';
Tr also has such pairs of verbs' (Hilton 1993, 139):
Tr mana 'put, place, set'; Tr mani 'be (in/at a place), exist';

Tr bi'wá 'clean it'; Tr bi'wí 'be(come) clean';
Tr čiwá 'stick s.th., vt'; Tr čiwí 'be stuck, vi';
CN also has such pairs of verbs (Sullivan 1988, 171):
CN tla-tema 'fill, place s.th.'; CN temi 'be full, be lying down';
CN tla-kotona 'break s.th.'; CN kotoni 'be broken';
CN tla-mana 'put s.th. on the floor'; CN mani 'be stretched out, extended';
CN tla-toma 'undo s.th.'; CN tomi 'be undone'; and so does Tbr:
Tbr towa 'leave s.th. behind, vt'; Tbr towi/tovi 'stay, remain, vi'.
Nv vurha 'atar [tie], vt'; Nv vurhi 'atado [tied]';
Nv tuha 'moler [grind], vt'; Nv tuhi 'cosa molida [something ground]';
Nv virioka 'desatar [untie]'; Nv virioki 'cosa desatada [something untied]';
TSh sawa 'boil, vt' and TSh sawi 'melt, vi'; and others;
SP muntunaa 'cover oneself' (active); SP muntun'i 'be covered' (stative) (Sapir 1930, 73, 143);
SP yauqqwa 'push in'; SP yauqqwi 'go in, set (of sun)'; SP yunna 'put down (pl objs)'; SP yunnia 'fall, drop down, pl';
SP ton'na 'strike, hit, vt'; SP ton'ni 'shake, vi'; SP ova 'pull out hair, vt'; SP ovi 'come out (of hair), vi'
SP pačá'a 'fasten s.th., vt'; SP pačá'i 'hang, be fastened, vi'; SP münišša 'turn over, vt'; SP münišši'C 'turn over, vi';
SP tuġwa 'put fire out, vt'; SP tuġwa / tuġwi 'fire goes out, vi'
WMU spæ'naa-ti'(i) 'flatten, vt'; WMU spæ'ni 'flat, stative/adj'
WMU -'nűga-y 'put in, stick in'; WMU nűġi 'wear, be put in, be in'
WMU tuġwá-y 'put fire out, vt'; WMU tuġwí- 'fire went out by itself, is gone out (stative/past)
Hp -iwa 'passive suffix' eliminates final -a of transitive verbs, so it is likely -a > -i with added -wa:
Hp paata 'melt, vt' vs. Hp paati 'melt, vi'; Hp aama 'bury, vt' vs. aamiwa 'was buried';
Hp maqa 'give' vs. makiwa 'was given' (Ken Hill 1998b, 881);
Tb -(i)w 'passive'; like Hp, the examples show -i of -iw changes verb final -a > -i (Voegelin 1935, 99);
ST taapna' 'partir [part], rajar [split], vt'; ST taapñia' 'partirse, rajarse [part, split], vi'.
Ls has this feature, but somehow reversed it to -a being intransitive/passive and -i being active/transitive.
Some languages have the final -i vowel as the perfective (having been done) rather than stative (is done):
Ca -'i 'realised' (Seiler 1977, 138-40).

Some UA languages have final -i as the perfective of Egyptian's old perfective more than the stative:
Cm -i 'completive suffix on verbs' (Charney 1993, 142-3).
TO -i 'perfective is marked by a final vowel change to -i' (Langacker 1977, 131);
Op -i 'perfective changes final -a to -i' (Shaul 2003, 25);
Eu -i 'the final stem vowel changes to final -i for the Eu preterite [past tense] in many, if not most Eu verbs, vs. Eu -a-n 'present indicative verb ending':
Eu hipra-n 'watch over, care for' vs. preterite: hipri 'watched over, cared for';
Eu maka-n 'give' vs. preterite: maki 'gave';
Eu taha-n 'burn' vs. preterite: tahi 'burned';
However, some Eu verbs show an -a transitive and -e intransitive distinction (e being halfway from a to i in position), as well as the -i preterite for both:
Eu wehra 'stand s.th. up, vt' (pret: wehri); Eu wehre 'stand up, grow, vi' (pret: wehri);
Eu pitása 'smash, flatten, vt' (pret: pitási); Eu pitáse 'be/get flattened' (pret: pitási).
[NUA: Hp, Tak, Num, Tb; SUA: Tep, TrC, CrC, Azt]

117 Another passive in Egyptian is the verbal suffix Egyptian -w (Allen 2000, 290; perhaps a development of the 3rd masc sg stative -w; Allen 2000, 202; Loprieno 1995, 83-88; and Gardiner 1969, 234-8); the form more fully may have been Egyptian -iw (Loprieno 1995, 53): similarly several UA languages show a passive suffix of *-iwa or *-wa:
UACV-2677 ***-wa / *-i-wa** 'passive': Langacker 1976b, 143, 148-50, *-wa; Heath 1998:
Hopi -iwa 'passive suffix' also appears as -iw/-il/-w/-l/-wa (Hill 1998, 881);
Tb -i-wa 'passive and impersonal suffix' (Voegelin 1935, 99-100; Langacker 1977a, 47);
CN -i-wa 'passive suffix' some verbs that end in -i take -wa (Sullivan 1988, 74);
CN -o 'passive suffix' also similar to Egyptian -w (Sullivan 1988, 74);
My -wa 'passive suffix' (Collard and Collard 1984, 209); Wr -wa 'passive suffix' (Miller 1996, 143);
Tr -wa / -riwa 'passive suffixes' (Brambila 1953, 90); Eu -wa/-u 'passive suffix' (Lionnet 1986, 37);
Yq -wa 'passive suffix' (Dedrick and Casad 1999, 283); Cr -(i)wa (Langacker 1976b, 143);
Tbr -iwa 'pasivo' (Lionnet 1978, 55)
Wc -wa (Langacker 1976b, 143).
The -i- (preceding -wa) in Hp, Tb, Azt is likely the pervasive UA stative/passive -i suffix above.
[NUA: Hp, Tb; SUA: TrC, CrC, Azt] [e2w]

118 Egyptian **-tw** 'impersonal 'one' or passive suffix on verbs' (Allen 2000, 177, 228, 264, 302; Gardiner 1969, 41); Tr **-ru / -tu** 'passive suffix' (Brambila 1953, 90, 95); remember intervocalic *-t- > -r- or -l- is common.
Wr -re-ru / -ri-ru 'passive of remote past tense' probably -ri- (past) + -tu 'passive';
The Suffix *-tu occurs in other UA languages as well, to be listed.

119 Egyptian **-ti** 'stative suffix for 2nd person singular and for 3rd person feminine singular (Allen 2000, 67, 202; Gardiner 1969, 234), just as the 3rd masculine singular forms are often generalized throughout a language, the 3rd fem. sg and 2nd sg forms cover about one-third of the pronominal slots and could also have become generalized in UA.
UACV-2699 ***-ti / *-tï** 'stative or resultative suffix, adjective suffix':
CU -tï 'a suffix to derive adjectives from verbs' (Givon 1980, 30-31);
Hp -ti 'realized suffix, verb is realized (Ken Hill 1998, 879); WTr -ri/-li 'stative/passive/participial suffix';
My -ri 'past participle': e.g. My yáa-ri 'is done' (Collard and Collard 1984, 208) or Cah *yara 'do'; Cah *yara-ti 'done';
Cm -tï 'predicate suffix with adjectives' (Charney 1993, 146, 198, 201);
SP -ttï 'passive' (Sapir 1930, 146); Wr -wari 'passive suffix' (Miller 1996, 143) probably < *-wa-ti;
CN -ti- 'derives adj's from verbs' (Sullivan 1988, 145). [NUA: Hp, Num; SUA: TrC, Azt]
Tr -rati 'passive suffix of past tense' (Hilton 1993, 138) the -ti portion compounded with something else;
Sr -iç 'resultative suffix' (Hill 2001, 3); likely -iç < *-iti-, with loss of final vowel. [NUA: Num, Tak, Hp; SUA: TrC, Azt]

120 The -n of the Egyptian sdm.n.f structure or -n suffixed to verbs for the narrative past, present perfect, and sometimes used for present:
Eu -n 'verb suffix of present indicative singular' (Anonymous 1981, 62)
TSh -nna 'the general aspect/tense verb suffix (Dayley 1989, 55-57); Sh -nu 'past, completed slowly' (Crapo 1976, 7);
Cm -n 'completive verb suffix, followed by 2nd happening' (Charney 1993, 145).[NUA: Num; SUA: TrC] [e2n]

121 Egyptian **i-** or **ip-** 'plural prefix on old demonstrative pronouns' (Gardiner 1969, 85; Allen 2000, 53) as in Egyptian pn, pw, tn, tw 'this'; ipn, ipw, iptn, iptw 'plural, these.'
Tr **i-** or **ip-** 'plural prefix': Tr čabóči 'spider'; Tr ičápoči 'spiders';
Tr siríame 'local/tribal leader, governor'; pl: isérigame 'leaders' (Brambila 1953, 14, 15)
Tr bineri 'alone, only, sg'; Tr a'wineri 'alone, only, pl' (< *appineri, Stubbs 1995, 413)
Tr a'wineri shows a different initial vowel than i-, but because Tr -'w- reflects *kw, which can reflect a gemination of *-pp- (and Tr b < *p), so *ip-pineri or *ap-pineri > Tr a'wineri. Tr kapitano 'boss, captain' from Spanish capitán with its plural Tr ikapitane shows that this plural prefix is still productive in Tr.

122 Egyptian **pw** was originally a demonstrative pronoun 'this/it' later 'he/they' and came to be used for emphasis or a topicalizer, always in 2nd position in specific structures: A-pw B 'it is A who is B / A is B' or A-pw verb 'it is A who verbs' (Allen 2000, 72-3, 334; Gardiner 1969, 103-4, 143):
UACV-2664 ***po/pu** 'he, she, it, 3rd sg': Ls -pu-; Wc pï-; and My -po. Mayo -po is suffixed to Mayo pronouns with no apparent meaning other than adding emphasis to the Mayo pronouns (Collard and Collard 1984, 214), yet is in exactly the expected position to be the old fossilized Egyptian -pw, which is also a structure for emphasis. Compare the Mayo enclitic subj pronouns (1st column) and emphatic pronouns (2nd column):

	Nominative pronouns	(Mayo) Emphatic pronouns
I	-ne	inapo
You, sg	-'e	empo
He/she/3rd sg	--	aapo
We	-te	itapo
You pl	-'em	eme'e
They	-mme/-em/-m	bempo

Note how Mayo **ina-po** aligns with Syriac **'inaa / naa** 'I'
Ls yixél**vu**-l 'intelligent, alert': this Ls form fits perfectly the Egyptian iqr-pw 'he (pw) is one excellent / capable' as a fossilized form (Allen 2010, 79); Cr pu '3rd person sg subject particle' (Casad 1984, 297).
Wc pï 'it/he': e.g., Wc šasúni 'verdad' vs. Wc pïšasúni 'es la verdad' and so Wc pï < UA *pu
Wr puu 'that'; Tr mapu 'relative pronoun, which, what' (< ma-pu, or Egyptian m-pw 'it is what/that which').
In Tr, the -pu element is actually isolated to mean 3rd person pronouns:
Tr ke-ne 'my' (-ne = I); Tr ke-mu 'your, sg' (-mu = you, sg); Tr ke-tumu 'your, pl' (-tumu = you, pl);
Tr ke-**pu** 'his, her, their'; thus, -pu is isolatable as a 3rd person pronoun (Brambila 1953, 33)

Ls ’itéŋvu ‘hot spring’ (’itéŋ- ‘hot’); Ls -tó’ma ‘wife’; Ls -tó’ma-vu ‘husband’.
Kw pu-/pï- ‘relative pronoun’ (Zigmund et al,127).
Kw wižavu-vï with *-pu suffix as *wicca- is the stem in the rest of Numic (1084)
SP pï- ‘whom, which, what, relative pronoun’ (ï < *u); Tb pïkanan ‘one doing’ < pw q/kana
Eu sisvi wecát ‘awl’ and Eu vusiven ‘awl’;
(1146) Aramaic tek / tikk-aa ‘twisted cord, chain’ > *tikkaa-pu: Mn tïǧápo ‘rope’; NP tïgapu ‘rope’.
Tb(H) allaawat ‘to talk, speak’; Tb(H) allaawappïï-l ‘speaker’ (< *haddabbar-pw); Ls ’ayákvu ‘rubbish’
UACV-918 **wiCca / *wiCtaC ‘calf of leg, lower leg’: NP kwiddza (< *kwicca/*kwiNca) ‘calf’ (w > kw);
TSh wica-ppï ‘calf, lower leg’; Cm ta’wiica ‘calf’; Kw wižavu-vï ‘calf’; Ch(L) wiča ‘calf of leg’; SP wica ‘calf’; CU wicá-vi ‘calf’. Note the extra *-pu-/-vu- suffix in Kw wiža-vu-vï also frequent in Ls.

123 Reduplication in verbs signals notions of imperfective or ongoing activity, repetitive and/or durative aspect in both Egyptian and in Uto-Aztecan. Langacker notes that “virtually every UA language displays verbal reduplication of some kind” (Langacker 1977, 128). While most reduplication in UA is of the initial syllable—kapa > kakapa > kakpa—Langacker also notes that final reduplication (i.e., 2nd syllable) associated with repetitive aspect or similar notions is found in at least Mn, Hp, and Tb; and lexicalized remnants are found in SP and TO (Langacker 1977, 128). Egyptian usually reduplicates the 2nd consonant—mri > mrr—and sometimes a bi-consonant syllable mnmn. Reduplication also serves to form the plural of nouns in some UA languages. For reduplication in various UA languages, compare Tb (Voegelin 1935, 109); Eu (Lionnet 1986, 28); and many more.

4.2 The Sound Correspondences between Egyptian and Uto-Aztecan

Egyptian	**became**	**UA**
’ (glottal stop)	>	w or other round vowels o/u, at times with glottal stop: o’o/u’u
i/y	>	i/y
ʕ (voiced pharyngeal)	>	w/o/u
b	>	p
p	>	p
f	>	p in initial position, medially -p- when doubled, - w- when not
m	>	m
n	>	n
r	>	t in initial position; r usually elsewhere, sometimes i/y as in Egyptian itself
ḫ (v’less pharyngeal)	>	hu/o/w
x	>	k
h̲	>	h/ø or ’/ø in a cluster
h	>	h/ø or ’/ø in a cluster
s	>	s
š	>	s
q	>	k
k	>	k
g	>	k
t	>	t
t̲	>	t
d	>	t
d̲	>	s

The Egyptian consonants w, p, t, k, s, m, and n have generally remained as such in UA. As in the Hebrew correspondences, the Egyptian voiced stops b, d, and g became devoiced to merge with the voiceless stops: Egyptian b, d, g > UA *p, *t, *k. As in the Hebrew correspondences, š and s are not distinguishable, but have merged to UA *s. Egyptian t̲ > UA *t should not be surprising, since the same happened in ancient Egyptian, resulting in alternate forms for many words: Egyptian **t̲ >** Egyptian **t** in t̲w/tw ‘you’; t̲wn/twn ‘rise, raise’; t̲bwt/tbwt ‘sandal’. Egyptian q > UA *k is also similar to a later Egyptian change. Most interesting is Egyptian d̲ > UA *s, since Egyptian d̲ corresponds to the Hebrew and Semitic emphatic / pharyngealized ṣ, which also became UA *s in the Semitic-p in UA. The glottal stop (’) and the voiced pharyngeal fricative (ʕ), like the Semitic-p-UA correspondences, correspond to rounding in UA, w between vowels or o/u adjacent to consonants (see 2.9); sometimes a glottal stop also appears with the rounding. The Egyptian voiceless pharyngeal fricative ḫ (like its Hebrew/Semitic counterpart) becomes hu/ho in initial position, and rounding (w/o/u) elsewhere, much like the other pharyngeal ʕ. The voiceless velar fricative, transcribed here

as x, became k, as it sometimes did in Coptic (Egyptian xnfy > Coptic kanufi ‘fish, sp.’; Egyptian x’ʕ > Coptic ko ‘place, abandon’), and as Proto-Semitic x became *k in Uto-Aztecan’s p-NWSem also. In fact, some Egyptian x > Egyptian k as early as the 20th dynasty (Cerny 1976, 52). Egyptian ḫ and h, like h in most languages, are often easily lost: e.g., silent *h* in English *hour* and *honor*, and in Spanish *hora* and *hablar*. Yet both ḫ and h appear often enough, or as glottal stop when they are the first consonant in a cluster.

In Middle Egyptian itself, **medial glottal stops** are rather unstable. For example, many pairs of alternate forms have one form showing the glottal stop while the other does not: Egyptian s’b/sb ‘jackal’; Egyptian b’gsw/bgsw ‘dagger’; Egyptian bt’/bṯ ‘run’; Egyptian f’k ‘be shorn, v’; f’k ‘shorn man’; Egyptian fkty ‘shorn priest’; Egyptian dg’i/dgi ‘hide’; Egyptian dg’i/dgi ‘look, see’; Egyptian dg’yt/dgyt ‘staring’; **Other variant forms** appear in Egyptian as well: drgyt/dgyt ‘bat’; gf/g’f/gwf ‘monkey’; bnr/br/bl ‘eyeball’; Egyptian **mhr/mhi** ‘milk-jar’; Egyptian mtr/mti ‘fame, renown’. Notice in Egyptian g’f / gwf ‘monkey’ a correlation between ’ and w, as in the Egyptian/Semitic to Uto-Aztecan also.

At the end of the introduction to Egyptian, see the explanation for the two Egyptian dictionaries cited in this work—Egyptian(F) and Egyptian(H). When available in Cerny’s Coptic Etymological Dictionary (1976) or Loprieno (1995), the Coptic forms are listed following the Egyptian forms. The Coptic forms are often a phonological distraction from the better match between Egyptian and UA, yet they are included; but keep in mind that Coptic often has different sound changes than in UA, such as no rounding for pharyngeals, Egyptian x > Coptic š rather than Egyptian x > UA *k, Egyptian ḏ > Coptic t/j vs. Egyptian ḏ > UA *s, etc.

UA often preserves Egyptian phonology better than Coptic: e.g., UA *itu’i ‘steal, take’ preserves all three consonants of Egyptian iṯ’ ‘steal’ whereas Coptic ji has only one. Note also Egyptian šm ‘go, walk, leave’ and UA *sima 'go, leave’ vs. Coptic še. Of Egyptian’s original three vowels—a, i, u—UA forms are often nearer those three vowels than Coptic: (133) Egyptian sbty ‘enclosure’ and UA *sapti vs. Coptic sobt; (243) Egyptian nbi ‘burn, flame’ and UA *napi ‘fire’ vs. Coptic neme ‘fire, glow’.

124 Egyptian(F) **tks** ‘pierce’; Coptic tooks:
UACV-616 ***tïkso** ‘pierce, poke’: Eu tékso 'pierce, prick, sting, v'; Eu hi-tekso-rat 'hiking staff/stick, v' [with which one pokes the ground]; Op tesso-a 'puncture, v'; Tr teso 'lean on a hiking stick, v’. [SUA: TrC] [e1t,2k,3s]

125 Egyptian(F) **km** ‘black’; Egyptian(H) **km** ‘schwarz / braun sein [be black / brown]’;
Coptic kame ‘black’; kmom ‘become black’:
UACV-1070 ***kuma** > ***koma** ‘dark, gray, brown, black’; B.Tep108 *koomagi 'gray,'; M88-ko33: Hp qöm-, qöm(a)- ‘be black, dark’ (Hp qöma also corresponds to UA *koma, since Hp ö < PUA *o and in Hp *k > q/_ö);
TO koomagi ‘(be) gray, (be) dim’; PYp koomagi ‘gray, brown’; PB koomïg/koomag; NT koomagi ‘gray, brown, dark’; ST kooma’ ‘gray, discolored, dirty.’ Egyptian km means two colors (black, brown), both of them, fitting well with the UA meanings of ‘black, brown, gray, and dark color’. Both gray and brown (Tep) are dark (Hp). This also likely ties to CV-501 *(si)kuma ‘cloud(y)’: B.Tep65 *hikomagi 'cloudy'; NP kummibï ‘cloud’. Willet lists ST kooma ‘discolored, dirty’. Note also PYp kuumlik ‘dirty’. Both NP and PYp show u, which assimilated to o in the other languages. [NUA: Hp, Num; SUA: Tep] [e1k,e2m]

126 Egyptian(F) **nmi** ‘travel, vi, traverse, vt’: Egyptian(H) nmi ‘reisen [travel], gehen [go], fahren [travel], durchziehen [pass through], vi, befahren [travel over], vt’:
UACV-1012 ***nïmi** ‘walk around, live’: Sapir; VVH171 *nïmi ‘walk around, live’; M67-263a *nem-i ‘live’; I.Num123 *nïmi / *nïhmi ‘walk, wander, live’; KH/M06-nï9: NP nïmmi ‘walk’; TSh nïmi ‘one moves’; Sh nïmi ‘live’; Cm nïmi ‘move about, walk, sg’; Ca ném ‘walk around’; Ca némi ‘chase, follow tradition’; Ls nónmi/nóónumi ‘follow’; Gb noŋí ‘andar’; Sr nïm/nïmï- ‘walk, walk around, walk along’; Sr nïhnïm ‘be walking (around)’; Sr nïmiin ‘chase’; Ktn nïm ‘walk, vi, walk on, vt’; Hp -nïma ‘go around doing s.th., circumgressive suffix’; CN nemi ‘live’; CN ne’nemi ‘wander about’; Huastec Nahuatl nemi’ ‘walk’; Pipil nemi ‘be, exist’; and in Jane Hill (2005) are Cp nənə- ‘walk around’ as well as Cp nemin ‘follow’ (Hill and Nolasquez, 1973) Cp nenmi ‘chase’ (like Ca) and Cp nénewe ‘walk’ with a problematic -w-. But Num sometimes does have -w- < *-m-, so note Mn nïwimoo ‘go about as a group’ and TSh nuwi ‘walk around, roam, wander, live (in traditional lifeway)’, durative nïmmi. The main reason for wandering was hunting and gathering, the traditional livelihood, so it also came to mean ‘live traditionally’. The reduplicated forms often meant ‘chase/follow’ from non-reduplicated ‘walk’. Note Gb noŋí, with a velar nasal likely from a cluster created by reduplication (as in Cp nénewe, Cp nenmi, or Ls nónmi) then syncope: *-nw-/-nm- > -ŋ-. John Gee (p.c.) mentions that this Egyptian term dropped out of usage rather early, yet the UA infusion may not be from later forms, or may be from a dialect that retained it. UA shows Old Egyptian forms in the stative -i (116) and pl prefix i-/ip- (121) also. [NUA: Num, Hp, Tak; SUA: Azt] [e1n,e2m,e3i]

127 From the verbs Egyptian nmi ‘travel, go’ > UA nïmi ‘walk around, live’ came a UA noun form ‘wanderers, Native People, those who live by walking about, i.e., hunting and gathering’:
UACV-1415 ***nïmï / *nïmi** ‘person, Amerindian, (or specifically) Numic person’: I.Num122 *nï(h)mï ‘person, Indian’; M88-nï10 ‘person, Indian’; KH/M06-nï10: Mn nïmm(ï), nïïmï’; NP nïmï ‘Indian’; TSh nïmï ‘person, people, human, Indian’; Sh(M) nïwï ‘person, Indian’ (vs. Sh(M) nïmi ‘move around, roam, make a living by hunting and gathering’); Sh(C) nïmï / nïmi ‘Indian’ (and Sh(C) nïmi ‘live, wander, travel’); Cm nïmï; Kw nïwï; Ch nïwï; SP nïŋwï; WMU nuu-č*i* ‘Ute’; CU núu-ci ‘Ute, person’. Add Ktn nïmihuŋ ‘wife’, pl: nïmihuŋam (< *nïmi-suŋa ‘man’s-girl/woman’), as it shows this morpheme in a compound. Add initial nïm’- of Tb(H) nïm’mïï’k|at ‘kill a human, murder, vt’. These *nïmi forms are the source of the term “Numic” and derive from *nïmi ‘walk around, live (traditional life, of hunting/gathering)’ as a ‘living one, person, doer of traditional life’. A change of intervocalic *-m- > -w- is consistent throughout SNum and appears in the closer/inner Numic languages of the other branches. [NUA: Num, Tak, Tb]

128 Egyptian(F) **nmi** ‘travel, vi, traverse, vt’: Egyptian(H) nmi ‘reisen [travel], gehen [go], fahren [travel], durchziehen [pass through], vi, befahren [travel over], vt’:
UACV-590 ***nami** ‘cross (river), traverse (an area, etc.)’: Ca nami ‘cross (road, river), go over’; Cp name ‘cross over, vt’; Cp name ‘race, vt’; Ls naama/naami ‘go across, pass over, wade, play in water, vi; cross an area, vt.’

129 Egyptian(H) **wnš** ‘Wolfs-schakal (Canis aureus lupaster) [wolf-jackal]’; Egyptian(F) **wnš** ‘jackal’; Coptic: woonš ‘wolf’; Egyptian(H) wnšt ‘Wolfs-schakalin, f’; Egyptian(H) **wnšiw** ‘Wolfs-hund’:
UA ***wancio / woncia** ‘fox’; the consonant clusters -ns- vs. -nc- are quite indistinguishable, like the English homophones *sense* and *cents*, or *once* and *wants*; thus, the following UA forms are good matches. Note Egyptian wnšiw and UA wancio. The other UA form aligns with the f. singular ending in -(a)t (UA *wancia) with the final t left off as usual:
UACV-572a ***wanci’a** 'fox': Fowler83 *woci’a: NP wacia’a 'fox'; TSh wocia; Sh wocia; Kw woziya; Ch oncia; and SP paonci ‘beaver’ may be a compound of ‘water-fox’. Note that Ch and SP show the nasal and thus the full cluster. Furthermore, intervocalic PUA *-c- > -y-; therefore, these -c- must be from something else, and a *-nc- cluster serves well; and NP and Kw show *a*, suggesting the adjacent w influenced a vowel change from *a > o in the others.
UACV-572b ***wacio > Tep *gasio > *kasi** 'fox': B.Tep96 ***kasio** 'fox'; Fowler83; M88-ka22 'fox'; KH/M06-ka22: TO gaso; Nv kaš; PYp gas; NT kašió; ST kašio. Miller combines these with *kawasi; however, the s in the rest of UA should be h in Tep, and the *w should be g, but does not exist. The Tep forms better belong with *wanci’V as paired here. Bascom reconstructs initial *k, yet two of the five Tep languages show g instead of k, which allows *waci > Tep *gasi, followed by devoicing of initial g in Tep *gasi > *kasi. Devoicing of an initial voiced consonant is more likely than voicing of an initially devoiced consonant in the two Tep languages, and the *wa(n)ci’a forms in Num also agree with that reconstrcuction. In fact, we should not be surprised at Tep lacking the nasal, because the nasal in the -nc- cluster in Num appears in only 2 of the 6 languages, and Tep typically shows fewer nasals than Numic. Given that and the division g/k more likely being from g < *w in initial position, Tep *gasio (< *wacio) and Num *wanci’a agree through the first four segments. [devoicing of initial *w > Tep *g > k] [NUA: Num; SUA: Tep] [e1w,e2n,e3s1]

130 Egyptian(F) sn ‘brother’; Egyptian(F) **snw** ‘companion, fellow, equal’: Egyptian(F) **snw** ‘brothers’; Egyptian(H) snnw ‘der Zweite [the second], der Andere [the other], Genosse [companion]’; Coptic **son** ‘brother’; pl: **snew** (Loprieno 1995, 46; Cerny 1976, 154; Lambdin 1983, 271):
UACV-659 ***sïnu** ‘another, different’: Tr se*nu ‘another, different one’. Tr se*nu aligns with Yq sénu/séenu ‘one, other,’ AYq seenu ‘one, someone,’ and My seenu ‘one’. Add Hopi sino ‘person, individual, human being, man’; Cm seni ‘different ways, various ways’. Uto-Aztecanists have put TrC *sïnu forms with *sïmï ‘one’, but things like Cm sïmï 'one' vs. Cm seni suggest different forms. At ‘one’ in UACV-2619 ***sïnu** ‘one’, the TrC forms (Yq, My, AYq seenu/senu ‘one’) belong with the above. [NUA: Hp, Num; SUA: TrC] [e1s3,e2n]

131 Egyptian(F) **šm** ‘go, walk, set out, leave’; Coptic še:
UACV-1011 ***sima** ‘go, leave’: VVH69 *simi/*sima to go; B.Tep66 *himïi ‘to go’, *hii ‘he went’; M67-198 *simi / *sime; L.Son241 *simï/sim-i; M88-si3; KH/M06-si3: TO him ‘move along, progress, walk’; LP himï; PYp hime; ST himču; Wr simi-ná ‘ir [go], andar [walk]’; Tr si-mea, sima-ma, simí ‘ir [go], irse [leave]’; Tbr sem- / -seme- / simi- / -sim- ‘ir, irse’; My siime ‘irse’; Yq sim. Add Cr sin ‘durative morpheme’ (final m > n in Cr): *sima > sim > sin. [e1s1,e2m] [SUA: Tep, TrC, CrC]

132 Egyptian(F) **sbq** ‘calf of leg’:
UACV-952a ***sipika** ‘lower leg’: Ls ṣivíiqa-t ‘lower leg’; Ca sivíqa-t ‘lower leg’; Cp sivisívi ‘calf of leg’.
UACV-952b ***sapa** ‘lower leg, calf’: Tbr sa-sapá-r ‘lower leg’; Yq wok čava’i ‘calf of leg’; but Hp saha ‘calf of the leg’ only if -pk- > -h-. In Yq, the cluster may have changed -ks- > -kč-. [NUA: Tak; SUA: TrC] [e1s3,e2b,e3q]

133 Egyptian(F) **sbty** ‘enclosure’; Coptic sobt ‘wall, fence’:
Yq **sápti** ‘fence of branches’. An earlier *sapati predates -pt- as a recent cluster; otherwise, bilabials as first element in a cluster normally disappear (4.3). [SUA: TrC] [e1s3,e2b,e3t]

134 Egyptian(F) **qbb** ‘cool; calm, quiet, cool breeze’; Coptic kbo / xbob;
UA ***koppa** ‘quiet, calm’: AYq kopalai ‘quiet, still, peaceful’; AYq kopan ‘resting, relaxing’; My kópana ‘take a nap’; Cm tokobo’niitï ‘calm, quiet’; PYp kepg ‘likable, pleasant’; perhaps Tep *kïpa ‘ice, snow’. Note that the AYq and My forms show an underlying *-pp-, because intervocalic *-p- would be AYq -v- and My -b-, but *-pp- > AYq -p- and My -p-. [SUA: TrC, Tep] [e1q,e2bb]

135 Egyptian(F) **mn** ‘to be firm, established, enduring, fixed, attached, remain, dwell’;
Egyptian mn ‘bleiben [stay, remain], fortdauern [to continue], fest sein [be firm], gefestigt sein [be steadfast], ruhen [to rest, be laid down]’. Egyptian mn also carries a sense of simply ‘be (at a place)’ as translated by Cerny and Groll (1993, 131). In UA, the widespread and semantically diverse verb UA ***mana / mani** takes essentially two forms: intransitive *mani 'fall, be (at a place), be lying spread flat over an area' and transitive *mana ‘spill, pour, put, spread s.th. flat (over an area), cover a surface, etc’:
UACV-1317c ***mana** ‘put (flat/lying down)’; ***mani** ‘be put, be, lie’: M88-ma9 ‘be situated (like liquid or mass obj.)’; KH/M06-ma9: Yq mána’a ‘poner [put]’; AYq mana, maná’a ‘set, put on flat surface’; AYq manek ‘be situated (massive objects or liquids)’; My manna ‘pone [puts]’ vs. My mánne-k ‘está puesto [is put]’; Tr (a)mana ‘poner, colocar [put, place] (especially in a container or as an offering laid out)’; Tr mani ‘put for s.o.’; Tr amana ‘poner (frequentive)’; Eu mane ‘haber cosas líquidas en olla [be liquid in a bowl], cosas discretas en chiquihuite or cosa redonda’; Eu mana ‘asentar o poner ollas, cosas redondas o huecas [set or put bowls, things round or empty]’; Eu manádau ‘ofrenda que ponen el día de los finados’; Eu mani ‘be’ (Shaul 1991, 82); Cm mana’kkoroomi 'cover s.th. over'; Cr meé’uhumwana ‘put lying down’; Wc mana ‘poner, tender, estirar [stretch out, lay out] pl obj’s’; Wc mane ‘puesto [be put], tendido [be stretch/laid out] pl. obj’s’; CN mana ‘spread s.th. out flat and smooth, vt’; HN mana’ 'be all over (water)'; Pl mana 'cook (in water). With a vowel assimilation, the subtraction of Sr pit(k) ‘fill (regarding containers)’ and Sr pitï’k ‘be full, filled’ from Sr pitimin ‘fill (several containers), vt’ leaves -min with a similar meaning.
UACV-1317a ***mani** ‘lie, be situated, cover an area (as liquid or mass noun)’; M88-ma9 ‘be situated (like liquid or mass obj.)’; KH/M06-ma9: NP manni ‘become, be’; NP mania ‘be’ (Langacker 1976, 10); SP maN ‘rest on, at, for (a time)’; Wr maní 'be (at a place)'; Tr maní ‘be in a container’; My mánne ‘be (liquid or gathered objects)’; CN mani ‘cover a surface (as water), spread s.th.out flat and smooth (as tortillas)’. Note CN mana 'spread s.th. out flat and smooth, v.t.' vs. CN mani 'extend over a surface, v.i.’; CN semmani 'fall, spill, spread out, scatter'; CN manki 's.th. smooth, flat'; CN tlamaniliaa 'set things in order with respect to one another, lay things out for s.o.'; CN tlamanis-tli 'plane, flat surface'.
UACV-1317b ***mana / *mani** ‘stumble, roll (over), fall over/off/down’: M88-ma38; KH.NUA; KH/M06-ma38: Cp máne ‘to roll, fall off, stumble’; Cp manániŋiyqal ‘he fell over’; Ca mána/i ‘fall down (rolling), roll, stumble over’; Ls máána/i ‘stumble and fall, roll down (a hill) vi, vt’; Sr manamk ‘fall down’; Hp mïnï(k) ‘stumble and fall, fall down’; Hp mïnï-k-na ‘knock over’—Hp leveled the vowels: *mani > mïnï. Notice that we do NOT have the NUA ŋ and SUA n in these items. [NUA n : SUA n] [e1m,e2n] [NUA: Num, Hp, Tak; SUA: TrC, CrC, Azt]

136 Egyptian(F) **win** ‘thrust aside, push away, set aside’:
UACV-2303 ***wina** 'throw down/out, spill, empty': M67-157 *wen 'empty'; M88-wï4; KH/M06-wï4: NP wïnai ‘throw, v’; Cm wï-nïïh-kupa 'be knocked down, be thrown down'; Kw winee 'throw down, drop'; SP wïnnai 'throw down'; CU winay 'throw'; Mn wïna’i ‘throw away, get rid of’; Sr wiin ‘throw away, throw down, roll (dice), neglect (a child)’; Eu wáhna- ‘pour, throw’; WMU wináy-y / wün(n)áy-y ‘throw down, sell, throw away, get rid of, give, vt’; maybe Sh wiiC ‘throw s.th. light away or aside’. Sh tawiC ‘throw s.th. big or solid, sg obj’ and other terms compound this with *taC- prefixed (revise UACV 2304-6); Sh wïttia 'to empty, spill’ (if < *win-ta). [NUA: Num; SUA: TrC] [e1w,e2i,e3n]

Egyptian b > p in UA, as in the Semitic-p in Uto-Aztecan

137 Egyptian(F) **bbyt** ‘region of throat’:
UACV-1508 ***papi** ‘larynx, throat, voice’: M88-pa62; KH.NUA; KH/M06-pa62: Ca páve ‘throat, voice’;
Cp pava ‘neck, throat’; the pav- portion of Ls pávkuni-š 'larynx, Adam's apple'; the pääv- of Sr pääv̆čan 'narrate, tell (story)’. [NUA: Tak] [e1b,e2b,e3i]

138 Egyptian(F) **bši** ‘to spit, spit out, vomit, v’; Egyptian(F) **bšw** ‘spittle, vomit, vomiting, n’:
UA ***piso-(ta)** ‘vomit, v’: the final -o in UA ***piso-(ta)** ‘vomit, v’ means the UA verb is a verbalization of the Egyptian noun bšw rather than from the verb bši, which verbalized nouns are common in UA. Langacker notes PUA *-ta ‘make’ (Langacker 1977, 45), a derivational suffix that derives verbs from nouns; e.g., Tr -ra (< *-ta) turns nouns into verbs (Hilton 1993, 134); as the -ta of *piso-ta in the other UA languages, whether presently productive or not. Thus, Egyptian **bšw > UA *piso-ta** ‘do vomiting, vomit make/do’:
UACV-2453 ***piso** ‘to vomit, v’: B.Tep269 *vihotai 'to vomit' (Tep v < *p; Tep h < *s); M67-450 *pis; M88-pi26 'to vomit'; KH/M06-kwi8: Remember in Tep, *p > w/v and *s > h: TO wihot; LP viohta; NT vióótai; NT vióóšigai ‘vomit, n’; ST viota. The consonants are clear in My bísata; My bísači ‘vomit, n’; Yq bísata, but assimilated the vowels: *piso-ta > pisata. Note also Hebrew b = b in My and Yq, instead of p. Tr shows things prefixed to *piso: Tr o’pésu ‘vomit, vi’; Tr ku’péso ‘vomit, vi’. The Azt dialects lack initial p as expected: CN i’sootla; Pl isuuta; SP pippitta’ni ‘vomit, vi’. Add Sr piiș ‘vomit’; PYp viohsim ‘vomit, vi’; perf: vioht-, viohot. Like SP cited by Miller, the initial pi(s)- portions of Ch pipitan’a, Kw pitahni, and TSh pitani also belong, compounded with s.th. like *-ta’ni (-ta ‘verbalizing suffix’ as in SUA and -’ni ‘intensive’); thus, *piso-ta-’ni > *pista’ni > *pitta’ni, -s- being lost as first element in the cluster, as usual; a triplication of the initial syllable in Ca pípivis ‘vomit, v’. [e1b,e2s1,e3w] [NUA: Num, Tak; SUA: Tep, TrC, Azt]

For a similar example of a noun’s verbalization, see ‘drunk’ at 170.

139 Egyptian(F) **bnty** ‘pair of breasts’; Egyptian bnty ‘Brustwarzen [nipples], weibliche Brüste [female breasts]’:

Mn	pizí’	Hp	piihï	Eu	víit / biít
NP	pica ‘milk’	Tb(V,M)	pii-l; Tb(M) pi’iš-t/n		
	pici ‘suck’,	Tb(M)	piišanat/’ipiš ’suck, nurse’	Tbr	wimú-r
TSh	pici	Sr	pi’	Yq	pípim
Sh	pici	Ls	pí-t	My	píppim
Cm	picii’; picipi ‘milk’	Ca	pi-ly; táw	Wr	pi’wá
Kw	pihi-vï	Cp	pi-ly	Tr	či’wá-ra; g/kasó-ra
Ch	pihívi; pihivovi ‘milk’	TO	baašo; wipih	Cr	--
SP	pi(h)ici-vi	Nv	vipidi (of woman)	Wc	cící
WMU	piíči-a ‘her breast’	PYp	vipi	CN	čiičiiwal-li
CU	píi-vi	NT	vípi/pípi	CN	eel-pan-tli ‘organ-on’
		ST	vipii	CN	eel-čikiwi-tl ‘organ-basket’

UACV-300 ***piCti(C)** / ***pitti** 'breast': VVH6 *pi 'breast'; B.Tep271 *vipi 'breast'; BH.Cup *pi 'breast'; M67-58 *pi 'breast'; I.Num166 *pici(’i)/*pica 'breast, milk, suckle'; L.Son191 *pi 'teta'; M88-pi9; Munro.Cup19 *pí-t; KH.NUA; KH/M06-pi9 *piX: Mn; TSh; Sh pici ‘breast’ and Sh pica ‘milk’; Cm; Kw; Ch; SP; WMU; CU; Hp; Tb; Sr; Ls; Ca; Cp; TO; LP; PYp; NT; ST; Eu; Tbr; Yq; My; Wr; and CN pipicoaa 'to suck’. To M88, Ken Hill adds Ktn pi’c; Gb pin ‘breast, milk’; Ch pihivi; WSh pici ‘breast’; WSh picciC ‘suck’; and WSh pica ‘milk’. Note also Sh(M) piciC ‘breast’; Sh(M) picciC ‘suck’; WSh pici ‘breast’ vs. WSh picciC ‘suck’. SP and WMU and others show that the final syllable with affricate is part of the stem, and a medial consonant cluster is apparent. Num *pici, the absolutive -t (rather than -l) in Ls, and the glottal stops in Sr, Tr and Wr suggest *-tt- or *-Ct-. As elsewhere, a cluster with t (*-Ct-) is the best candidate for medial *-c- in NUA. If only *-t-, then *-t- > -r- in Num and > -l- in Tak usually. If the final -ci syllable were a fossilized Num absolutive suffix *-ci, we would not see so many glottal stops after *-ci. While a compound with *-ci… ‘suck’ is often the case, note that in most Numic languages the verb geminates the medial consonant (*picci ‘suckle) while the noun does not (*pici breast), which may mean that the compound is *pic-ci ‘breast-suck’. Some languages show separate forms: e.g., Sr pi, piiha 'suck' vs. Sr pi’ 'breast, nipple, milk’. The -h- in SNum might introduce a sort of echo vowel anticipating the cluster, since it does not show up anywhere else. The pi’i of Yq hipi’ikim ‘milk’ also aligns with *piCti > *piri > pi’i, since liquids to glottal stop is frequent in intervocalic clusters with -t- in Cah. [c/h; glottal stop metath in Tb; cluster; Gb -n] [e1b,e2nt,e3i] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, Azt]

Some features of the above forms for breast merit comment. In the Numic languages (left column), a medial -c- cannot be from PUA *-c-, because*-c- > NUA -y- between vowels. Thus, Num -c- is usually from *-Ct-, because a lone -t- is more likely to go to -r/l- intervocalically. But a doubled -tt- or a cluster like -nt-, which is likely to become a geminated -tt-, is the frequent source of NUA intervocalic -c-. Nor is the final -ci the absolutive suffix. Because Num has an absolutive suffix *-ci, some Uto-Atecanists may assume that Numic ***pici (< *pitti)** ‘breast’ contains such and that the stem is only *pi; however, the Numic sources suggest we are dealing with *piCti / *pitti. Iannucci also has such in his Numic reconstruction. All of those make this a good match for Egyptian **bnty** > NUA ***pitti > pici**. In addition, the final -t instead of -l in Ls suggests an underlying consonant. Many forms have been shortened so that only initial *pi is obvious.

In addition to UA ***pitti*** ‘breast’ are similar forms throughout UA, meaning ‘suck’ and ‘kiss’, such as CN pipicoaa ‘suck’, a reduplication of CN picoaa ‘kiss, v’ and Num ‘suck’: Mn pici; NP pici; Sh -piciC; Ch picï; CU picí; consider also NT piisiúúmai ‘lick’ and especially NT višúúsumai (< *picúcumai) ‘suck’; Gb picú ‘suck at breast’. NT višúúsumai 'suck' fits well a compound of *pici-cu’ma ‘breast-suck/taste,’ thus isolating pici as ‘breast’; for UA *cu’m > Tep sum, see 771 Hebrew **ṭʕm** ‘taste, eat’ > UA ***cu’mi** ‘sip, suck, swallow.’ Compare these with Egyptian bit ‘bee’ below [Num, Tb, Hp, Tak, Tep, TrC, CrC, Azt]

140 Egyptian(F) **šnbt** ‘breast’:
UA *sanaC- ‘breast’: Tb piišana-t ‘breast’ (from earlier *-sanaC-t, C = consonant). While nearly all of UA has Egyptian bnty ‘breast(s)’, only Tb piišana-t shows Egyptian šnbt ‘breast, chest’ compounded with *pi-, the mammary breast. The final -t rather than -l is significant suggesting another final consonant (b): *šanaba-t > šanap-t > šana-t. Without the underlying consonant, we would expect Tb šana-l, but we get šana-t, thus a final consonant. [Tb] [e1s1,e2n,e3b]

141 Egyptian(F) **bit** ‘bee, feminine noun’: some t’s survive in UA and the evidence suggests an early palatalization of t > c, especially in Tep s (< *c):
UACV-161 ***pita / *piti > *pica/pici/picu** 'bee, wasp': M67-32 *pis/*pic 'bee'; L.Son194 *pica 'avispa'; M88-pi6 'wasp, bee'; KH/M06-pi6: Eu pica/pisat 'avispa [wasp]’; Gb píčokwar 'mosca [fly]; Sr piičičo'a-ţ / piičču’a-ţ 'fly, n’; Wr pi’cá 'vuitachi (como abeja, rojo, pica, que secreta goma usada como incienso)'; Tr pičé 'avispa grande'; My bíica 'avispa'; Cr pípwa’a-na 'bee'; HN 'eca-tl 'wasp'; Pl eca-t 'wasp’; Tb ’ipi-t 'horsefly'; Tb pičoogiš-t 'horsefly'; Sr piičičo’a-ţ 'fly'; Ca pi’piš 'horsefly'; Sh pipitta 'horsefly'; Tr kupisi 'firefly' (*ku- 'fire'); TO wiipš (TO/Tep w < *p and š < *c). Ken Hill adds Ktn picucu’a-č and considers Ch picïcïki ‘rattlesnake rattle’. From Tepiman (Tep), add PYp vipisi 'wasp, hummingbird'; LP(EF) wípis 'avispa, bitache'; NT pipííši 'wasp, hummingbird'; ST viipis 'wasp'; ST vipiiš 'hummingbird'; AYq viiča 'wasp' (< *piica); Yq wíiča ‘red wasp’ (loan?); the -para (< *pita) of Tr napári / tapára / wapára ‘bumblebee’. Two things suggest we are dealing with an original PUA medial *-t- rather than *-c-: (1) the fact that three NUA languages (Sr, Ktn, Gb) also show medial -c- suggests something besides medial *-c-; (2) Wr -’c- with a glottal *stop* may also suggest the presence of an original *stop*, if not a cluster; (3) unable to find Spanish bitache or vuitachi in three large Spanish dictionaries, I assume they are local terms, perhaps borrowed from UA and show -t-. Does *pita > para allow the varieties Tr maparí / naparí / aparí ‘tábano [horsefly]’ and Wc vaarái ‘fly, bee’ or Tr ŕapára / apára / wapára ‘moscarda, insecto mas grande que una abeja’ and Tr napári / ŕapára / wapára ‘abejorro, jicote’? [*-t- > *-c- > Tep *-s-; clusters, palatalization; -a/o alternation] [NUA: Tak; SUA: Tep, TrC, CrC, Azt]

142 Egyptian(F) **bik** ‘falcon’; Coptic beeč:
UACV-749 ***pik** ‘hawk, sp’: Hp piikwa ‘lesser nighthawk’ (Hill); Hp piikwa ‘nighthawk’ (Seaman); TSh pikkitiki-ççi ‘sparrow hawk.’ [NUA: Hp, Num] [e1b,e2i,e3k]

143 Egyptian(F) **bk’** ‘pregnant’; Egyptian(F) **bk’t** ‘pregnant woman’; Coptic boki ‘conceive’:
UACV-2188 ***poka** ‘stomach, pregnant’: VVH149 *poka 'stomach'; M67-418 *poka 'stomach'; M88-po10 'stomach'; B.Tep278 *vooka 'stomach'; KH/M06-po10: Eu *bok-e ‘pregnant, stomach-haver’; TO wook ‘stomach, abdomen, belly’; LP vook; NT voóka(i); ST vook; Cr huká; Wc ne-huáá 'my stomach’; Eu vokíma ‘stomach’. Add PYp vookar 'stomach’; PYp vook ‘pregnant’. Note that the Coptic vowel is o, or the rounding of the glottal stop being anticipated in the preceding vowel is possible too—*pVk(V)’a > *po’ka > *poka; in either case, the glottal stop could have been lost early in the dialect of Egyptian (Egyptian bk’t > *bkt) since such is typical of Egyptian glottal stops anyway. [iddddua] [e1b,e2k,e3’] [SUA: Tep, TrC, CrC]

144 Egyptian(F) **b’q** ‘oily’; Egyptian(F) b’q ‘moringa-oil’:
Cr pu’učira’a ‘fat, adj’; Cr is as expected, since PUA *k > č/_i in Cr. [SUA: CrC] [e1b,e2’,e3q]

145 Egyptian(F) **bnt** ‘harp, f’(> Coptic boine):
UAVC-1986 ***pona** ‘to play music, play drum’: M67-142 *pon ‘to drum, v’; M88-po18 ‘play music’; M88-po12 ‘play drum’; KH/M06-po12,18: Miller has CN teponas-tli ‘drum’ in two sets and he compares the two sets (M88-po12 ‘play drum’; M88-po18 ‘play music’) as possibly related, which they seem to be; therefore, we combine the forms of both sets: My póona ‘play instrument’; Yq poóna ‘touch repeatedly, play (tambor/instrument), nail, v’; Yq hi-pona ‘play (instrument)’; Tbr hi-pona ‘play (music)’; CN teponas-tli ‘log drum’; Pl tepuunawas ‘native drum, made from hollowed log’; SP pon’noa ‘to drum, v’; Wc tépu ‘drum’. CU papű’ni ‘drum’ is suspect as the glottal stop may exclude it. Note the vowel o in Coptic and the extra syllable prefixes—hi, te—aligning with Hebrew ha- ‘the’ and Egyptian tV- ‘the’. Feminine nouns like bnt ‘harp’ often derive from verbs less the fem noun ending -(a)t. Such an unattested verb—bn ‘play strings’ or a denominalized verb—would fit TrC *pona ‘play instrument, touch repeatedly’. In Egyptian bnt ‘harp’, the consonants seem to have been separated by vowels—*bonat— vs. *binty ‘breast’ (139) and *bint/batt ‘daugher’ (534). [iddddua] [SUA: TrC, Azt, CrC] [e1b,e2n,e3t]

146 Egyptian(F) **bi** ‘nein [no]’:
UACV-1535 ***pi** ‘no’: TO pi ‘no, not’; PB pima ‘no, not’; Tr pe ‘no, not’. [e1b,e2i]

Egyptian ’ > w in Uto-Aztecan or a glottal stop rounding the vowel anticipating the glottal stop

Like the ’aleph or glottal stop in the Semitic-p of UA (5.4), the Egyptian glottal stop also tends toward rounding, that is, it becomes UA w between vowels, and o/u adjacent to consonants, sometimes along with a glottal stop adjacent to rounding.

147 Egyptian(F) **m’i** ‘lion’; Coptic mui:
UACV-1350 ***mawiya** ‘mountain lion’: B.Tep149 *mavidi/a ‘puma’; M67-291 *ma ‘mountain lion’; L.Son143 *mawiya ‘león’; M88-ma26 ‘lynx’; KH/M06-ma26: Tr mawiyá ‘puma, león americano’; Wr mawiá ‘bobcat’; Wr(MM) mawiyá / máwi’iyá / mauyá ‘león [mtn lion]’; Cr mwáhye/mwáhaye ‘onza’. In Tep languages, *y > Tep d/j: TO mawiđ, pl. maipiđ ‘lion, puma, cougar’; LP maviji; PYp mavidi; NT mavíídyi; ST maviidy. Add Tbr mawí-t ‘león’ and Cp témevi-š ‘mountain lion’ with a prefix té-, possibly ‘rock’. This is *mawiya in TrC and CrC; add Eu maviot/mavirot (Shaul 1991, 73, 93) (r < d < *y). Other instances of Tep w = TrC w exist, or was this borrowed into Tep before the sound change *y > d, but after the sound change *w > g, since the *w remained and merged with *p (> Tep v/w). Note also the glottal stop in Wr(MM) as -w’- (later separated to wi’i) also happens elsewhere. [*w = Tep p; *w > v] [e1m,e2’,e3i] [SUA: Tep, TrC, CrC; NUA: Tak]

148 Egyptian(F) **t’yt** ‘shroud’; Egyptian(H) t’yt ‘Leichentuch [shroud]’; Egyptian(H) t’yt ‘Göttin Tait’; Egyptian(H) t’ytt ‘Stoff [material]’; Egyptian(H) t’yti ‘der Bekleidete [the clothed]’; Egyptian(H) Segel(tuch) [sail(cloth)]’:
UACV-256 ***tawayi** (note Ls tawááyi-), **redupl UA *tatawayi > *talawayi** ‘wrap around’: Tb tala’awa ~ ’atala’awa 'it (rope) encircles it'; Tb talaawïš(-ït)~'atalaauš 'go around'; Tb talaaw~’atalaauš ‘he encircles it’; Eu hitárave / hitárawe 'vestirse'; Ls tawaayi-š ‘cape-like garment of twisted strips of rabbitskin formerly, but now any kind of cape’ (Elliott); ‘rabbit-skin blanket’ (Bright). Jane Hill (p.c.) notes that Numic *taa’ï ‘shirt, clothing’ may belong here also. Both Tb and Ls show final -s, whatever that means. [NUA: Tb, Tak; SUA: TrC] [e1t,e2’,e3i]

149 Egyptian(F) **t’yt** ‘shroud’; Egyptian(H) t’yt ‘Leichentuch [shroud]’; Egyptian(H) t’yt ‘Göttin Tait’; Egyptian(H) t’ytt ‘Stoff [material]’; Egyptian(H) t’yti ‘der Bekleidete [the clothed]’:
UACV-495 ***ta’V** ‘shirt, clothing’: SP taa’ï ‘shirt’; WMU taá’ ‘clothes, shirt’; CU táa’ ‘shirt, clothes’; perhaps Ktn taavï-č ‘buckskin’ and Ktn tavï (referring to clothes). Jane Hill notes these may tie to UACV-256 *tawayi. [NUA: SNum, Tak] [e1t,e2’,e3i]

150 Egyptian(F) **t’** ‘earth, land, ground, country’; Coptic to:
UACV-760 ***tïwa** ‘sand, dust’: Hp tïïwa 'sand'; Hp compounds suggest an originally larger semantic range to include ‘dust, earth’: Hp tïïwaqal- ‘(at) the edge of the land, seashore, horizon’ (qal ‘edge’);
Hp tïïwanasave ‘the center of the earth’; Hp tïïwaŋw-ti ‘decompose, turn to dust, become part of the earth’; Tb tïïwï-t 'dust'; Jane Hill (p.c.) notes Cp tïw- ‘dust’ as a welcome addition. Cp tewvaŋa ‘where dust was’; Ls toowu-t ‘dust in the air’ (Ls o < *ï); Sr tiüva-ţ ‘earth, ground, land, world, country, floor, dirt, dust.’ Also UA ***to’o** ‘dust’: Yq to’očia ‘dust’; My toro’očia (redupl); AYq to’očia ‘dust.’ Cr sáa-ta’a ‘sandy ground’ (sáa = ‘sand’). [NUA: Hp, Tb, Tak; SUA: CrC, TrC] [e1t,e2’]

Egyptian ’ (glottal stop) often yields w and/or **glottal stop with adjacent round vowels:**

151 Egyptian(F) **i’w** ‘old man’; Egyptian(F) **i’wi** ‘be aged, v; old age, n’; Egyptian(F) **i’wt** ‘old age’:
UACV-1566 ***yo’o / *yu’u** ‘old’: Yq yó’o ‘old, grow up, grow old’; Yq yo’otui ‘old people’; Yq ’ó’ola ‘viejito/a’; My (y)ó’ola, ó’ora ‘old’; My yó’otu ‘is growing’; My yó’owe ‘is grown, is big’; My yúúya ‘old (of things)’; AYq yo’ora / yo’owam ‘elders, ancestors’; AYq yo’otu ‘mature, adj, grow old or tall, vi’; AYq yo’otui ‘old person, elder’; Eu dočisuari ‘age’ (Shaul 2008/9) (< Egyptian y’ti šw). Perhaps SP iiC ‘old’; Tb yu’um ‘it wears out; Tb yu’umat ‘it is wearing out’; Tb yo’ol~’oyo’ola ‘be bald’. [SUA: TrC; NUA: Tb] [e1i,e2’,e3w]

152 Egyptian(F) **i’wi** ‘be aged, v; old age, n’; Egyptian(F) **i’wt** ‘old age’; Egyptian(F) **i’yt** ‘old woman’:
UACV-1568 ***yoci(-tu)** ‘(become) old’: Wr ocíru-na/océru-na ‘become old’; Wr ocírume ‘old man’; Tr očeru- ‘grow, develop, become old’; Eu docí ‘old’ (Eu d < *y); Eu docítu’u-n ‘become old’; Eu docíwari ‘very old’. Tb yu’udz- ‘it fades’; Tb yu’udzat ‘it is fading’ (Voegelin 1935, 102); Eu dočisuari ‘age’ (< Egyptian y’ti sw). Eu shows *yoci, while Tr and Wr often lose initial consonants, so *yoci is the likely reconstruction, like Egyptian(F) **i’wt** ‘old age’ and to UA *yo’o above. [e1i,e2’,e3t] [SUA: TrC]

153 Egyptian(F) **s'** 'son'; Egyptian(F) **s't** 'daughter':
AYq aso'o-la 'baby, infant'; AYq asoa 'give birth, vi'; AYq asoa 'child of a woman'; My asoa 'son of a woman'; Ls sawaa-may 'daughter'; Ls ṣawaama-la 'daughter, girl' (Elliott 2000); the **so'o** portion of SNum ***pi-so'o-ti** 'child' (UACV-143) with Egyptian pi- 'the':
UACV-143 ***piso'o-** 'child, boy, children': Kw pišï'oo/pišo'o-či 'infant, fetus, child'; Ch pisó'oci 'child'; Ch(L) pipiso'^{w}a 'woman's child of either sex'; Ch(L) pipiso'oci 'child from about four months to six years of age'; SP piss'o-ci 'boy'; SP pl piss'o-ci-ŋwï 'children'; WMU píščiu̲ 'children, pl' (< *piso'otimï); CU píisčiu 'children'. SNum forms (Kw, Ch, SP, WM, CU) derive from *pi-so'o-ti(mï) child(pl). The two distinct Ch(L) terms match m. and f. forms. The Cah forms (AYq, My) have a prefixed a- like many Sr nouns. [NUA: SNum]
UACV-2575b ***sï'a** 'girl': I.Num195 *sï'a (young) girl; M88-sï11 'young girl'; KH/M03-sï11: Mn sï'a; NP sïa'a / cïa'a. While Miller's inclusion of NP sïa'a 'girl' and Mn sïsï'a 'girls' in M88-su21 with *siwa/*suŋa is uncertain, many Num ï are from PUA *u; thus, Num ***sï'a** 'girl' (perhaps < ***su'a**) may fit Egyptian s't 'daugher' and has the typical UA look (-a) of the Egyptian fem sg ending -(a)t. [WNum] [e1-s, e2-', e3-t] [NUA: Tak, Num; SUA: TrC]

UA words for '**STAR**' show many reflexes for a very solid tie with Egyptian **sb'** 'star' (or Egyptian **sb't** 'constellation, group of stars), and another possibility for Egyptian **gnh̲t** 'a (particular) star':

Mn	tazinópï	Hp	soohï	Eu	síbora/sí'ibor
NP	paatïsuba	Tb	šuu-l; yeu'wišn *m.s.*	Tbr	soo; so-ko-rá-t
TSh	taciumpi	Sr	hoo'ţ	Yq	čóki
Sh	taci'ïm-pin	Ca	sú'we-t	My	čokki
Cm	tacinuupi	Ls	ṣú'-la	Wr	so'póri
Kw	puucii-vï	Cp	sú'ul	Tr	se'porí/so'porí/so'parí
Ch	puuciv(ï)	TO	hu'u	Cr	sú'ura'abe-(te) (-pl)
SP	puuci-;	PB	siavugui 'e's mayores'	Wc	cii.maníiši 'las pléyades'
	kaŋa- 'morning star'		huhuga 'e's menores'; uhapa 'all the stars'		
		PYp	si'avag; so'opoli		
CU	puucii-vi	NT	šiaavogai	CN	siitlal-in

The SUA languages often anticipatingly transpose the glottal stop to precede the preceding consonant as in (Egyptian sb' > *so'po 'star'; 157 Egyptian it' > UA *itu'i/i'tu; 724 parʕoš > pa'rosi 'jackrabbit'); and the vowels adjacent to the original glottal stops are usually round vowels (o/u).

154 Egyptian(F) **sb'** 'star'; Coptic siu:
UA *si'po / *sipo' 'star': Wr so'póri; Tr se'porí / so'porí / so'parí; Eu síbora/sí'ibor, all show the glottal stop, adjacent to the rounded 2nd vowel after leaving its 3rd consonant position to be anticipated or jumping ahead of the 2nd C: *sipo' > *si'po > si'ipo. Not listed above are Tepecano huvva 'star' and Tepecano huppa 'stars' (Langacker 1977, 81) which have h < *s. In Tepecano and the other Tepiman languages, we expect Tep h < UA *s, Tep v/w < *p, and Tep g < w/glottal stop. Interestingly, each Tep form (subtracting the *si'a loaned from CN) shows 2 of the 3 consonants, different ones showing a different two of the three, and some, like PYp si'avag, may show all three. Hp, Tb, and the Tak branch (all of NUA) show approximations of *su'u, perhaps with loss of b/p- as first consonant in a cluster (*sup'u > su'u; see 4.3) or might they be early Azt loans: Hp soo-hï; Tb šuu-l; Cp sú'u-l; Ca sú'we-t; Sr hoo'-ţ; Ls ṣú'-la. Some Tep and other SUA languages do similarly: Tbr sóo; TO hu'u (TO h < PUA *s); Cr sú'ura'abe-(te) (-pl). In CN siitlal-in, *p typically disappears so *sipu'> siu > suu >sii (CN i < *u). The preceding forms of those 13 UA languages align well. The *puuti forms in SNum (Kw, Ch, SP, CU) show the 2nd and 3rd consonants (b and ') but are missing the first (s); likewise, variants of Tep *vuga (< UA *puwa) in PB, PYp, NT align with the 2nd and 3rd consonants also and because *s > h or ø (nothing) in Tep, the lack of s is more understandable. Also belonging is AYq suawaka 'falling star', in contrast to Cah (Yq, AYq, My) *çoki, possibly < *t̲knw.
UACV-2169a ***si'po** 'star' (< *sipo'o/*sipu'u): Eu, Tr, Wr. PYp so'opoli likely a loan < Tr/Wr so'pori.
UACV-2169b ***-puwa** in ***ci'apuwa** or ***supuwa** 'star': PYp, Nv, NT. See *ci'apuwa below.
UACV-2169c ***pu'-ci / *puCti** 'star' (< sb't): Kw; Ch; SP; WMU; CU (SNum). With loss of initial *si-, SNum *puutti/*pu'ti as well.
UACV-2169d ***su'u / *suwa** 'star': Sapir; VVH71 *su 'star'; M67-413 *su/*cu; BH.Cup *sú' 'star'; Munro.Cup123 *ṣúú'u-la; L.Son254 *so/sopori; M88-su9; KH.NUA; AMR *su'u; KH/M06-su9: Hp, Tb, Ca, Cp, Ls, Sr, TO, Tbr, Cr, CN. Because *p > ø and *u > i in CN, then CN sii- could fit either *su'u or *si'pu. Sapir includes Ktn hu'u-ty or hu'-č 'star, landsnail' (Anderton 1988), which belongs with the other Takic forms. Miller's and Hill's inclusion of Gb sosyót 'stars' certainly belongs as well; Miller's inclusion of NP paattïsupa has parts in common with Tr so'parí; he notes the vowel of the TrC forms *o disagrees with the other forms; NUA and Tep show *u, while SUA shows *o, with the possible exception of CN i (< *u). I agree with Sapir, Miller, and AMR who include CN, and Sapir lists Wc sulawi/jorawe, similar to the Cr form above. While most reflexes show a medial glottal

stop, Nv huhuga suggests w, perhaps *sipu'a > *sup/vuwa > Tep huhuga. Also worth noting is that Eu si'ibora and Tr se'porí show fronted vowels instead of back round vowels. As a side note, Cr sï'ïpu'u-(te) (pl) 'caracol(es)' of SUA and Ktn hu'-č 'star, landsnail' of NUA are cognate. Ktn has both meanings and the Cr form fits in well with SUA words for star, though Cr sú'ura'abe-(te) (-pl) 'star' is a different word. Thus, the Cr word for snail may be a loan from another UA language, though it fits star, as a comparative cognate, better than Cr's own word for star does. [e1s,e2b,e3',e3t] [NUA: Hp, Tb, Tak, Num; SUA: Tep, TrC, CrC, Azt]

155 Egyptian(F) **sb'** 'door'; Coptic sbe:

UACV-476 ***pu'u** 'door': Ls púú'u-k 'door'; Cp púki-ly 'door'; Hp poksö 'ventilating hole, window, smoke hole' (Hp o < *u); and probably the *puu portions of ST vuusan 'passage, way'; PYp vuupi 'hole'. Ls -k and Cp -ki derive from UA *ki 'house.' Though these Tak languages show different forms for 'star', we should not exclude the probability that those words for 'star' and these words for 'door' developed from different variants or vowelings or stress patterns of **sb'**. In fact, Coptic sbe 'door' vs Coptic 'siu 'star' are also quite different, though from the same consonants (Egyptian sb'), yet the Coptic forms have much in common with UA's vowelings. The lack of first vowel between 1st and 2nd C's (in Coptic sbe) is exactly the kind of initial cluster that makes first consonants disappear—thus Tak *pu'u (as also Tbr puri 'lip' < *sputi)—and Coptic vowels for star are like the UA vowels for star: i-u and i-o. In any case, that SNum shows forms for 'star' (*puu ..) similar to Tak's forms for 'door' adds viability to both. [NUA: Tak, Hp; SUA: Tep] [e1s,e2b,e3']

156 Egyptian(H) **gnḫt** 'ein Stern [a (particular) star]':

SP kaŋa- 'morning star'; other examples of the cluster Egyptian -nḫ- > UA ŋ would be nice though everything else in SP qaŋa- 'morning star' fits well: initial k/q (< *g) and the final -a (< *-at) typifying feminine nouns, and SP qaŋa-mmwi 'morning star month' suggests a final -C. [NUA: Num] [e1g,e2n,e3h4]

Three fairly similar Egyptian verbs—Egyptian **it', iti,** and **t'w/ t'i**—with similar and overlapping meanings of generally 'take, pick up, steal'—appear in UA with surprising degrees of individual semantic clarity relative to the Egyptian counterparts.

157 Egyptian(F) **it'** 'take, carry, steal' (> Coptic oj 'thief'):

UA *itu'i > i'tu 'to steal, take'; KH.NUA: Cp itu'e 'to steal'; Wr i'to 'take'. Cp and Wr reflect Egyptian **it'** very well, showing all three consonants as well as the expected rounding adjacent to the glottal stop. Note Cp itu'e 'to steal'. Wr does its frequent glottal stop anticipation, forwarding the glottal stop one syllable as it also did in 'star': Egyptian *sb' > Wr so'pori.
[NUA: Tak; SUA: TrC] [e1i,e2t,e3']

158 Egyptian(F) **iti** 'take, carry off, rob':

UA *ïci 'steal, take' (Egyptian t/t > UA *c; and then medial (non-initial) UA *-c- > -y- in NUA; and UA *c/č > s/š in Tep (TO, PB, PYp, NT, ST) as well as *y > d in Tep. The UA words for 'steal, rob':

Mn	noqaġa/noqoġa	Hp	ïyiŋwï 'thief'	Eu	écba'a-n
NP	wazi-cakatï	Tb	'ïïy-(ït)	Tbr	icikwa
TSh	innïntïkkah	Sr	ïy(ïi)/ïh'ïi	Yq	'étbwa
Sh	tïtïkka-x/h	Ca	'éyetu	My	ekbwa
Cm	tïrïhkarï; sikusarï	Ls	'uyóo-tu-	Wr	icikóa-ni
Kw	'ïiya-ni-	Cp	itú'e	Tr	čigó-; čiwá-; wi-mea
Ch	ïyïŋi	TO	ees; B: 'ïïsidï	Cr	ti'i/ra-nawa'a
SP	ïyïŋka-	PB	'ïïš	Wc	nava; naváaya;
		PYp	eesi		tináváyame *ladrón*
WMU		NT	'ïïši; 'ïïšid^{y}ai		
CU	'iyïyi	ST	'ïïš; 'ïïšid^{y}	CN	ičteki; naamoyaa

A following high front vowel like *i* encourages palatalization of Egyptian **iti** > ***ïci,** matching UA ***ïci:**

UACV-2178a ***ïci** 'steal': VVH120 *'ï; B.Tep *'ïïsidai 'to steal', and *'ïïsi 'he stole'; M67-414a *'eye (NUA); L.Son11 *ïci-kwa; M88-ï6 'steal'; KH.NUA; KH/M06-ï6; Munro.Cup129 *'əyə-t 'thief' [Ls 'uyó-t; Cp 'əyə-t; Ca 'əyə-t]; Kw; Ch; SP; CU; Tb; Cp; Ca; Ls; Sr; Hp; TO; PYp; LP; NT; ST; Eu; Yq; Tbr; Wr; Tr; My; Ktn 'ïyïw; and ič- of CN ičteki. A good example of *-c- > NUA -y-, which AMR includes in "A Northern UA sound law: *-c- > -y-", listing SP ïyï-ŋka; Tb ïïyV; Ls uyo-t 'thief'; Ca eyet 'robber'; Sr ïyï-i; Hp ïï'ïyi; TO ïïs 'stealth'; and Wr ici-koani.

UACV-2178b ***ïci-kwa** (< ***ïtikwa** ?) 'steal': Another syllable is consistently added in TrC *'ïcikwa (Eu, Tbr, Yq, My, Tr, Wr). Perhaps the ič- of CN ičteki. Even Eu écba'a and Tr čigó/čiwá align well with *ïcikwa. Add the first of WMU íígai 'steal' and íígoočaa 'he just stole (s.th.)'? [*t > k in My] [NUA: SNum, Hp, Tb, Tak; SUA: Tep, TrC, Azt]

UACV-1133 ***ï’ïci-to** ‘hide’: B.Tep344 *’ï’ïsito ‘hide’; M67-228; M88-ï12; KH/M06-ïl2: Pl iinaya ‘hide’; TO ïïs 'stealth'; TO ču ees-k 'be a thief'; TO ees-to 'hide, v.t.p.'; UP ’ï’ïsto; NT ïïštyo; ST ’ï’ïštyo. Though Miller listed only Tep and Pl in this set, other forms certainly belong with each, whether they belong together or not; most notable are Eu ecí 'hidden, v.i.' and ecí-to 'hide, v.t.'; likewise, Hp ïï’ïyi 'steal, v.t.p., sneak off secretly, v.refl.'; the first three segments of Wr icipú-na 'esconderse [hide]' and Wr icikóa 'steal'; Tr čičípu 'esconderse' (consonant harmony), though the last 3 languages lack the -to morpheme for their inclusion in this compound. The first part (*ï’ïci-) of this verbal compound is the same stem as is found under 'steal'. [kđb oto] [SUA: Tep, TrC]

159 Egyptian(F) **t̲’w** ‘take up, seize, snatch, steal’ (> Coptic jiwe); Egyptian(H) **t̲’w / t̲’y** ‘nehmen [take], wegnehmen [take away], stehlen [steal], ansammeln [collect], zusammenpacken [bring together]’: Egyptian(H) t’w ‘Träger [carrier, bearer]’; Egyptian(F) t̲’wt ‘a gathering up of things’:
UACV-998 ***tï’wi / *tu’wi** ‘to gather seeds, harvest’: Ls tó’wi ‘gather (as seeds), harvest’ and Mn tïwïqa (also tïga) ‘gather (seeds, etc) by beating plant with stick’ match well (Ls o < *ï). Sr cawei ‘gather, pick, harvest’ may suggest *ta’wi > *tï’wi. Though above at *tu’a ‘bear fruit’, note Eu tu’u ‘darse los frutos [yield fruit], convertirse en [turn into], hacerse [become]’; Eu tui ‘cosecha [harvest]’. Consider also Ls či’i ‘to gather things lying on the ground’. [NUA: Tak, Num; SUA: TrC] [e1t,e2’,e3w]
UACV-393 ***tu’u** 'take': I.Num223 *tu(’)u ‘take, pick up, fetch’; M88-tu19; KH/M06-tu19: Cm tuu ‘fetch water’; the SNum forms reconstruct to s.th. much longer, s.th. like *tu’uCma / *tu’umma: CU tï’umay 'pick up (off), take (off)’; SP tu’uhma / tu’umma 'take pl obj’s’; SP tuumai ‘pick up’. Add Ch tu’úma ‘catch, take pl objs’; WMU tu’úma-y ‘take (many things)’. We might also add AYq maču’unama ‘hold in hand, grasp while moving’ (with palatalisation *t > č) and AYq maču’uweyek ‘hold while standing’. [NUA: Num; SUA: TrC]

160 Egyptian(F) **t̲’w** ‘take up, seize, snatch’ > UA *to’o ‘go get, go to do/get’:
UACV-395 ***to’ / *tu’** ‘fetch, go get, go to do’ (often compounded with *’u’ ‘take’ in *’u’-to): KH.NUA; some from KH/M06-tu11: Sr uu’ţu’ 'go get, go marry' (vs. Sr ’uu' 'take, pick up, marry (woman)'); Gb úuro’ ‘voy ir a traer’ (vs. Gb ’ú’a ‘take’); Hp oyato ‘go to put several (vs. Hp oya ‘put several’); Hp -to 'go/come intending to do s.th., be about to' (as in Hp kwis-to 'fetch, go to get (sg. inan. obj)'; Hp yïkï-to 'fetch (pl obj)'; Hp wik-to 'fetch (anim. obj)’; Cr(JM) tya’antú’utu’u ‘take them (small round objs)’. Add Tr tó-mea ‘traer consigo, llevar consigo’; Tr -to- 'go do s.th.'; AYq tovo’ote 'carry with the hand'; Eu -too in Eu zóktoo 'carry in arms'; Eu mato 'carry on shoulder'; Yq tóha ‘llevar, traer, echar, dejar’; AYq toha 'carry sg. obj’; Nv toabada ‘acarrear’; Wc tu/tuu ‘llevar, bajar’. Why Hp o, not ö? We might combine this with the above, except for differing Cr, Wc, Nv, and Tr forms. [e1t,e2’,e3w] [NUA: Tak, Hp; SUA: Tep, TrC, CrC]

Egyptian ʕ > w/o/u: the voiced pharyngeal fricative appears as a round (semi)vowel in UA

161 Egyptian(H) **ʕrq** ‘Korb [basket]’; Egyptian(H) **ʕrʕr** ‘ein Korb [a basket]’:
UACV-1520 ***wari** ‘basket’: L.Son326 *wari ‘cesto (basket)’; M88-wa6 ‘basket, rabbit net’; KH/M03-wa6: Op wari; Eu warít; Tbr mwalí-t (*w > mw in Tbr); Yq wáari; My waari; Wr warí; Tr warí. Miller combines these with *wa’na ‘(rabbit) net’ (596), but the glottal stop in *wa’na is lacking in SUA *wari, plus a consistent 2nd V difference: -a vs. -i, and different meanings. So I separate them until additional data direct differently. Note the prominence of -r- instead of -l- in languages that have both. [n:l:r liq] [SUA: TrC] [e1’2,e2r,e3q]

162 Egyptian(F) **šʕy** ‘sand’; Coptic šoo:
UACV-1867 ***siwal >** NUA **siwaN** ‘sand’: Sapir; M67-361 *sa ‘sand’; M67-362 *se ‘sand’; I.Num194 *(pa)siwa(h) ‘sand, gravel’; L.Son226 *sa/*sï arena; M88-sa9 and sï4 and KH/M06-si21 *siHa where H = a glide (AMR): the final -l is odd, unless a feminine form **šʕt** existed, but UA *siwa matches the primary Egyptian consonants well:

Mn	pasiyápï	Hp	tïïwa; ciwavi; nöŋa;	Eu	sa/sáta
NP	pasiwabï; otïba ‘fine sand’		civohkya; naaki		
TSh	pasiŋwampin/pasiŋompin	Tb	šiihpi-t	Tbr	sihá-t
Sh(C)	pasiampin	Sr	ööqţ	Yq	sée’e
Cm	pasiwaapi	Ca	ŋáči-š	My	see’e
Kw	sihwa (m)bï, sihombï	Ls	’éxva-l	Wr	seté
Ch	otávï	Cp	háxa-l	Tr	saté
Ch(L)	siwampï; otavi ‘fine sand’	TO	o’od; o’ohia	Cr	seh;
SP	patï(ya); ahta/atta	Nv	hia	Cr	sáa-ta’a ‘sandy ground’
	šiuN ‘gravel’	PYp	o’oi	Wc	šie.káari
WMU	tá-vï, siwá̲-ppï	NT	óórai		
CU	siwá-pï	ST	o’ya	CN	šaal-li

Numic pa-siwaN-; and Tbr has the same vowels as Num; Yq and My leveled vowels and have ’ vs. w; Cr sáa-ta’a ‘sandy ground’ and most of SUA have cognates. In Num, the pa- of *pa-**siwa** ‘sand’ is *pa- ‘water.’ Tb sïwaa-l ‘ground, dirt, earth.’ The first syllable of Tb šiihpi-t as a compound belongs, yet Tb sïwa-l ‘ground, dirt, the earth’ represents the uncompounded form. TO hia ‘sand dune’ (found by AMR) has the expected h < *s, but lacks any sign of the pharyngeal, yet most of SUA lacks it, as do a few forms in NUA; yet plenty also show the w < ***ʕ** very clearly. Include the latter part of B.Tep326b *’oo’ia ‘sand,’ a compound of *hora and *siwa, with an early loss of *w in Tep. Though many Uto-Aztecanists consider the forms related, the only viable explanation for the very different forms of Numic *siwa and SUA *satV has been offered by Manaster Ramer (p.c.): *siwa > sia/si’a > se’e/sa’a/saa. The final CN liquid is interesting and consistent with a fem ending -a(t); cf. CN šeewal-li ‘shade’ < Egyptian šwyt ‘shade’ for another fem final -t > l in CN. Many have noted the array of initial-s forms for ‘sand’ (Sapir, Miller, Iannucci, Lionet, Hill, Manaster-Ramer; M88-sa9 and sï4 and KH/M06-si21 *siHa where H = a glide, after AMR), sï4 and sa9 basically sort them according to first vowel. After loss of -w-, then excrescent y is natural in an environment of *sia (*siwa > *sia > siya). Whatever the C was, it seemed to disappear in SUA, where the vowels also assimilated (*siwa/siHa > *saa) or leveled (*siwa/*siHa > *see) much of the time:
UACV-1867a ***siwaN** ‘sand’: Mn, NP, TSh; Sh; Cm; Kw; SP siuN- ‘gravel’; CU; Tb; TO -hia ‘sand dune’ (AMR 1996d); SP šïŋwam-pï ‘sandy gravel’ (AMR 1996d). Ken Hill adds WSh pasiwompin and Ch siwampi ‘coarse sand’; Ch siwampï ‘gravel’; Ch siwa’aavï ‘sandstone’. Add Nv hia. Hp ciwavi ‘gravel, coarse sand’ may be a loan or may have c/s issue, as the other 3 of the first 4 segments are identical. If so, all branches of NUA except Takic are represented. We see ŋw in TSh and SP. The latter part of B.Tep326b *’oo’ia ‘sand’. [*w > ø in TO; c/s]
UACV-1867b ***sï’ï** (< *si’a/siwa) ‘sand’: Yq, My, Wr, Cr séh; Tb sïwaal. [for *i-a > Cah e-e, see *pita at fire]
UACV-1867c ***sa(ta)** ‘sand’: Dakin 1982-81: Cr sáá-ta’a ‘sandy ground’; Eu sa/sáta, CN šaal-li. AMR (1996d) notes that the frequent assimilation of vowels in Azt (*siCa > saa) explains these as related to *siCa (here *siwa). Ken Hill adds Cr šarí ‘mud’, perhaps a loan from Azt. [t > l/r > ’ in Cah; V leveling; *w > ø in Tep] [e1s1,e2’2,e3i] [NUA: Num, Hp, Tb; SUA: Tep, TrC, CrC, Azt]

The UA words for ‘sun’ exemplify both Egyptian initial r > *t in UA and Egyptian **ʕ** > UA *w. Egyptian initial r > t is like Hebrew initial r > UA *t, though one UA language, Tr, actually has ŕ (< r) and t (< t):
163 Egyptian(F) **rʕ / rʕw** ‘sun’; Egyptian(H) **rʕ nb** ‘täglich [daily], jeden Tag [each day]’; Coptic ree:
UA *tawa / *tawi ‘sun, day’ and *tava: Hp taawa ‘sun’ and Wc tau show w, the expected reflex of Egyptian ʕ; other languages exhibit shorter and longer forms: for example, Eu ta- ‘sun, day’ vs. Eu tawi ‘sun, day’; Eu tawe/tawide ‘daytime, adv’; Eu tawe-n ‘be day, the sun shines’; Tr ŕawe ‘day’ also shows w, and even though Tr ŕáyenari/ ŕáenari ‘sun’ sometimes shows y, such w/y alternations happen in Tr and some other UA languages. All the Numic languages show reflexes of *tapa, usually as tava since v is the intervocalic variant of *p. However, there are cases of *w > v, such that *p could be a reinterpretation of intervocalic v as p, though actually from *w, which appears to have happened elsewhere in UA also. So 27 of the 30 UA languages show words for ‘sun’ starting with intial *ta-.
UACV-2230a ***tawa / *tawV** ‘sun, day’: Hp taawa ‘sun, day’; Wr tawé 'day'; Wr(MM) rawé / ta’wé / tawé / taawé ‘día [day]’; Tr ŕawé ‘day’; My taáwa(ri) 'day'; Eu távi/táve/távi ‘día [day], sol [sun]’; CN tlaawiaa 'to light s.th.'; AMR 1996d argues well for CN ilwi-tl < *tawV (ilwi-ka-tl ‘sky’ <sun-house)’; HN tlaawia’ to shine; Pl tatwi ‘to dawn’; Pl taawil ‘candle, light’. Add Tb(H) taawït ‘during the day’. Besides Hp taawa ‘sun’ are Hp taala ‘be light’; Hp taavi ‘sunshine, sunlight’. [NUA: Hp, Tb; SUA: TrC, CrC, Azt]
UACV-2230b ***ta**’**a / *ta-** '(day)light, sun': the Cahitan languages—Yq taa’a; AYq taa’a; My taa’a—all show ’ for ʕ, as in ‘sand’ also. Tr ra-, ta-, ra-tá 'daylight, sun, brightness’. At ‘sand’ also does Num w = TrC ’.
UACV-2230c ***ta-iwa-(Li)** ‘become day’: Tbr ta-imoa-lí-t ‘day’; AYq taewali 'daylight’; Cr teíhimwata’a ‘east’; AYq taiwo 'east’. Only the first syllable *ta- is cognate here.
UACV-2230d ***tapa** 'sun, day': I.Num209 *tape/*ta- (pref.) 'sun, day': a cognate appears in every Num language. [*w > v as in pine *yuwi > *yuvi] [NUA: Num; SUA: Azt]
UACV-2230e ***tamV** 'sun, day': BH.Cup *tVmet 'sun, day'; HH.Cup *tamet 'sun, day'; Munro.Cup125 *tamé-t 'sun, day'; KH.NUA: Sr; Ls; Cp; Ca; Gb támit 'sun, day’. Every branch has things beginning with *ta-. [NUA: Tak, Num, Tb, Hp; SUA: Tep, TrC, CrC, Azt] [e1r,e2’2]
UACV-2033 ***tawa-kali (> tïwï-ka)** ‘sky, sun-house’: M67-384 *te sky; BH.Cup *tu ... ac ‘sky’; L.Son303 *tïwïka ‘cielo’; M88-tï3 ‘sky’; KH/M06-tï3: note Tbr *tawa-kalí-t; CN ilwi-ka-tl; TrC *tïwïka < *tVwV-kali ‘sun-house, sky’; Eu; Wr teweká ‘sky, world’; Tr rewe-gá-či ‘cielo’; My; HN ’elwika-tl. [SUA: TrC, Azt]

Other illustrations of Egyptian r > PUA *t in initial position

164 Egyptian(F) **rn** ‘young one, of animals’:
UACV-146 ***tana** ‘offspring’: Wr taná 'child, little one'; Wr tana-ní/tani-má 'give birth'; Tr ŕaná(ra) ‘cría [offspring], hijo [son]’; Tr ŕana-mea 'parir, dar a luz [give birth]’; Ktn titini-t ‘young boy, child, baby’ is probable in spite of a vowel change. [SUA: TrC; NUA: Tak] [e1r,e2n]

165 Egyptian(F) **rwi** ‘dance, v’; Egyptian **rwt** ‘dance, n’:
UACV-634 ***tawiya** / ***tuwiya** > ***tuya** ‘dance’; redupl ***tu(w/v)tui**: AYq tatawiilo ‘turn around, vi’; Sr tuhtu’ 'dance, vi’; Ktn tuhtu’ ‘dance, vi’; Ktn tuhtuic ‘dance, n’; Ktn tuhtuhyït ‘dancer, n’; Ls tóótuwi-š ‘guardian spirit, person who performs a certain dance, the tatahuila’; Gb tóvtu’ax 'tatahuila, kind of dance'; Gb tóvto’ar 'the tatahuila dancer'; CN i’tootiaa ‘dance, v’; CN mi’to’-tli 'dance, n’; Pl ihtutia 'dance, vt/refl’; *tuya > PYp tuuda ‘dance, vi’; TO čuuđ ‘do a squaw dance, v.r.’ [w>v] [e1r,e2w,e3i] [NUA: Tak; SUA: Tep, TrC, Azt]

166 Egyptian(F) **rwi** ‘go away, depart’ (> Coptic lo ‘cease, stop’):
UA *tawa > *towa 'leave, remain, wait': Tbr towi/tovi ‘quedar [stay, remain], vi’; Tbr towa ‘dejar [leave s.th.]’; Yq táawa/tawa 'quedar(se)'; My taawa-k 'se quedó'; AYq taawa 'stay, remain, vi, leave behind unintentionally, vt'; Wr toa 'leave s.th. for s.o.'; Mn tatawa 'wait'; Tr arewe ‘leave s.th./s.o. behind, abandon.’ [SUA: TrC] [e1r,e2w,e3i]

167 Egyptian(F) **rwd** ‘cord, bow-string, (as a plural) sinews’:
UACV-1844 ***tïsa** ‘rope’: SP tïšša-vï ‘rope’; CU tïsá-vi ‘vine, rope’; CU sávï ‘rope’; WMU sávï ‘rope’. Keep in mind Egyptian d > UA *s; and because PUA *u > Num ï often, either PUA *tusa ‘rope’ or *tïsa fits the Egyptian. [NUA: SNum] [e1r,e2w,e3s4]

168 Egyptian(F) **rm** ‘fish’; Coptic rame; Egyptian rm is often found in the pl **rmw**: Tr ***ŕamú*** ‘small fish’. Tr ŕ corresponds to Egyptian r and Hebrew r at the beginning of words. [SUA: TrC] [e1r,e2m,e3w]

169 Egyptian(F) rmṯ ‘man’; Egyptian(H) rmṯ ‘Mensch, Mann [man]’; Egyptian(H) rmṯ / rmṯṯ ‘Menschen [human being, man, person], Menschheit [mankind]’; Coptic rome, rem- ‘man, one, person’:
UACV-1428 ***tïmatí / *rïmatí*** ‘young man’: Tr ŕemarí ‘boy’; Eu temáci ‘mancebo [young man]’; Wr te’marí ‘boy, young man’; Wr re’marí ‘friend’; Wr remarí ‘man’ (loan from Tr?). The Eu accusative—Eu temáci-ta—shows the 3rd syllable to be part of the stem, not a suffix, and Tr ŕ instead of t in Tr ŕemarí points to initial r, not t; and 3rd syllable -ci in Eu shows *-ti > -ri in Tr/Wr. Op ro’omoi ‘youth’ (Shaul 2007) shows Coptic o, and the others show the other vowel or may be due to unstressed centralization. [e1r,e2m,e3t] [SUA: TrC]

Egyptian x > Uto-Aztecan k, as Semitic x > k also

170 Egyptian(F) **txi** ‘be drunk, drink deep’; Egyptian txt ‘drunkenness’; Egyptian(F) **txw** ‘drunkard’:
UACV-10 ***tïku** 'drunk’: Wr tekú 'be drunk'; Tr ŕiku 'become drunk, sick, faint'; Tr téguri/tékuri 'ebrios, borrachos, pl’; WTr reku ‘drink’; WTr reku-me ‘drunkard’ (Burgess 1984, 34). Remember Tr ŕ = PUA *t). Add ST tukgia ‘drunk, delirious with fever’ (ST g < *w). For another instance of UA forms being verbalizings from the noun CCw rather than the verb CCi, we also see Egyptian bši ‘to vomit’ > Egyptian bšw ‘vomit, n’ > UA *piso-ta ‘vomit’ (138), and 1st V approximates Coptic tihe. In Num, we often see Hebrew/Egyptian x > Num h, which suggests we consider Mn tïhuyee ‘angry’ and Sh tuhu/tuhuC ‘angry.’ [SUA: TrC, Tep; NUA: Num] [e1t,e2x,e3w]

294 Egyptian **xpš** ‘foreleg, thigh’: UA ***kapsi*** ‘thigh’; see fuller treatment at 294.

295 Egyptian **xpd** ‘buttock’ > **UA *kupta** ‘buttocks’; Egyptian **xpdw** ‘buttocks’ > **UA *kupitu** ‘buttocks’; see at 295.

171 Egyptian(F) **sxn / zxn** ‘kidney fat, kidney tallow, pancreas’ (Faulkner, Hannig):
UACV-1257 ***sikun** ‘kidney’: -skun of Ca pípiviskun; Eu cikúr; Yq sikúpuriam /sikúpuliam; AYq sikupuriam; My sikipuriam; Wr cihkipúni; PYp kuplida. We see final -n in Ca and the Cahitan forms suggest a cluster; otherwise, AYq would show -v- instead of -p-. Eu cikúr may be the only isolated form; *sikun does compound as ***sikuC-puriya** ‘kidney’, as PYp, Yq, AYq, My, and Wr combine *sikun/ciki and *puriya to yield ***sikupuriya**, which explains both TrC *sikupuria and PYp kuplida quite well, with syncope of the 2nd u and loss of initial hi- (<*si-) in the latter. TO olopaj might be a metathesis to s.th. near *kulipad, after which loss of initial k- and vowel leveling occurred: *kulipaD / kolipaD > olopaj (TO). [c/s] [SUA: Tep, TrC; NUA: Tak] [e1s,e2x,e3n]

172 Egyptian(H) nwx ‘verbrannt [burnt, singed], versengt warden [become scorched]’, ausglühen [glow], zerkochen [to cook thoroughly]; Egyptian(F) **nwx** ‘to heat, vt; be scorched, vi’:
UACV-523 ***noko** ‘to roast (often meat), v’: I.Num114 *no(h)ko 'to roast meat'; M88-no10 'to roast meat': KH/M06-no10: NP no’ho 'to roast, bake'; Sh nokko 'to roast, bake'; Cm nohko / noki 'bake biscuits'; Tb nohot~’onoh 'to roast in the ground’; Tb nohoo’yat~’onohooi’ 'roast, vi'; Tb nohoo’yiin 'roast, vt' (Tb h < PUA *k). Egyptian ‘be scorched’ and UA ‘roast meat’ and all three consonants as expected all bide well. Hp nöq- ‘word-forming element having reference to meat’ also fits. [SUA: Num, Hp, Tb]

173 Egyptian(H) nwx ‘verbrannt [burnt, singed], versengt warden [become scorched]’, ausglühen [glow], zerkochen [to cook thoroughly]; Egyptian(F) **nwx** ‘to heat, vt; be scorched, vi’:
UACV-1434b ***naka** ‘meat’: CL.Azt108 *naka ‘meat’: CN naka-tl; Pl nakat; Po neket; T nakatl; Z nakat. Besides *naka meaning both ‘bighorn’ and ‘meat’, so does *pa’a mean both.
UACV-1434a ***naka** ‘mountain sheep’: KH/M06-na29: Kw nagi ‘bighorn sheep’; Ch nagá ‘mountain sheep’; SP naġa-ci ‘mountain sheep’; WMU naaġá-č*i* / naġá-č*i* ‘bighorn, mountain sheep’; CU nagá-či ‘bighorn sheep’. I agree with Ken Hill in this being cognate with Azt *naka ‘meat’; a different voweling than 172. [iddddua] [e1n,e2w,e3x] [NUA: SNum; SUA: Azt]

174 Egyptian(F) **sxt** ‘field, country, pasture, willow, n.f.’; Coptic sooše:
UACV-1055a ***sakat / *sakaC** ‘willow’: Sapir; CL.Azt72 *saka ‘grass’; Fowler83; Munro.Cup138 *ṣaxá-t ‘willow’; KH.NUA; M88-sa26; KH/M06-sa26: Cp sáxa-t; Ca sáxa-t ‘willow tree’; Ls ṣaxá-t ‘arroyo willow’; Sr haqat; Gb saxát/sakát ‘sauz [willow]’. Miller lists only Tak forms. Ken Hill and Sapir include CN saka-tl ‘grass’ with which I agree. Hill also rightly adds WSh saka-ppin ‘type of willow’; Ch sagávï ‘willow’; Hp tïïsaqa ‘grass’; Ktn hakat ‘willow’; Tr sakará ‘zacate’; Pl sakat ‘grass, straw’. Add NP saga-pi ‘plant, several kinds of trees in the willow family’; ST va-haak ‘caña de zacate’; Tbr haka ‘straw’; Ch(L) sagah and Ch(L) sagaavasï’api ‘willow sapling used in house construction’. Absolutive -p in NP, -pp in WSh and -t in Tak all suggest a final C: *sakat ‘willow’. The semantic split is interesting: ‘willow’ in Tak and Num (most of NUA), but ‘grass’ in Hp and SUA, and both in Egyptian. Sapir ties the CN form to *saka 'willow,' which is what the Egyptian-UA tie suggests also, since both Egyptian and UA terms mean both ‘grass/pasture’ and ‘willow’. Most interesting is Hp tïïsaqa ‘grass, hay’ because Egyptian sxt is a feminine noun and Egyptian t’- ‘the’ is the feminine definite article prefix and we see exactly that in Hopi, while the others show sakat without it. [e1s3,e2x,e3t] [NUA: Num, Tak, Hp; SUA: Tep, TrC, Azt]

Note in 174 above and 175 below that both NP and SNum have reflexes in both *saka and *sïhï, perhaps from early cyclical borrowings. For now Miller’s separation of *saka and *sïhï is useful.

175 Egyptian(F) **sxt** ‘field, country, pasture, willow, n.f.’; Coptic sooše:
UACV-2552 ***sïhï** 'willow': I.Num197 *sïhï 'willow'; M88-sï12; KH/M06-sï12: Mn sïhïbï; NP sïïbi ‘silver willow’; TSh sïïpin; Sh sïhï-pin; Kw sïï-vi; CU sïï-vï-pï 'cottonwood tree’. Intervocalic *-k- > -h- and rising *a > ï may tie this to *saka ‘willow, grass’: NP saga-pi ‘kinds of willows’ and NP sïïbi ‘silver willow’ being one from each, perhaps also *sïhïpï ‘sumac, squaw bush, Rhus trilobata (used for weaving). [NUA: Num] [e1s3,e2x,e3t]

176 Egyptian(H) **x’m** ‘verbeugen [to bow], sich verbeugen [to bow, bend oneself], beugen [to bend]’; Egyptian(F) **x’m** ‘bend arm in attitude of respect; bend back; bow down’:
UACV-438 ***kom**/***ko’om** ‘bend’, ***(noC)-ko’mi** ‘to bend’: M88-no1 'bend'; M88-ko14; KH/M06-ko14: Kw nokkomi 'to bend, be bent'; SP nohkommi / nokko’mi 'bend, vi, be bent'; CU komo’ni-ci 'bend, twist, curve, turn, n’. Note the glottal stops in UA also. Miller has these SNum forms combined with *koli forms, though they differ in the second consonant. Add WMU *hia*qqw̲ő̲’mi ‘bend (in road), crook (in arm)’. [NUA: SNum]

As in ‘bending arms’ or ‘wrapping arms around to hug s.o. or carry s.th.’ note:
UACV-384 ***koma** 'hug, carry in arms': M88-ko3 'hug, carry in arms'; KH/M06-ko3: TO koom-k 'hug'; TO koom-č 'have in one's arms'; Wr komí 'hug, carry a person or animal'; My kóomim 'los gatos (biceps)’; PYp komi ‘carry in arms’; Tr omabi 'cross or fold arms, wrap or dress oneself in s.th.'; NT koomiáátugai 'carry in the arms'; NT kokóómityukui 'abrazarlo, vt’; ST koomkia / koomkk / koomkiču 'hug’. [iddddua] [NUA: Tak; SUA: Tep, TrC]

177 Egyptian(H) **x’m** ‘verbeugen [to bow], sich verbeugen [to bow, bend oneself], beugen [to bend]’; Egyptian(F) **x’m** ‘bend arm in attitude of respect; bend back; bow down’; relevant to the Egyptian semantics of ‘bending the back’ to ‘bow down’ is the meaning of ‘down(ward)’ in UA:

UACV-702 ***ko'om** 'down, low': M88-ko5 'below'; KH/M06-ko5: Eu kom 'para abajo [downward]'; Wr ko'miná 'cuesta abajo [downhill]; Tr go'ná 'abajo'; My kóm (appears in phrases meaning down(ward)); My kó'omi 'abajo'; ko'mi 'abajo'; HN komol-li' 'pit in the earth'. Add first part of Tb 'omholok 'under'. Yq kom 'para abajo'. [iddddua] [e1x,e2',e3m] [NUA: Tb; SUA: Tep, TrC, Azt]

178 Egyptian(H) x'i 'eine Krankheit [a disease]'; Egyptian(H) x'yt / h̲'yt 'Gemetzel [slaughter, carnage], Leichenhaufen [corpse-heap]'; Egyptian(H) x'yt 'Leiden [suffering], Krankheit [illness, disease]'; Egyptian(F) **x'yt** 'slaughter, carnage'; Egyptian(F) **x'yt** 'illness, disease'; Egyptian(F) **x'i** 'sickness'; Egyptian(F) **x't / h̲'t** 'corpse'; Egyptian(F) **h̲'yt** 'corpse-heap'; Egyptian(F) h̲'t 'disease'. Whether the nouns xo'yat 'disease, corpse, slaughter' from an unattested verb x'i / h̲'i 'die/kill' or from a denominalized verb, the UA verbs mean 'die, sleep, vi (of pl subj's)' or 'kill, vt (pl obj's)' and phonologically match perfectly.
UACV-1190a ***koy / *ko'ya / *ko'iya** 'fight': B.Tep102 *kokodai 'he fights'; M88-ko30 'fight'; KH/M06-ko30: UP kokïda; LP kokda; NT kokódai; ST kookda; TO kokđa 'kill, pl obj's.'
UACV-1190b ***ko'ya / *ko'Vya;** AMR ***ko'yi** 'die, pl subj; kill, pl obj.': VVH45 *koya 'to kill, pl'; B.Tep106a *kooda 'to kill pl obj's' and B.Tep106b *koi 'he killed pl. obj's'; M67-129a *koi 'die'; I.Num59 *ko'i 'kill, die, sleep'; KH.NUA; L.Son87 *ko 'morirse'; L.Son99 *koya, ko-i 'matar pl obj's'; M88-ko8 'die'; KH/M06-ko8 *ko'yi (AMR): Mn qoi 'kill pl obj's'; NP koi/koi'hu 'kill pl objs'; TSh ko'i 'die, pl subj's'; Sh koiC 'die, pl subj's'; Cm kooi 'die, pl subj's'; Kw ko'i 'kill pl obj's'; SP ko'i 'kill pl obj's, go to sleep, pl subj's; SP ako'i 'sleep, pl.'; CU ko'ay 'slaughter, kill en masse'; Ls qi'éé 'kill pl obj's'; Sr qö'ai 'die, be sick, vi pl'; Hp qöya 'kill pl obj's; TO koo'i 'die, pl'; TO kokđa 'kill, pl obj's' and the others from B.Tep102; LP koi 'he killed pl objs'; NT kooda 'kill pl obj's; ST kooda 'kill pl. obj's'; Eu koda 'kill pl. obj's'; Tr go'í-mea, go'ya-rï (pret.) 'kill pl obj's'; Wr ko'yá-ni, ko'-ma 'kill pl. obj's'; Wc kukúúya 'kill pl. obj's'; Wc kuuyáa 'war, warrior, kill' belongs, since Wc u < *o. Miller also includes similar forms such as TO ko' 'corpses'; Wc kúuye sick'; CN kokoaa 'sick, hurt, v.refl, hurt, vt'. Initial vowels, including Hp ö, Wc u, and all other o's, align well with PUA *o. Ls should show e-i, but i-e happens. Medially we are dealing with a cluster, perhaps -'y-. Note the evidence of y in Eu, Wc, Hp, NT, ST, Wr, Tr go'yá/go'í. Without the final vowel (a), y > i is expectable: *ko'ya > ko'y > ko'i. PYp and other Tep show y > d: PYp ko'ida 'kill pl obj's'; PYp ko'id 'kill (pret.)'. AMR includes this set in his article "A Northern UA sound law: *-c- > -y-," wherein he reconstructs *ko'yi 'to kill (pl obj', with which I quite agree, though I would adjust the final vowel to *a* in light of its presence in Hp, Tr, Wr, Wc, and much of Tep. As for overlap with 'sleep', AMR's sound law *-c- > NUA y might merge *koci and *ko'i/*ko'y(a) in NUA, but many SUA languages show that a distinction is warranted: Tr/Wr ko'ya/ko'i 'die, kill' vs. Tr/Wr koci 'sleep' and Tep *koda 'kill' vs. Tep koso 'sleep'. Sr qö'ai (< *ko'ay) and UP kokïda could indicate a 2nd vowel of *a*—*ko'aya—easily assimilating to *i* before *y* or syncopating, both of which we see often. Next is a compound of this stem. What of Cp qaawe 'to die, be sick'? [e1x,e1h4e2,e3i]

179 tied to the above with reciprocal *na- prefix: **UA**CV-1191 ***na-ko'(i)y(a)** 'fight, hit/kill each other': NP nakoi; Hp naaqöy-ta; Eu nákoda / náhoda; Tr nakó-; Wr nakó-; Tb noŋooyï 'wrestle'; Cp náŋiš (Ca i < *o); Kw nonogo'i / nonogwi'i 'fight'; CU nako-ko'ay 'fight'. The reciprocal of *ko'ya sets the later segments further from initial position, so they tend to reduce more, thus (na-)koy < *ko'ya is a remarkable preservation for non-initial syllables in UA. The nasalized velar in Tb and Cp, perhaps from nasalization in the environment from initial *na-. [*ko > qo > qi/qe Cup] [NUA: Num, Tak, Hp, Tb; SUA: Tep, TrC, CrC, Azt]

Egyptian pharyngeal ḫ > hu / ho in initial position and w/o/u elsewhere

180 Egyptian(H) **ḫbi** 'festlich sein [be festive, make festival]'; Egyptian(F) **ḫbi** 'be festal, make festival'; Egyptian(F) ḫb 'festival':
UACV-1985 ***hupiya** 'sing, song': I.Num38 *hupi(y)a 'sing, song'; M88-hu12 'song'; KH/M06-hu12: Mn hubiyadu 'sing, play instrument, make music'; NP hubia 'sing'; TSh hupia 'song'; Sh hupia 'song'; Cm hubiya' 'song, hymn'; Cm nahubiyaarï 'sing a song for s.o.'; Cm hubiyaarï 'cry, yell noisily'; Kw huviya-vi 'song'; Ch huví-tu 'sing, v'; Ch huvia-vï 'song'; SP uvia/uviC 'song'; SP uvi-ttu 'sing a song, song-make, v'; CU 'uvwi-ya-vï 'song'. Note the -y- acts as underlying consonant causing gemination in SP. [iddddua] [NUA: Num] [e1h2,e2b,e3i]

181 Egyptian(F/H) ḫnqt 'Bier [beer]'; Egyptian(H) n'-ḫnqt 'die Trinker [the drinkers]':
UA *hunaka 'drunk, alcohol': Hp hoonaqa 'drunkard, silly person, drinking habit' (Hp o < *u of PUA; Hp hoonaq-ti 'become drunk, crazy'; Hp honaq-kïyi 'alcoholic drink.' [e1h2,e2n,e3q] [NUA: Hp]

182 Egyptian(F) **ḫtp** 'be gracious, be at peace, rest, set (of sun), pacify'; Egyptian(H) ḫtp 'zufrieden sein [be at peace], freundlich, gnädig sein [be friendly, gracious], ruhen [rest], sich niederlassen [let/lay oneself down], untergehen [go down (sun, stars, persons in death)], gelegt sein (h̲r) unter [be laid under]'; Egyptian(F) ḫtpyw 'non-combatants'; Egyptian(H) ḫtpyw 'die Friedfertigen [the peaceable ones]';

Egyptian(H) ḫtpy ‘der Genädige [the gracious/merciful one]’; Coptic **hotpe**:
UACV-1616 ***huCpi** ‘peaceable’: Hp hopi ‘behaving, peaceable, polite’. Hp -p- < *-pp-/-Cp- (from a cluster, like *-tp-), because if not a cluster, then Hp *-p- > -v-. So Egyptian ḫotpe > UA *huCpi is a good match.
UACV-703a ***’uppi** (> *opi) ‘dive, sink, go down in’: Ca ’upi ‘dive, vi’ and Ktn ’op-ïk ‘dive, sink, vi’ both agree with a medial cluster (*-pp-/*-Cp-). Though Tb seems to have lost the gemination, Tb likely belongs as well: Tb(H) opat ‘dive’; Tb(M) *’oobat- ‘dive’; Tb(V) ’ob~’o’op ‘dive’, with vowel assimilation (u-a > o-a). The Egyptian semantics ‘peace, go down, be buried’ have the various dimensions in UA ‘be peaceable, sink, subside’. Nv huputuda ‘pacificar a una persona enojada’; Nv hupitudida ‘pacificar para otro’ as well as Nv hupida hupituda may be from *sïppï ‘cold’ as Nv hupi ‘hacer fresco’. As unlikely (in ‘making a place safe/peaceable with incense/smoke’) are Eu úpiso ‘sahumar [fumigate with odorous smoke]’and Wr upáni ‘smell, incense smoke’, which also show geminated *-pp-, and tie to *hup(p)a ‘skunk’ at least. Also less likely are Num/Tb *upita ‘slow’ (at ‘slow’), for lack of geminated *-pp-, though the semantics are okay—quiet/slow, i.e., peaceably—if gemination were lost. [e1h2,e2tp,e3p] [NUA: Tak, Tb]
UACV-703b ***huppa** ‘untie, come loose, let down’: Ch hupá ‘untie’; Ch hupá-ki ‘come untied’; SP uppa ‘untie’ (Miller uhpa); WMU uppaa ‘untie’; Kw nohopï ‘unravel’; Kw nohopï-kwee ‘get loose’;
ST hupaañ ‘deshilado [unravel, come undone]’ (pl huupak ‘deshilados’); Hp hòopa ‘peel the skin or covering off a stem by pushing it all to one end, like the paper off a drinking straw’. When peeling off s.th., the coming off is usually downward, and one must loosen before whatever can come down. So ‘loosen/untie’ and ‘peel off’ (Hp) are both semantic extensions of ‘let down’. This is the active/transitive form *huppa ‘let down, cause to go down (by untying)’ vs. intransitive *(h)uppi ‘go down, sink’. [NUA: Num, Hp; SUA: Tep]

183 Egyptian(H) ḫtp ‘Rastplatz [rest place]’; Egyptian(H) ḫtp ‘gelegt sein’ (hr ‘unter’) [be laid under]’:
UACV-1922b ***hïppa** > ***hapa** ‘shade’: TSh hïppa ‘shade, shade house’ and TSh hïppaiya(nna) ‘shadow’; Sh hïpa, hïki, hïka ‘shade’; Mn habaa/hapaa-t ‘to shade’; Mn haba/hapa ‘shade house’; Mn habána ‘in the shade’; NP hapa ‘shade’; Kw hava ‘shade’; SP ava-vi ‘shade’ (cognate? Miller queries; yes, it is only missing initial h-, a very vulnerable whisper diachronically; CU ’aváa ‘shadow’; WMU aváa ‘shade, shadow, n’; Ch(L) hava-vï ‘shade’. [NUA: Num] [e1,e2,e3]

184 Egyptian(F) ḫtp ‘to set, of sun’:
UACV-2243a ***huru-** ‘set (of sun), v’: TO hudun ‘set or sink (of sun), v’; Eu urún ‘para el poniente’;
Eu urícvai ‘para el poniente’; Eu urícei ‘del poniente’; Eu urúkon ‘al poniente’; ST hurnip ‘poniente, n’; Nv urhunu ‘anochecer, v’; NT urúúnïi ‘hacer tarde’; NT urúúkïi ‘hacer tarde’. Usually Tep h < *s, but not in Eu and sometimes Tep keeps *h, and Eu’s stem is more richly productive in its morphological use than is typical of a loan. Many morphemes suffix to *huru, one of which is the compound below.
UACV-2243b ***huruniko** 'afternoon': B.Tep79 *hurunoko/*hurunïko 'afternoon'; M88-su20; KH/M06-su20: UP hudunïkï; NT urúnoko; ST hurnïk; TO huduni ‘descend, set, sink, go down’; TO hudunig ‘sunset, west, evening, night’. This set— Tep huru(p)-’ni-ko ‘set/go down-do-at/during’—has its first part from *huru(p) ‘go down (of sun)’. Eu normally has s < *s, which leans away from PUA *s for Tep h, though a Tep loan is possible. But Tep languages occasionally keep *h, and some TrC forms suggest such here. [e1,e2,e3] [SUA: Tep, TrC]

185 Egyptian(F) **ḫnt’sw** ‘lizard’; Coptic anθus; with definite article prefix **pV-ḫnt’sw**:
UACV-1380 ***-hoto-** ‘lizard’: Eu behór ‘cachorra / cacharron que se come’; Yq behó’orim ‘type of lizard’; Yq porowim ‘sp. of lizard’; My porowim ‘lizard’; Tbr holi/huri ‘iguana’; PYp tohoroki ‘sp. of lizard’; PYp vihul ‘sp. of lizard’; PYp tohorek ‘sp. of lizard’; PYp viuheli ‘sp. of lizard.’ Only Tbr shows *hotV alone. The others may have Egyptian prefixes fem. t-/tV- and masc. p-/pV- ‘the’ fossilized in the forms. PYp vihul and Yq beho’orim (and My, Eu) look like the masc prefix plus *hotV; and PYp tohorek and PYp tohoroki as likely contain fossilizations of the fem prefix. The Cah form *porow is most interesting since (after p-) it shows the rounding of the pharyngeal (in the first o), the cluster -nt- > -t- > -r-, and a w for either ’ or w and the *s* is lost. All the others similarly show portions. [e1,e2,e3] [SUA: Tep, TrC]

186 Egyptian(F) wḫ’ ‘hew (stone)’; Egyptian(H) wḫ’ ‘brechen (Steine im Steinbruch) [break (stone)]’:
Hopi waho(-k-) ‘for particulate matter to spill’. [iddddua]

Sometimes for Egyptian ḫ, the initial h of hu proves fragile and is lost, showing only an initial round vowel:

187 Egyptian(F/H) **ḫw’** ‘foul, offensive, putrid, adj; rot, putrify, smell offensive, stink, vi’; Coptic how:
UACV-2044 ***hu’a** / ***hu’i** ‘break wind, stink’: Sapir; L.Son65 *huha/*huh-i 'heder'; CL.Azt161 *ihyaak; CL.Azt210 **hu’a 'break wind'; KH.NUA; I.Num17 *u(’)u; KH/M06 astutely combines ’u3 and hu2; M88-hu2 'to fart, break wind'; KH/M06-hu2:
Kw huu ‘fart,v’; Kw huu-pï ‘fart, n’; SP ooC-; CU ’uu’i ‘fart, v’; CU ’uú-pï ‘fart, n’; Tb ’uumat~’uum;

Cp hú’; Ca hú’-il 'anything that smells'; Gb hohó; Sr huu’; TO uiwi; Eu húha 'heder [to stink], emporcar el aire [to foul the air]’; Wr uhá-ni; Wr uhí-ma; Tr uhá / uhí / uhú; My húuha; because CN i < *u, the i’/i’i (or *u’u) fits of CN i’iiyootiaa ‘breathe, sigh, break wind’; CN (i)’yaaya ‘to stink’; Pl ihyal ‘fart’. Consonant harmony (*hu’a/hu’i > huha/huhi or ’u’a/’u’i) has many UA forms having h for both consonants or ’ for both consonants—huh, ’u’—though some (Sr, Ca, Cp, Kw) show initial h and medial ’ , i.e., UA *hu’ < ɧw’ of Egyptian, a stunning match. Sapir ties TO and SP, uniting Num and Tep. Note also NP hunkï 'odor of skunk' and Sr hukum 'to smell’ which are at ‘skunk’ also, with *hupa ‘stink, skunk’. [e1h2,e2w,e3’] [NUA: Num, Tb, Tak; SUA: Tep, TrC, Azt]

387 Egyptian(H) ɧwi ‘fliessen, fluten [flow, flood]’; Egyptian(F) ɧwi ‘surge up, overflow’:
UACV-367 ***huwiC** ‘canyon, water way’: Kw huwi-pi-dï ‘canyon’; Ch huwípi (< *huwippi) ‘wash, canyon’; SP uiC ‘canyon, gully’; WMU wíí-pp*ü* / wii-pp*i* ‘flood, where flood flows, a wash, canyon, n’; CU wíi ‘be flooding, vi’.

280 Egyptian(F/H) **ɧm’(t)** ‘salt’ > **UA *omwa / *oŋa** ‘salt’ is treated below at 280.

Non-initial Egyptian **ɧ > w/u/o**

188 Egyptian(H) **nɧbt** ‘Hals [neck], Nacken [nape of the neck]’; Egyptian(F) **nɧbt** ‘neck’; Coptic nahbe: as Hebrew šekem ‘shoulder’ slid down the UA arm to mean ‘shoulder, arm, hand’, the same direction of change happened for Egyptian **nɧbt** ‘neck/shoulder’ to UA ‘arm/hand.’ Egyptian rmn ‘shoulder, upper arm, carry, arm’ similarly shifted as Hebrew šekem and Egyptian nɧbt in UA, from ‘shoulder’ to ‘arm.’
UACV-1120 ***nohopi > nopi** ‘hand, arm’: B.Tep174 *novi ‘hand’, *noonóhovi ‘hands’; M88-no8; KH/M06-no8: TO nowi ‘hand, arm’ (pl: noonhoi); PYp novi ‘hand’, pl nonovi; Nv novi, pl: nonovi; PB nov ‘hand’; NT novi ‘hand’; ST nov ‘hand, arm’. The -h- in TO plural (noonhoi) and in Bascom’s reconstruction of the plural (*noonóhovi) and other forms suggest another consonant between n- and -v-, a consonant much like ɧ > ho. [SUA: Tep]

189 Egyptian(H) nɧb ‘anschirren [to harness], ins Joch spannen [to yoke animals]’:
UACV-405 ***noC / *noCop** 'carry on back’: I.Num112 *no(’)o ‘carry (on the back)’; M88-no6; KH/M06-no6: Mn noo ‘carry, pack, haul’; NP no; TSh nooC ‘carry on the back’; Sh nooC; Cm noo ‘haul’; Kw nooC ‘pack or carry on the back’; Kw noo-pï ‘s.th. packed’ (-p- instead of -v- shows final gemination); Ch(L) noogwah ‘carry on back’; Ch(L) ’avi-n^{y}ooci ‘(one who) carried white clay on his back’ (’avi ‘white clay’); SP noo / nooC; CU nöö-’way ‘carry, on back, in hands, on vehicle’; NP(B) noo- / noo’o- ‘carry, transport’; NP(B) noobidïu ‘to camp’. Note Mn nobi ‘house’ and Mn nobiha ‘pack, bundle up, vt’ as well as Mn noo ‘carry, pack, haul’ and Cm noo- ‘hill, knoll, hauling’ and others, all suggesting a relationship between *nooC ‘carry/haul one’s stuff’ to campsite, WMU nööppi ‘blankets, bedding, camping place, one’s stuff in a pile or place’ and *nopi ‘make windbreak, wikiup, campsite, camp pile of stuff’ (temporary house) and *no’o(vi) ‘hill’ (mound or pile looking like a pithouse). [e1n,e2h2,e3b] [NUA: Num]

190 from Egyptian nɧbt ‘neck’ the semantic change to ‘back/shoulder’ to ‘mound, pithouse’:
UACV-1216 ***nopiC < *no’piC / *no’opiC** ‘house’: Mn nobi ‘house’; NP nobe ‘house’; TSh noppoi-cci ‘habitat, home, nest on ground’; Sh nanopi-ppï / nonopi-ppï ‘windbreak, lightly made wikiup with rounded top’. Cf. CNum *no’opi ‘mountain top’ at mountain. I had suspected that WNum *nopi ‘house’ is from a ‘mound-like’ term, as pit-houses look like mounds on the landscape, then found the CNum terms that mean ‘mountain top’. In SNum is SP novi ‘put bark over’ and SP novi-ppï ‘bark covering, windbreak’ which is mound-looking and used as a temporary house when traveling, as well as Kw novi-pï ‘windbreak, n’. Note also WMU nööppi ‘blankets, bedding, camping place, one’s stuff in a pile or place’. And compare Mn nobitu ‘build a house’ and NP nobidïga ‘to camp, v’. So the term is in each branch, and with overlaping meanings. Mn nobi ‘house’ and Mn nobiha ‘pack, bundle up, vt’ as well as Mn noo ‘carry, pack, haul’ and Cm noo- ‘hill, knoll, hauling’ and others, all suggest a relationship between *nooC ‘carry/haul one’s stuff’ to campsite as in WMU nööppi ‘blankets, bedding, camping place, one’s stuff in a pile or place’ and Num *nopi ‘make windbreak, wikiup, campsite, camp pile of stuff’ (temporary house) and CNum *no’o(vi) ‘hill’ (mound or pile or pithouse). Hebrew baamaa ‘back, hill’ has the same pair of meanings we see in Numic’s semantic shift ‘back’ to ‘mound’. [NUA: WNum, CNum, SNum]
UACV-1461 ***no’opi** ‘mountain top, hill, mound’: TSh noopi ‘mountain top’ (no absolutive suffix, so -pi is part of the stem); Sh(C) no’o-pin ‘a hill, a rise, a small round hill’ (Crapo); Cm noo- ‘hill, knoll’, reference to ‘hauling’ (probably as in ‘pile of’). This likely ties to SNum nooC-pV ‘campsite, carried/hauled stuff’ and to WNum *nopi ‘house’ because pit houses look like mounds or little hills. [NUA: CNum] [e1,e2,e3]

207 Egyptian **t̲pɧt** ‘hole, den, hole of a snake’: UA ***tapu** ‘hole’; see fuller treatment at 207.

Egyptian h = h or Egyptian h > ’ in a cluster

191 Egyptian(F) **thi** ‘go astray, transgress, reject’: Egyptian(H) thi ‘abweichen [deviate]’:
UACV-1304 ***toha** ‘leave/dejar’: Wr tohá- ‘separate (on the road), go different directions’; Yq toha ‘llevar, traer, echar, dejar [leave]’; AYq sutoha ‘leave, abandon, release’; Yq su’utoha ‘abandonar, dejar, soltar [let go/loose]’. [-a/-i transitive/stative in Tbr] [e1t,e2h1,e3i] [SUA: TrC]

192 Egyptian **nhp** ‘copulate’; Coptic nuuhb; Hebrew n’p ‘be adulterous’ (K&B note this may tie to Egyptian nhp); Aramaic(J) n’p ‘be adulterous’:
UACV-532 ***na’pa / *naCpa** ‘join/be together, copulate’: Tr na’pe ‘unirse a alguien en union sexual, copulate’; Tr napa ‘union, joining’; Wr na’pa ‘a pair, the two joined together’; Wr na’pe ‘mix, join’; Yq naápo ‘a lado de, junto de, at the side of, together with’; Ktn nap-ïk ‘be stuck together’ (Ktn would have -v- unless there was an underlying cluster, thus evidence for the medial cluster *-’p-); Ktn napa-wicu’ ‘splice a rope (< together + twist)’. [NUA: Tak; SUA: TrC] [e1n,e2h1,e3p]

193 Egyptian **mhr / mhi** ‘milk-jar’; Egyptian **mhit** ‘milkcow’:
UACV-1439 ***mu’i** ‘milk’: M67-284 *mu ‘milk’; M88-mu8 ‘milk’; KH/M06-mu8: SP muí-vi ‘milk’; SP muí-ni ‘my milk’; Wr mu’i- ‘to have much milk (of animals)’; Cr ci’iméh. Add 2nd syllable of Tr či’-mu- ‘have milk’. [NUA: Num; SUA: TrC, CrC] [e1m,e2h1,e3r]

Egyptian <u>d</u> > s in Uto-Aztecan

As in the Semitic-p in UA, **Egyptian <u>d</u> > s in UA** also, for in Afro-Asiatic and in the ancient Near East, Egyptian <u>d</u> corresponded to Hebrew ṣ, which in turn also became s in UA’s Semitic-p vocabulary.

194 Egyptian(F) **<u>d</u>’i** ‘1. extend, cross (water, area), 2. pierce, transfix, 3. devour (food)’:
UACV-622a ***sowa** ‘pierce, prick’: CN soo ‘pierce, draw blood’; CN so’soo ‘string things together by piercing and threading them’; CN so’soowa ‘pierce, nail s.th., vt’; CN so’solwiaa (applicative of so’soo); Yq sóa ‘apuñalar, picar’; Yq sóosok ‘clavarse una atilla, espinarse’; AYq soa ‘poke, prick, puncture’; AYq hih/his-soa ‘poke, prick, vt’; My sóiya ‘picarse’; Tr so- ‘pierce’; Tr čihiso- ‘pierce, prick, puncture’; Tr nata ‘abertura’; Tr nata-so- ‘pierce’; Wc šuu ‘ensartar [string, as beads]’ (Wc u < *o).
UACV-622b ***so’a / *so’i** 'pierce, sew, shoot arrow': KH.NUA: Sr hö’ai 'sew'; Ls ṣé’i 'shoot with a bow, pierce one's body’ (Ls e < *o). The semantics of ‘pierce’ in both a and b, as well as Sr ‘sew’ and CN ‘thread’ likely tie these together, pun intended. [w/’] [NUA: Tak; SUA: TrC, CrC, Azt]
UACV-2297 ***so’i** 'thorn, pierce': VVH132 *so’i 'thorn'; B.Tep74 *ho’i 'thorn'; L.Son255 *so, so-i 'espinarse'; M88-so2; KH/M06-so2: Ls ṣé’i 'pierce, shoot with a bow'; Sr hö’i 'to sew'; TO ho’i; LP ho’i/hoi’; PYp ho’i; NT hoí; NT óímadai 'espinar'; NT óídyadï 'espina'; ST hoi’/hoii; Wr so’i 'espinarse'; Tr so’iwá ‘espina, astilla’; Tr so’(w)i-mea 'pierce'; My soóso-k 'se espinó'; AYq sooso ‘thorn, sticker’; HN so’ 'to string with a needle and thread’; Nv hoi ‘espina [thorn]’. Perhaps CN pa’sol-li 'briar patch'. [e1,e2,e3] [NUA: Tak; SUA: Tep, TrC, Azt]

195 Egyptian(F) **<u>d</u>’i** ‘devour’ has same UA correspondences as Egyptian s’i ‘sich sättigen, satt warden, satt [be satisfied, sated], zufrieden sein’; less likely Egyptian swr / swi ‘trinken, saufen (Tiere) [drink, sup (animals)’:
UACV-781 ***suwa / *su(C)wi(C) / *suCCaC** ‘eat up, consume(d), die’: VVH72 *suwi/*suwa ‘consume, eat up, finish’; M67-130 *sua / *suwa ‘die’; M67-153 *suwa ‘eat’; I.Num183 *su’a 'eat, consume, finish up'; L.Son266a *suwi ‘agotarse’; 266b *suw-a 'agotar'; B.Tep75 *hugi ‘eat’; M88-su3 ‘finish, consume, use up’; KH/M06-su3 *suCHaC (AMR): Mn su’a 'eat all, eat up'; NP soo’a ‘eat up, consume’; NP sua ‘consume’; Kw soo-kkwee 'consume, eat up'; SP šua 'consume (usually food)'; CU suwa-y 'eat up'; Hp sowa 'eat up, consume, devour'; TO hugiog 'destroy, spend, use up'; TO huhug 'perish, die' (cf. Hp so’a 'die, perish, pl’); Wr soa- 'consumir'; Wr soa-pa-ni ‘be used up, be out of’; Tr suwí- 'acabarse, agotarse, morir'; My súwwa ‘kill pl. obj’s’; Tbr suhi / zuwi / zuñwá 'acabarse' (a nasalization occurs in the Tbr reflex of *suwa, as in the Tb reflex of *pusi ‘eye’; and Num at brown); Wc sïï 'acabar’. In his dictionary, Miller separates Wr suení ‘cross the river’ and Wr suení ‘finish’ though the Wr forms are identical, yet ‘cross the river’ is exactly one of the Egyptian meanings, as well as ‘finish (up), eat, consume’; i.e., both meanings are in Egyptian and UA. With an extra morpheme are My ansu ‘be finished’; AYq ansu ‘finish up, vi’; AYq ansuwa ‘end, terminate, be finishing up’. Miller includes Pl seewi 'go out, die out, be extinguished'; CN seewi 'calm down, take a rest, cool off’. Perhaps CN tetešoaa 'gnaw, chew' or AYq sauwa ‘use, vt’; Wr suení ‘acabar’. [e1s4,e2’,e3i] [NUA: Num, Hp; SUA: Tep, TrC, CrC, Azt]

196 Note Egyptian(F) **<u>d</u>’i** ‘cross (water, sky)’ and Wr suení ‘cross the river’ (if -ní another morpheme), but Wr suéla ‘edge, border’ is at 1074 Semitic saaḫil > UACV-792 ***suwi(y/l)a** ‘end, edge, shore, border’: B.Tep76 *hugida 'edge’.

197 Egyptian(F) **dʕb** ‘coal-black’; Egyptian(F) **dʕbt** ‘charcoal’:
UACV-243 ***so’opa** ‘black, dark’: Eu sóbei / só’obei ‘black’; Eu soba / sobé 'become black'; Cr sú’umuara’a 'está negro o prieto (persona)’. Also Eu sovewa ‘blacken/soil with soot, smudge’. Note both the presence and lack of glottal stop in the same language (Eu), which was left out when lengthened by affixes, as in other forms above (see at Egyptian x’m, 176-7). [e1s4,e2’2,e3b] [SUA: TrC, CrC]

198 Egyptian(F) **d’rt** ‘bitter gourd’:
UACV-2140 ***sawara** 'gourd': Tr sáwara ‘maraca, sonaja’; Wc kïšáuri ‘jicara’. Metathesis would admit CU wəsáraa-ganá-pï ‘gourd, calabash, rattle’, and CU and Kw at UACV-2137 *soko both contain *-kana, isolating that morpheme. Wc has an extra initial kï-. [e1s4,e2’,e3r] [NUA: Num; SUA: TrC, CrC]

199 Egyptian(H) **db’** ‘bekleiden [to clothe], wechseln (kleider) [change (cothes)] vt’; Egyptian(H) **db’** ‘ein Gewand (für Götter) [garment (for gods)]’; Egyptian(H) **db’yt** ‘eine Kleid [item of clothing, garment], n.f.’; Egyptian(F) **db’** ‘clothe, adorn’; Egyptian(F) **db’** ‘garment (worn by god)’ (Cerny 1976, 181; Faulkner and Hannig, all have ‘worn by gods’); Egyptian **db’t** ‘robing-room’; Coptic tebi ‘strip, bandage, linen’:
UACV-491a ***sipu’** > ***si’pu** ‘underclothing, slip, skirt, shirt, clothing’: Wr si’picá ‘skirt’; Tr sipuca ‘skirt, enaguas, gown’; Tr siputa-ma 'put on skirt, enaguas, gown'; Cp hísexve-l 'clothing, goods'; vowel leveling in Cp, since ï is between i and u: *si’pu- > *sïkpï. Tr showing t rather than the usual -r- for intervocalic -t-, suggests a 3rd C glottal stop at the end which jumped to before p in Wr and Cp. Cp -x- aligns with glottal stop of Wr. Wr si’picá ‘skirt’ and Tr sipuca may reflect Egyptian db’yt ‘a garment’ in light of other -yt- > UA -c-. Tr has vowel u, expected for the glottal stop after the bilabial, yet Wr actually shows the glottal stop, though transposed as usual, and the vowel assimilated (*i-u > i-i). Add Sr havïïţ ‘clothes, blanket’ (Sr h < *s). The forms below also tie to Egyptian db’.
UACV-491b ***supï** 'shirt, clothing': Yq súpe/súupe ‘camisa [shirt]’; Yq supe-téne; AYq supem ‘shirt, blouse’; AYq supete ‘put on shirt or dress, v’; My súpe-te ‘está vestiendose [get dressed], v’; My súppem ‘vestido, camisola, camisa, n’. This Cahitan etymon likely anticipates the vowels of 199 sipu above. Note the similarity of Egyptian -b’- > Wr -’p- in Egyptian sb’ ‘star’ > Wr so’pori ‘star’ and Egyptian db’ ‘clothe, adorn; garment’ > Wr si’pica ‘skirt’ and Egyptian it’ > Wr i’tu and ‘jackrabbit’, wherein the glottal stop hops to precede consonant. [e1s4,e2b,e3’,e4t] [NUA: Tak; SUA: TrC]

200 Egyptian(F) **dbt** ‘brick’; Egyptian(H) **dbt** ‘Ziegel [brick]’; Coptic tobe / to’obe ‘adobe’:
UACV-2 ***supa-** ‘adobe’: Dakin 1982-84; Stubbs2003-8: Tr supá-na-ri ‘adobe’ (Tr supá-na- ‘make adobe’); Tr supá-ca-ri ‘adobe’; Wc šïnaríiya 'adobe’. To Dakin’s astute observations, add NT úúpasai ‘el adobe’; NT úúpastai ‘hacer adobe [make adobe]’. As UA *s > Tep h, then Tep h > ø in NT, the NT úúpasai fits the 2nd Tr form perfectly, i.e., Tr supá-ca-ri. Length and two different Tr terms combine to suggest we are dealing with a compound. The 1st Tr term and Wc both have *su...nari in common, since Wc ï < *u. Furthermore, in CrC, *p > h/ø, which would encourage the loss of the isolated vowel as 2nd element of a dipthong: *supa-na > *sïa-na > *sï-na. All 3 forms suggest a reconstruction of PUA *supa, and two forms suffix *-ca for *supa-ca (Tr, NT) and two suffix *-na for *supa-na (Tr, Wc). The Tr -na- and -ca- syllables are causative morphemes, and -ri is a noun suffix; so the stem *supa corresponds perfectly with Egyptian dbt and the round vowel of Coptic (Cerny 1976, 181), as well as a final -a for the fem. noun ending. Spanish adobe is also from Egyptian, though Egyptian d > t in Coptic and thus Spanish, but Egyptian d > s in UA. [medial *p > h/ø in CrC, then syllable loss; e1s4,e2b,e3t] [SUA: TrC, CrC, Tep]

201 Egyptian(H) **dnnwtt** ‘Schlange, Stirnschlange [snake species]’ (less likely snw ‘brother’):
UACV-2062 ***sinawi** 'snake': L.Son243 *sino ‘culebra’: Tbr sinawe 'reptile'; Tbr hi-sinawe-ra-t 'gila monster'; Wr sinói ‘snake’; Wr wetésinoi ‘kind of small snake’; Tr sinowi ‘snake’; Tr ŕisínoa ‘a black poisonous serpent’; maybe Cm kwasinaboo’ ‘snake’ and the -sin- in Sh pasin-nuyua ‘water snake’ (western dialect)’ (cf. Sh nuyua ‘crawl (as snake)’) and Sh pasin-kokon ‘water snake’. If *pi- is a prefix, then Nv vinoi may belong since *s > Tep h would leave h hardly durable: *vihnoi > vinoi. Ktn šunišuni’ ‘snake motion, like a snake, adv’ is less likely but mentionable. [SUA: TrC, Tep; NUA: Num, Tak]

Egyptian t = Uto-Aztecan t

202 Egyptian(F) **tm** ‘negative, no, not’ > ST čam ‘no, not’; WTr ta’me ‘no, negative’ (maybe a compound, as *ta* is also a negative, which could be a shortened tam). [e1t,e2m] [SUA: Tep, TrC]

203 Egyptian(F) **tm** ‘close (mouth)’; Egyptian(F) tm ‘be complete’; Hebrew tmm ‘be complete, finished’:
UACV-464 ***tïmaC / *tïmam** 'to close’: Sapir; M67-90 *tem 'close'; KH.NUA; I.Num241 *tïma/*tama ‘close’; M88-tï38 ‘to close'; KH/M06-tï38: NP wï-tïma ‘lock up, tie shut’; NP ma-tïma ‘close (book)’; Cm tïmarï ‘fill, cover, put lid on’; TSh tïmah; Sh tïmah ‘to close in, lock in’; Sh tïmiih ‘to close in, lock in pl. obj’s’; SP tïŋwa 'to close'; CU tuwáy ‘to close, lock, shut’; Cp téme 'to cover, close, enclose'; Ca témi ‘to close, lock up’; Sr tïmk/tïmïhk 'close, shut, vi’; Sr tïm(ïh)kin 'close, shut, vt’; Ktn tïmk ‘shut, lock, plug up’; Ktn tïmkï-t ‘lid, door’; Ch tïwá ‘close, v’; Ch tïwá-pï ‘door, closing’; WMU tuwámpü(g̱)a ‘door (itself), of cubboard or whatever’; WMU yüűruwampü(g̱)a ‘door or doorway (of house)’. Sapir ties the SP form with CN teema 'cause s.th. to fill up, pour into a container, vt’; CN teemi 'fill up, be full, vi’. Sapir's association seems reasonable in light of other forms like NP to/ci-tïmma 'plug a hole’, where the notions of filling, plugging, and closing are closely associated. Iannucci's reconstruction (*tïma) is good, adding a geminated or final underlying -C, evident in Ch, CNum, and specifically a nasal in WMU. Tb(H) tumaaw ‘fail, vi’. [nasals] [e1t,e2m] [NUA: Num, Tak; SUA: Azt]

204 Coptic tbt/tebt ‘fish’ (Cerny 1976, 183, Smith 1983, 43):
UACV-894a ***(pa-)topa** ‘fish’: B.Tep263 *vatopa-i ‘fish’; M67-174 *top ‘fish’; Fowler83; M88-to15 ‘fish’; KH/M06-to15: TO watopi; PYp vatopa; LP vatap; NT vatóópa; ST vatoop; mostly Tep, perhaps Tr ŕo’či. *pa- likely ‘water.
UACV-894b ***topo** ‘fish sp’: CN(RJC) topo-tl ‘small fish’; Mecayapan Nahuatl topoh ‘fish’; Tbr tepó ‘catfish’. Elliot (2000, 1410) finds enough Ls fish words ending in -pu, he suspects -pu ‘fish’.
Or Arabic θuʕbaan ‘fish, eel’? [final -a/o alternation] [e1t,e2b] [SUA: Tep, Azt, TrC]

Egyptian t > t in UA, as t > t in Egyptian also

205 Egyptian(H) **t’y (t’w)** ‘Mann [man], männliche Person [male], männliches Kind [male child]; Egyptian(F) **t’y** ‘male, man’:
UA *tawi > *tïwi ‘man, male’ appears in SUA, while many NUA forms derive from the reduplicated form *tatawa > *tatwa > *taŋ’wa- ‘man’ (CV-1416a below). Most of Num has forms of *taŋ’wa- with Tb taatwa-l ‘man’ providing a key, as Manaster-Ramer (1991d, 1993a) explained how PUA *-tw- > -kw-.
UACV-1416a ***tawa**; redupl’d *tatawa > *tatwa > *takwa/*taŋwa > *ta’wa/*taN’wa ‘man’ (as AMR affirms): Sapir; M67-273a *tawa; 273c *tana/*ta; I.Num213 *teŋa ‘man’; M88-ta26; AMR 1991d; KH/M06-ta25: TSh taŋummï / taŋwammï ‘man’; Sh tenkwa, tenna; Cm tenahpï; Kw ta’ni-ppïci; Ch taw’a-ci; Ch(L) taw’wa-ci; SP taŋ’wa-ci; WMU ta’wa-či ‘man’; CU ta’wá-ci; Tb taatwa-l. WMU has nasalized vowels that other Ute dialects do not have or are not recorded in other Ute sources. Manaster-Ramer (1991d, 1993a) proposes *-tw- > -kw-, well supported by the Tb form. These contrast with TSh takkan ‘sperm, semen’ and TSh takkampin ‘arrowhead, obsidian, flint’ and other Num forms listed above with *taka ‘man’. These link to SNum *tuwa ‘(bear) a son’ and see *tïwi ‘man’ below.
UACV-1416b ***tawi > *tïwi** ‘person’: Sapir; M67-273b *tewi ‘person’; M88-tï9; KH/M06- tï9: Cr t^{y}évi, pl: taïïte; Wc téví / téwí ‘persona’; Wc teïtéri ‘gente, indígenas’. Sapir also cites Pima tiwo-t, and the 2nd part of CN okič-tiu’ ‘older brother’ fits CrC *tïwi. Miller and Hill understandably join the *tïhoy (below) and tïwi forms, as a simple loss of -h- yields exactly that (*tïhoy > tïwi); but a few things like Tr tewe / towí ‘boy’ vs. Tr ŕehói ‘man’ suggest separate sets (Hernandez 2003, 165), and an earlier Kiowa-Tanoan form of Kiowa togul ‘young man’ may tie to *tïhoy as loan source (g > h). Those and initial *ta in the Cr pl may suggest a voweling variation of *tawa (> *tawi > *tewi/tïwi), that is, *tawa, the reduplicated stem in Tb and Num *tatwa > Num taNkwa, with nasalization from laryngeal ’. Hp tiyo ‘boy’ (pl: tootim) aligns with CN, Pima, Tr, etc, in *tewe/tiwi > tiw/tiyo. What of Hp ti ‘child, offspring’? [e1t,e2’,e3y] [NUA: Tb, Num, Hp; SUA: CrC, Azt]

206 Egyptian(H) **t’y (t’w)** ‘Mann [man], männliche Person [male], männliches Kind [male child]; Egyptian(F) **t’y** ‘male, man’; another denominalized verb in UA of ‘have a son/male’ from ‘son/male’:
UACV-139a ***tuwaC / *tu'aC** 'to bear, son, child’: M67-54 *tu 'boy'; I.Num233 *tu(w)ah/*tu(w)a(‘a) 'boy, son, child'; M88-tu9; Miller, Elzinga, McLaughlin2005; KH/M06-tu9: Mn tuwa 'child, son, son of sibling of same sex'; Mn tuwa-mï-du 'to give birth'; NP tua 'son'; TSh tuaC-/ tuacci 'son'; Sh tua 'son, child'; Sh tuaC 'give birth to'; Sh tutuah ‘be born’; Cm tua’ 'son'; Kw tuwa 'son'; Ch(L) tuwa / Ch túa ‘man’s son’; Ch tua-ni / tu’aa-ni ‘my son’ (cf. Ch tu’aa ‘marrow’); SP tuaC 'child, son, give birth to'; CU tua-ci 'son'; CU tuay 'give birth to'; Tb tu’mul 'baby, offspring'; Cr -tï’ïrii-múa 'son of a man’; because Cr ï < *u, the tï’ï (*tu’u) portion of Cr pa’arï’ï ‘boy, girl, sg.’; Cr tï’ïrii ‘boys, girls, pl’. Besides Numic, Tb, and Cr, note others such as Nv tuturh ‘hijo (por parte del padre’) and Cp tú’a 'to bear fruit’. PB tutur ‘son of a woman’ (the r/d of Tepiman corresponds to *y).
UACV-139b ***tuwiC / *tu'iC** 'boy, child': M88-tu10 'young man'; I.Num222 *tuipihci(‘i) 'young man'; KH/M06-tu10: NP tuipicci 'teenage boy'; TSh tui-cci; Sh tuinï-(ppï) ‘boy’; Sh natuipicci/ tuicci 'young man, boy'; Cm tuinïhpï’ ‘boy, sg’; Tb tu’ilam ‘boy’; Ch(L) tu’^{w}aci ‘young of animal’; Tr towí 'niño, muchacho' also fits, since *u > Tr o, u. Because final a vs. i alternations are common in UA, the *tuwa/*tuwi forms are surely related. In fact, the

vowelings *tuwaC ‘bear, vt’ as a transitive form and *tuwiC as a stative result (child born) may be original. More interesting is the occasional glottal stop (in both Tb forms, Cr, Cp, Ch). One variant of the Eu term for themselves is Eu eutewe, which may contain tewe. Perhaps *toti: Gb točínit 'hombre'; Sr tïčint, pl: tïčinam ‘young man’; Hp tootim ‘boys (pl. of tiyo)’. [w/’] [e1t,e2’,e3y] [NUA: Num, Tb, Hp, Tak; SUA: Tep, TrC, CrC]

207 Egyptian(H) **ṯpḫt** ‘Höhle [cave, hole, den], Loch [hole]; Egyptian(F) **ṯpḫt** ‘cavern, hole (of snake)’: UA ***tapu** 'hole': Wr natapú-na ‘make a hole through something’; Tr ŕepó-kari ‘hole of a burrowing animal or its litter’; Mn tapogi ‘cave’; NP tïbbogi ‘cave, perhaps ‘hole-house’ with *ki ‘house.’ [e1,e2,e3] [Num, TrC]

208 Egyptian(H) **ṯḫn** ‘glänzend sein [be shiny], funkeln [sparkle, glitter], leuchten [shine, gleam]’; Egyptian(H) **ṯḫnḫn** ‘glänzen [shine, gleam], heiter sein [be bright]’; Egyptian(F) **ṯḫn** ‘to gleam’; Egyptian(F) **ṯḫnw** ‘Libya, Libyans’; from Egyptian ṯḫn ‘to glisten, sparkle’ then Egyptian ṯḫnw literally means ‘glistening’ which is what sandy deserts do, is glisten, so ṯḫnw ‘Libya’, as the glistening desert to the west of Egypt, would mean ‘desert’ as much as ‘Libya’; and regarding TO tohono ‘desert, the south’, the desert glistens like any desert does and it is to the south :
UACV-774 ***tohono** ‘desert, plain’: TO tohono 'desert, the south’; PYp doho 'plain, field’ (if PYp d was a voicing or mishearing of t). So Libya, west of Egypt, is the desert, the glistening hot. [iddddua] [e1t,2h2,3n,4w] [SUA: Tep]

209 Egyptian(H) **ṯbt** / twt ‘Sohle (d. Fusses) [sole (of foot], Sandale [sandal], Fuss [foot], f’; Egyptian(F) tbt / ṯbt / tbyt / ṯbwt ‘sandal, sole, f’; Egyptian(F) ṯbwty ‘sandals, dual’, pl: ṯbwt ‘sandal(s)’:
UACV-1959 ***tapat-ta** ‘footwear’: Mn tapáca ‘(soft) shoe’; PYp teev ‘handmade shoes’. Eu ’óbat ‘zapato [shoe]’ is lacking too much for inclusion. [Most NUA intervocalic -c- < *-Ct-] [e1t,e2b,e3t] [NUA: Num; SUA: Tep]

210 Egyptian(H) ṯbt / **twt** / twy ‘Sohle (d. Fusses) [sole (of foot], Sandale [sandal], Fuss [foot]’; pl: ṯbwt ‘sandals’; dual: ṯbwty ‘sandals’; from the 3rd variant Egyptian tw(y) > Coptic *to’we, but these UA forms derive from the 2nd form Egyptian **twt** ‘sandals, pl’ (Cerny 1976, 199) and its dual ***twty**:
UACV-1953 ***tuti** (> *tuci (Hp), > cuci > Tep susV) ‘sandals’: B.Tep209 *suusaka ‘sandal’; M88-cu18; KH/M06-cu18: because Hp o < UA *u, Hp tooci (< *tuti) ‘shoe, moccasin’ fits Egyptian *twt or dual *twty perfectly, given palatalization from *ti > ci before a high-front vowel. Tep also reflects *tuti. As is often the case, Tep s < c < *t; thus, *tuti > *cuci > *susi, and Tep often anticipates vowels, so the suffix -ka yields *susi-ka > susaka as found in nearly all the Tep languages: TO šuušk; LP šuušak; NT súúsaka; ST suusak; Nv suska ‘zapatos [shoes]’. Note also Sh tattoo ‘put on shoes’. [e1t,e2w,e3t] [SUA: Tep; NUA: Hp, Num]

211 Egyptian(F) ṯbwt ‘sandal, sole’; pl: ṯbwt ‘sandal(s)’; Egyptian(H) **ṯbt** / twt ‘Sohle (d. Fusses) [sole (of foot], Sandale [sandal], Fuss [foot]’:
UACV-1961 ***poca** ‘zapatos’: If the 2nd vowel had the accent, then the 1st can become a short non-descript vowel between t and b to cluster them and cause the the first syllable to be dropped eventually; it happens in Numic, for example; thus, the TrC languages appear to have lost the initial t in TrC *poča/pota ‘sandal’: My boóčam ‘zapatos [shoes], calzado [have shoes on]’; Yq bóočam ‘zapatos [shoes]’; AYq voočam ‘shoes’; AYq vera’a voočam ‘sandals’. Tb wahcipïï-l ‘moccasin’ (< *-tipï) matches a fossilization of the Egyptian indefinite article prefix *wa- ‘a/an’ with the above . [SUA: TrC]

212 Egyptian(H) nhsi ‘erwachen [awake], aufwachen [wake up]’:
UACV-2461 ***nïC** ‘wake’: TO nïhhim ‘wake up’ (*s > h in Tep); Nv nïnï ‘despertar del sueño’; PYp neenim ‘wake up’; ST ñiñia’ ‘despertarse’; Wc nieree / nieriiya ‘despierto, visible, haber, mirar, vivo’. [SUA: Tep, TrC, CrC]

Egyptian i > i (before a consonant) or **Egyptian i > y** (before a vowel)

213 Egyptian(F) **imi** ‘negative verb’; Egyptian(H) imi ‘nicht, kein’:
UACV-1536 ***im** ‘no’: PYp im ‘not, no’; PYp i’ima ‘not have (s.th.)’; PB im ‘no’; Wc ’íma ‘negar, no permitir’. [e1i,e2m,e3i] [SUA: Tep, CrC]

214 Egyptian(F/H) **ir** ‘do, make’; infinitive **irt**; Coptic are/ire:
UACV-687 ***yara** ‘do, make’: AYq ya’a ‘do, make’ (remember that *r > ’ in Yq; therefore, Yq and AYq ya’a- derive from *yara); Yq yá’ari ‘lo hecho [what’s made]’; AYq ya’ari ‘made’ (< *yara-ti); AYq ya’aria ‘make’; AYq ya’awak ‘made’ adj; Wc yuru ‘do habitually’; Wc yurie ‘do, make’; Yq ya’a ‘do, make’; Yq ya’ati ‘be done, made’; Yq yáati-ne ‘acaba [finishes]’; My yáa-te 'está cesando, terminando [be ceasing, finishing]’; CU ’ïri / ïrï ‘to make, craft, fashion, v’; Eu -da’a in Eu vove-da’a ‘walk, lit road-do’ (vove-t ‘road’; Eu d< *y); Wr yorá / olá / holá ‘hacer [do, make]’; Tr -yiri in Tr mapuyiri ‘like’: Tr mapu ‘relative

pronoun, which, what'; therefore, Tr mapuyiri seems to have a morpheme break of Tr mapu-yiri and 'he/it does' fits well for the second morpheme, which would have the whole word meaning 'that which he/it does' or 'what/how he/it does' which equates to 'like him/it' if it's like he/it does. Note AYq ya'a-wa-k 'made' with passive -wa. Cr -ri 'make' and Cr -iri applicative (Casad 1984, 160) may be of a different stem and Tb ya'awa 'finish it'. [e1i,e2r] [Num, Tb, TrC, CrC]

215 Egyptian(F) **itt** 'fly up':

UACV-929 ***yïtti** (sg) / ***yotti** (pl) 'fly, jump': I.Num292 *yo(h)ci/*yo(h)ti/*yï(h)tï/*yï(h)cï 'fly, v'; M88-yï12 'fly, v'; KH/M06-yï12: Mn yoci; NP yoci; TSh yïcï, pl: yotiC; Sh yïcï, pl: yotiC 'get up, fly'; Cm yïcï 'fly, sg.'; Kw yozi, pl: yori 'jump, fly'; CU yïčí 'fly'; CU yïči-vörí 'fly around' (pöri 'move, go, walk, pl'); My yoríriam 'insectos que vuelan' (< *yoteti…). Some of these may pair with non-geminated alternates (*yutti vs. *yuti) or dialectal variants diffused: TSh yïcï 'jump' and TSh yotikkwan 'jump, get up, fly up, take off'; Kw yozi 'dance' and Kw yori 'jump, fly' and Mn yïdïki 'jump from fright'.

UACV-274 ***yu' / *yut** 'bounce': M88-yu1; KH/M06-yu1 'bounce, v': Cp yutyút- 'trot, v'; Ca -yú'i- 'trot, v'; Cp yut- is reduplicated; Ca forms are usually close to Cp, so the difference initially surprised me, but if reduced from a reduplication, then *yutyut > *yu'yut > yu'i is easily plausible in that -t- > -'- in a cluster is frequent. Perhaps for Ls yúhi 'trot, v' also; Wr yu'ri- 'caer solo, mismo'. Tepiman *y > d, and d > j/_i, so the čud in TO čudwua / judwua 'bounce, land on one's feet, v'; My yú'a 'empujar [push]'. Good set, Wick! [e1i,e2t,e3t] [NUA: Tak; SUA: Tep, TrC]

216 Egyptian(F) **in** /Coptic **ene** 'interrogative particle introducing yes-no questions' (< in iw; Cerny 1976, 36); and Egyptian **in** is sometimes written n' (na) in Late Egyptian (Cerny and Groll 1993, 553), which form suggests that some pronunciations were *na / *ina, which also fits the Tep (TO and ST) forms (*na) well. The fact that ancient Egypitians wrote ***in*** and later Egyptians wrote n'/na recommends something like *ina, much like Arabic 'inna, to which it is etymologically connected (Loprieno 1995, 100):

UACV-2532 ***ina** 'introduces yes-no questions, emphatic, topicalizer': TO n-/na- 'introduces yes/no questions'; Tb an- 'interrogative particle' (Voegelin 1935, 137, 177); CN in- 'the, as for, with reference to' is probably a merging of early morphemes—one 'the' and another 'as for, with reference to.' The latter matches Egyptian ***in*** in both form and use as an emphatic or topicalizer. Both the Egyptian and the TO particles are found in initial position (Saxton, 147; Allen 125, 181, 332, 385, 399). Egyptian ***in*** is also used for emphasis and topicalization (Loprieno 115-6), like it is in CN. ST na 'subordinator' (Willett 1991, 233-248) may also be cognate with TO na-. [e1i,e2n] [SUA: Tep, Azt; NUA: Tb]

Uto-Aztecan terms for 'heart':

Mn	píyu	Hp	ïnaŋwa	Eu	hibés
NP	bbiwï	Tb	suuna-l	Tbr	ara-ma-lí-r; ava-ma-lí-r
TSh	pihwïn	Sr	huun; Ktn huna-c	Yq	híapsi
Sh	pihyïn	Ca	sún-il	My	suula; híapsi 'vida'
Cm	pihi(naboo')	Cp	ṣúun	Wr	sulá
Kw	pïhyï-pï	Ls	ṣún-la	Tr	surá; bisurá
Ch	piyï	TO	iibđag	Cr	sïéheniu'ukari
SP	piyïC; piyï-ppi	Nv	hura-di; 'ibdïg	Wc	'iyáari
WMU	muġú / muġúa-vi	PYp	ibda	CN	yool-li
CU	mugúa-vi	NT	úra; iibïdaga		
		ST	hur; 'iibda		

217 Egyptian(H) **ib** 'Herz [heart], mittelpunkt [midpoint], Zentrum '[center], n';
Egyptian ib 'wish, want (noun and verb)':
TO iibđag 'heart, inner life, fruit bud' and TO iibhai 'prickly-pear cactus or its fruit'; these two TO terms show that iib- is the isolatable morpheme; and Ch and Tb below show the Egyptian verb: Ch pii 'I wish' (< Egyptian ib-i 'I wish'); Tb -(i)ba' 'desiderative suffix: I want/s.o. wants (to do s.th.) (Voegelin 1935, 117). 1166 below is the set including TO iibđag. 1167 is debatable enough not to count yet.

UACV-1166 Tepiman *ibïdaga < UA ***ikwïyawa** 'heart': B.Tep308 *'iibïdaga 'soul, heart': TO iibđag; Nv 'ibdïg; PYp ibda; NT iibïdaga; ST 'iibda. Reconstructing UA *kw for Tepiman b conforms with UA tradition, but Tepiman iib- 'heart' is identical to Egyptian ib 'heart'. [e1i,e2b] [NUA: Num, Tb; SUA: Tep]

UACV-1167 ***pihwïC / *pihyïC** 'heart': I.Num164 *pi(h)wï/*pi(h)yï heart; M88-pi19; KH/m06-pi19: Mn; NP; TSh; Sh; Cm; Kw; Ch; SP. The Numic terms are mostly missing the initial vowel i in ib; however, besides SP piyï-ppi is SP ipyï-ni 'heart-my', which does show the missing initial vowel when suffixed, in fact, is very similar to the Tepiman forms above. [NUA: Num]

218 Egyptian(H) **swn** ‘leiden [suffer]’; Egyptian swnyt ‘Leiden, Pein [suffering, pain]’; Egyptian swn ‘erkennen [recognize], wissen (von) [know (of)]’; Egyptian swn ‘öffnen [open], erschliessen [open up]’; Egyptian(F) **swnyt** ‘pain’; Egyptian(F) **swn** ‘affliction’; Egyptian(F) snnw ‘suffer, be distressed’
UACV-1165 ***suna > SUA *sura** ‘heart, inner part, seed’: Sapir; VVH98 *sula ‘heart’; M67-222a *sula ‘heart’; B.Tep578 *hura ‘heart, integral part’; I.Num184 *su(h)- ‘prefix, with the mind, mentally’; BH.Cup *ṣún ‘heart’; L.Son264 *sura ‘corazón’; Munro.Cup63 *ṣúúni-la ‘heart’; KH.NUA; M88-su13; KH/M06-su13: Tb suuna-l ‘heart, inside’; Sr huun; Ktn huna-c; Ca sún-il; My suula; Cp ṣúun; Wr sulá; Ls ṣún-la; Tr surá; bisurá; Nv hura-di; NT úra; ST hur; Hp soona ‘edible part of seed’; Hp son ‘middle of’; Cp ṣúun; Ca sún-il; Gb súnar; Sr huun ‘heart, inside, center’; Nv hura-di ‘heart’ (more the soul or spiritual/emotional heart); NT úra; ST hur; Cr sïéheniu’ukari (sïé < *sura); TSh sun- ‘with the mind, by feeling or sensing’. Ken Hill adds Tbr sura-nyi ‘con el corazón’. Also add Eu surát ‘grano [grain, seed]’; Eu sure ‘granar [to seed (of plant)]’; Eu -súra ‘dentro [inside], entre [among]’. PUA *sun ‘heart’ is in all branches. Other terms reflect the Egyptian verb ‘suffer’: Ca súnwe’-ma ‘sad, poor’; Ca súnikat ‘hard time, suffering’; Ca sun-sún’e-ika(t) ‘one who is sad, poor’; Ca súnwe ‘feel sorry for s.o.’ The s vs. ṣ in Cp ṣúun ‘heart’ and Cp súunvi ‘feel sorry for’ puzzles in part, but for another semantic dimension, note Egyptian swn ‘erschliessen (Weg) [open up a way]’ and Tr surá- ‘soltarse, libertarse, escaparse [get loose, escape]’. Some languages show this “heart” dimension to be “knowing” more than “feeling”: e.g., Ca sun ’í’ive ‘without heart, crazy’ is without knowing rather than discouraged; and Ca sun táwas ‘heart-lose, forget’ also means ‘losing the knowing’ more than ‘losing feeling’. Yq nasonte ‘injure’; AYq nason-te ‘harm, ruin, spoil, vt; break down, vi’; AYq nasontela ‘disarrayed, messed up’; AYq nasonti ‘ruined, blotched’; My nasonte ‘decompose’ all align with the ‘injured, sad, not-as-should-be’ semantic dimensions of swn. The Ca form (suni-) suggests that the Cahitan forms (na-son) contain a fossilized na- prefix. [*-l- > -’- in Cr; final -a/-o alternation] [e1s,e2w,e3n] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

219 Egyptian(H) **iqr** ‘fähig [capable], leistungsfähig [efficient], vortrefflich [excellent], vorzuglich [excellent, first-rate], ausgezeichnet [excellent], sehr [very]; Egyptian(F) **iqr** ‘skillful, excellent, capable, intelligent’; Egyptian iqr-pw ‘he (pw) is intelligent’:
UACV-1280 ***yikar** ‘knowing, intelligent, able, good’: Ls yixélvu-l ‘intelligent, alert’ (this aligns with the Egyptian structure Egyptian iqr-pw ‘he (pw) is intelligent’); Eu dedekara-wa ‘knowledge, wisdom’ (Eu d < *y of PUA); ; Eu dedeka- ‘know, be (cap)able’; Eu deka- ‘tener buena vista o el que tiene buena vista [have a good view or he who has a good view]’; CN yeek ‘well, thoroughly, good, right’ belongs and Ca -(a)k(t) ‘excellence, be good at’ (Seiler 1977, 94) may belong. [e1i,e2q,e3r] [NUA: Tak; SUA: TrC, Azt]

220 Egyptian(F) t̲sw ‘commander, protector’ (< t̲s ‘marshal (troops), order, arrange’)
UACV-1277 ***tusu’** ‘learn, know’: NP tusuyu ‘learn’; CU tïsú’-wi ‘be smart, clever, knowledgeable’; WMU t*üh*sú’ay-y ‘be smart’, perfect: t*üh*sú’ay-kye. WMU ka sú’u wa̲’tüm ‘not smart one, n/adj’ and WMU kač tüsú’u wa̲’ ‘is crazy, not smart, vi’ suggest that tï- is often lost as a pre-stress syllable, which is common enough in WMU. The tóš of Ls tóšŋu- ‘to command, order’ fits even better semantically, and Ls o < *ï, which is the same vowel CU has. [e1t,e2s,e3w] [NUA: Num, Tak]

Egyptian w remains w adjacent to vowels, u/o adjacent to consonants

221 Egyptian(F) **wr** ‘great (in size or importance), much, many, big, oldest’; Coptic wer; Egyptian(H) **wr** ‘Gross sein/werden [be/become great/large], hoch [high], veil [much], zahlreich [numerous]’; Egyptian **wrw** ‘der Grösste [the greatest/largest], Vornehmste [the most distinguished]’:
UACV-204a ***wïru**, reduplicated ***wïrwïru > *wï’wïru > *wï'ïwïru** ‘big’: Sapir; VVH100 *wï 'big'; BH.Cup *wət? ‘augmentative suffix’; B.Tep51a gï’ï 'big'; 51b *gï’ïgïrï 'big, pl.'; M67-39a we 'big'; L.Son340 *wï 'mucho'; KH.NUA; M88-wï1; KH/M06-wï1: Sr wïïr ‘much, many’; Ktn wïr ‘lots, many’; Ca -wet 'augmentative suffix'; Ls wut 'augmentative suffix'; Gb awé'e 'very'; Hp wïïko ‘extensive(ly), in a large area, for a long way, for a long time’; Hp wïïpa ‘long, tall, long in time’; CN we’ka ‘far away, distant.’ For Tep, keep in mind Tep g < *w: TO ge’e(đa); PYp ge’e; pl: ge’eger; NT gï'ï/gïï; gïdu; pl: gïïgïrï; ST gï’; pl: gï'ïgïr. But *w > w in TrC and the rest of UA: Eu wéi; Wr werú ‘much’; Wr werumá ‘big’; Wr weisá ‘many times’; Tr wa'rú / o’rú 'big, much, important' (Tr pl: e’weri / o’weri / weri); My bwé'uru; bweere; Tbr weé ‘'alto, largo [tall, long]’; Tbr we-tú ‘ser grande [be big]’; Cr ve’é / be’e; CN weei. Note -wari in Eu docíwari ‘very old’ vs. Eu docí ‘old’ (Eu d < *y); and Eu docítu’u-n ‘become old.’ The Ls suffix Ls -wu-t ‘big’ also suggests a 2nd C, as it is regularly followed by -t, instead of -l: Ls yuŋáávay-wu-t ‘condor’. Their placement suggests that the origin of the many glottal stops in UA forms reflecting ***wï’wïru** are probably from the r ending up in a cluster after reduplication: *wïrwïru > *wï’wïru. Given such, everything else fits Egyptian wr / wrw or a later reduplicaton *wrwr in early UA. AMR’s reconstruction

*wït also shows a final consonant effecting the absolutive suffixes of NUA. Note the absolutive suffixes added to ‘badger’ and ‘bear’ in the Tak languages: Cp húna-l 'badger'; Cp húnwe-t 'bear'; Ca húna-l 'badger'; Ca húnwe-t 'bear'; after *huna the suffix is -l, but after *wï- the suffix is *-t, which suggests a 2nd consonant *wïC. [e1w,e2r]
UACV-204b ***kwï’ïru** 'big': M67-39d *kwe 'big'; L.Son127 *kwiru 'grande'; M88-kwï1: My bwé’uru, pl: bwéere; AYq bwe’u, pl bweere ‘big, large, pregnant’; Yq bwé’u ‘grande [large]’; Wc kwi ‘mucho’ (cognate? Hill asks. probably). The w/kw dichotomy is discussed in Stubbs (1995), yet the *kwïr development from *wïr happened only in the Cahitan languages of the TrC branch. The *wïrwïru reduplication might be behind the development of the kw-forms that parallel w-forms: *wïrwïru > *wï’wïru > *wï’kwïru > *kwï’wïru/*kwï’uru, as a glottal stop in a consonant cluster becomes k elsewhere in UA. Miller lists the My, Wr and Tr forms under both *wï and *kwï, as Wr/Tr w corresponds to both *wï and *kwï. However, the Cah bwe.... forms have their initial consonant aligning with *kwï, while Tep *g definitely aligns with *w.
UACV-204c ***wïr** 'old': Sapir; M88-wï2 'old'; Hill rightly combined wï2 ‘old’ with wï1 ‘big or great’; in fact, ‘old’ is one of the meanings of Egyptian wr ‘big, etc’: Hp wïïyo, wïïyïw-ta ‘be old’; TO gï’ïl ‘maturity’; Wr wela ‘ser viejita’; Tr weráame 'vieja'; CN weewe’ 'old man’. My ó’ora/ó’ola 'viejo’ may better belong at *yo’o ‘old’. [liquids NUA r = SUA r; and kw/w]
UACV-204d ***wïC**- ‘with long object, instrumental prefix’: Sapir; I.Num283 *wïh- ‘whip’ (instr. pref.); KH/M06-ip14: Sh wïC-; WSh wïC- ‘with a long instr, generic instrumental’ (p. 110); Sh(C) wïC- ‘with a long or cylindrical or general instr, instrumental prefix’; Kw wï- ‘instrumental prefix’; SP wïC-. Like the semantic shift in Hp wïïpa ‘long, tall’ from ‘big’ > ‘tall/long’, so in Num is it ‘long’ in this instrumental prefix rather than ‘big’. Note Hp -p- (vs. -v-), suggesting gemination due to a final -C on the first morpheme wïC- / wïC-. [NUA: Hp, Tak, Num; SUA: Tep, TrC, CrC, Azt]

222 Egyptian(F) **wnx** ‘be clothed, put on clothing’; Egyptian(F) wnx ‘roll of cloth’; Egyptian(H) wnx ‘sich kleiden [clothe self], gekleidet werden [become clothed]’:
UA *wanaC ‘cloth, clothing’: NP wïna-pï ‘cloth, clothing’; Sh wanaC-ppï ‘cloth’; Cm wana(pï) ‘cloth, clothes, trade goods’; Mn wanaqa ‘measure, try on (clothing).’ The final gemination shows an underlying final consonant. [e1w,e2n,e3x] [NUA: Num]

223 Egyptian(H) **wnxyt** (wnxt) ‘Kleidung [clothing]’:
UACV-482 ***waCkay(la)** ‘clothing’: Wr wa’kilá ‘shirt, clothes’ and Hp -wqay- in Hp ’ati-wqay-napna 'underclothes' (’ati 'under' and napna 'shirt' leaves -wqay-) relate to each other. The extra syllable caused syncope of the middle vowel and clustering of -nq- (> -Ck-). [l/r > y; reduction] [e1w,e2n,e3x,e4] [NUA: Hp, Tak; SUA: TrC]

136 Egyptian(F) **win** ‘thrust aside, push away, set aside’:
UA ***wina** 'throw down/out, spill, empty'; for full treatment, see 136.

224 Egyptian(F) **wxd** ‘be painful, suffer, endure, be patient with s.o.’; Egyptian(F) **wxdw** ‘pain’; Egyptian(F) **wxdt** ‘pain’; Egyptian(H) wxd ‘ertragen [bear, stand], erdulden [endure, suffer], seelisch leiden [mentally/emotionally suffer]’: Egyptian(H) wxdy ‘Kranker [sick person]’:
UA *okotï ‘be in pain, suffer, sorrow’: Tr okóre ‘be in pain, feel pain’; Tr oko ‘be in pain, feel pain’; AYq hiokole ‘pity, vt; compassion, sympathy’; AYq hiokot ‘pitifully, adv’; AYq hiokot aane ‘be suffering’; AYq hiokot ea ‘feel miserable, be needy’; My hiókot aane ‘está sufriendo, padece [is suffering, suffer]’; My hiókot máčira ‘sufrimientos [sufferings], tristezas [sorrows]’; My hiókore ‘perdona [pardon, forgive]’; My hiókole ‘tiene compasión/lástima [have compassion/sorrow (for)’. [e1,e2,e3] [TrC]

225 Egyptian(H) **wt / wt’** ‘einwickeln [wrap in], umwickeln [wrap around]’; Egyptian(F) wt ‘bandage, bind, v’:
UACV-253 ***witta** ‘tie, wrap’: Mn wïtawa ‘tie, vt’; Mn wïtabo’na ‘bundle up, vt’; Kw wotabanaga ‘wrap, roll up’; In Num, *-tt- > -c- adjacent to high vowels is typical: Kw wiči 'wrap up'; SP wičča 'wrap around, tie’; WMU *hwih*čč*é-y ‘wrap, vt’; CU wəčá-y ‘wrap, bind, bandage (with), vt’; NP wïcakïna ‘tie (horse, shoe, willows)’; NP wïcabiggï ‘fasten, tie together’; NP wïcakana ‘tie, vt’; TSh wïccokwah ‘tie, vt’; TSh wïccamanaa ‘tie an animal up’. Mn -t- < *-tt-, and all suggest *-tt-. Maybe Hp wiwa-k ‘become connected, attached, vi’; Hp wiwa-k-na ‘rope, lasso, vt’ perhaps Hp wiwa < *witwa < *witawa, much like Mn wïtawa or from redupl. UA may reflect the Egyptian wt’ variant in light of Mn and anticipation of the glottal stop causing gemination: wt’ > wV’tV > wVttV. [e1w,e2t,e3’] [NUA: Num, Hp]

226 Egyptian(F) **wnm** ‘eat’: ‘of harvest’ in the TO definition is key in
UACV-636 ***wïnima** ‘to dance, v': Hp wïnima ‘to dance, vi sg'; Ch wïnïmi ‘to dance, v'; Kw wïnïmi ‘to dance, v’; TO wiinim ‘dancer in a harvest ceremony’ may be a loan from Hp, yet elsewhere Tep w = *w (e.g., TO mawid < *mawiya ‘mountain lion’). For a semantic connection of ‘feasting (eating)’ and ‘dancing’, see Egyptian ħbi (134), for festivals involve singing, dancing, and eating. [iddddua] [TO w = NUA w] [e1w,e2n,e3m] [NUA: Num, Hp; SUA: Tep]

227 Egyptian(F) **m'm'** 'dom-palm (tree)':
UACV-1605 ***mamahu / *ma(C)wa** 'palm tree': BH.Cup *máxwal? 'palm tree'; Fowler83; Munro.Cup89 *mááxwa-l 'fan palm'; M88-ma28; KH.NUA; KHM/06-ma28: Cp máawa-l; Ca máwu-l/ máu-l; Ls mááxwa-l/ mááxu-l; Sr mamahu-ţ / mamahw-ţ 'California fan palm'; Gb máhar 'grass, zacate, rama'; TO maahagam 'fan palm tree'. Ken Hill adds Ch mamau'umtampï and Ch mahavï 'tree/plant'. Cp, Ca, and Ch all show *mawV or *mau'u < *m'. Add Nv maagama 'palma' (< *maawama). Since *w > g in Tep, then TO maahagam 'fan palm tree' and Ls, Sr with *-xw- / -hw- from *-'w-, stop + rounding, or reduction from *-'m'-. Munro lists *maahawa-l as another possible proto-form (besides *mááxwa-l). A severe reduction of 2 or 3 medial consonants *-'m'-. Ch mamau'um… portrays Egyptian m'm' best with loss of the first glottal stop in a cluster or reduplication of -mau'um-. Other forms reflect a meltdown of 3 consonants to the varieties seen. Note kw vs. w in Ls vs. Cp/Ca again. [medial w/xw/h, h in TO, Gb, Sr] [e1m,e2',e3m,e4'] [NUA: Tak, Num; SUA: Tep]

228 Egyptian(F) **mi** 'like, according as'; Egyptian **my (mii)** 'likewise, accordingly'; Egyptian **mity** 'equal to, similar to'; Egyptian **mitt** 'the like'; Egyptian m mitt, r mitt 'likewise': the mit- of Sr mitkin 'seem'. 'Seem' is semantically 'like, seem like, be like, look like.' [e1m,e2i,e3t] [NUA: Tak]

229 Egyptian(F) **mw** 'water'; Egyptian **mwy** 'watery'; Coptic mu:
UACV-2523 ***muwa/i** 'wet': Hp mowa-ti 'be wet, moist'; Ls páá-muwi-š 'wet'. [e1,e2,e3] [NUA: Hp, Tak]

230 Egyptian(H) mn 'leiden [to suffer], krank sein [be sick], schmerzen [to hurt]'; Egyptian(F) **mn** 'be ill, suffer'; Egyptian(F) **mn** 'sick man'; Egyptian(F) **mnt** 'malady, suffering, what is harmful'; Egyptian(F) **mnw** 'pain':
UACV-1598 ***mana(ya)** 'hurt': NP manaya 'warning s.o. that s.th. might hurt them, v'; NP tamanayai'hu 'wounded'; NP namaniya'hu 'hurt self really bad, injure'; Cm manïïcikwa' 'pain, ache, n'; Cm manïï'maitï 'tire of s.th.'; Cm manïïsukaarï 'excite, give sensation (cause good or bad feeling in body or spirit)'. [NUA: Num]

231 Egyptian(F) **mri** 'want, wish, love'; Coptic me; Egyptian(F) **mr** 'canal';
Egyptian(H) i-**mr** r-i 'Follow me!' (Hannig 2003, 546):
UACV-1010a ***mïri / *mïli /*mïla** 'run, flow, go, want': B.Tep160 *mïrai 'he runs', *mïri 'to run', *mï 'he ran'; M67-177 *mel 'flow, (run)'; BH *mən 'come'; M88-mï6 'go, run, walk (sg?)'; KH/M06- mï6: Eu merá 'correr uno [run, sg]'; PYp mera/meli 'run'; Nv mïrha 'correr'; TO mïd, mï, mïïl 'arrive (wind, water, runner)'; LP mïli; LP oimïrï; NT mïli; NT aimïrai 'walk around'; NT mïráádami 'runner'; ST mïl^{y}i; Tr mé-/ma-; Wr -ma, -mi- 'future suffix sg'; Cr me/me'i; Hp mïïna 'flow, run (of liquid)'; Ls món-/muná 'travel, come, walk, go'; Cp menmáx 'will come' (neqa 'is coming'); Ca ménvax 'come' (nék-en an allormorph); NP minai 'ooze out'. [e1m,e2r,e3i]
UACV-1010b ***milV** 'trample, stampede': Sapir ties CN miimiloa 'trample about' and SP miŋkwa 'come out forcibly, stampede' (< *minni-kwa < *mil...), which seems as probable as not. [iddddua]

232 Egyptian(F) mr 'want, wish, love':
UACV-2695 ***-mï(r)a** 'future suffix': Miller 1996, 133: ST -mïra 'go to (do s.th.), suffix of purpose, sg' (Willett & Willett 2005, 289); Tr -méa / -ma 'future suffix'; Wr -ma (Miller 1996, 133); Wr(MM) -mera / -mela 'futuro condicional para sujeto singular'; Ktn -mat 'non-proximal future' (Anderton 1988, 96); Of course, this may well tie to *mïri 'run' though some languages yield differing forms for the two. Tbr -m(u)- 'desear, futuro' (Lionnet 1978, 34), but parting from Lionnet, ties to Tr/Wr -ma/-mV seem more likely; Cr mï'ï 'desiderative morpheme' (Casad 1984, 162) and 'want' and 'run' are often paired semantically in UA. With *u > ï in Num quite often, the shift or push chain effect of *ï > i in Num should also be considered. Note also Ca méle 'be fond of, care for' and Cp mélen 'very, much, hard, fast'? The 2nd V in this etymon often varies: e.g., in Tr alone are Tr mé-, ma-, but -muri in rarámuri. Note semantics of Egyptian 'canal, waterway' and UA 'flow (of water/river/in waterway),' and the change 'run' > 'want' is clear. Interestingly, both Tr -mea 'future' and WTr -mela 'future' (Burgess 1984, 13) derive from UA *mïla 'run/go/want'; perhaps the two most common sources of future markers universally are 'want' verbs and go 'verbs' of which English uses both: I am going to study; I will study (will = want/desire). For other UA verbs whose semantic dimensions range from 'want' to 'run', note WTr -nare 'verbal suffix indicating desire' and Eu nare 'run after s.o.' Note also Ls ma'ma 'like, want'? and Sr mia 'may, might' (Hill 2001, 8) perhaps a 'future' that became a 'maybe'. [iddddua] [e1m,e2r,e3y] [l/r/n; r > CrC '] [NUA: Hp, Tak, Num; SUA: Tep, TrC, CrC, Azt]

233 Egyptian(F) **mẖi** 'drown, be drowned, overflow, inundate; swim, launch (vessel)';
Egyptian(H) **mẖi** 'im wasser sein [be in water], schwimmen [swim]'; Egyptian(H) **mẖt** 'Flut [flood]'; Egyptian(H) **mẖt** 'Sumpfland von Unterägypten [swampland of lower Egypt], die deltamarschen [the delta marshes]'; Egyptian(H) **mẖtiw** 'Marschbewohner pl [marsh dwellers], Nordbewohner [Northerner], bewohner des Deltas [dwellers of the deltas]':
UACV-1997 ***muCta** 'sink, be in water/liquid': Hp momori 'be swimming'; Hp moro-(k-) 'get dipped, briefly immersed'; Ls mota 'sink in mud'; Hp o < *u, and for Ls, usually *-t- > Ls -l-, but here, Ls -t- means a cluster, which -ẖt- is, and *muCta > Ls mota also shows a vowel assimilation. Whether an early UA verbal suffix *-ta or -tV reflects the final tV of Egyptian, we may have a denominalized verb. [t/l] [NUA: Hp, Tak]

234 Egyptian(F) **mẖyt** ‘fish (collective), lit. swimmers’:
UA *muti ‘fish’: CN mič-in ‘fish’; UA *u > Azt i, and palatalized t > č/_i, then *muiti or *muti > muči > miči > CN mič-. Other TrC *musi may or may not tie in, so we list, but do not count yet, but CN mič- yes:
UACV-895 ***musi / *muci** ‘fish’: L.Son160 *musi ‘bagre’; M88-mu17; KH/M06-mu17: Op músi; Tr mu*sí; Eu musít; CN mičin ‘fish’ (cognate? Miller queries). Tr mo’tereči ‘fish’ (mo’-tere ‘head-step/mash’ says Brambila) would not align. [e1m,e2h2,e3y,e4t] [*-t- > -c-> -s- in Tep?] [SUA: Tep, TrC, Azt]

235 Egyptian(H) **m’yt** ‘Scheide [sheath, vagina]’: UA ***muci** or ***muti** 'vagina':
UACV-2447 ***muc** 'female genitalia': M88-mu4 'vagina'; KH/M06-mu4: Wr muhcí ‘vagina, grass’; Tr mučí ‘vagina’; TO muus ‘vagina’; and Hp mosŋya 'clitoris’. A good match since TO s < *c, and both Tep s and UA c can also derive from *t (Stubbs 2000a), especially in front of a high front vowel. Also worth noting is the identical reconstructions of UA *muti from both Egyptian **mẖyt** ‘fish’ (234) and Egyptian **m’yt** ‘vagina’ because the forms are identical in 3 of 4 consonants, and for the 2nd C (ẖ vs. ’), both become round vowels (u). Because PUA languages practically disallowed dipthongs, prefering CVCV patterns, a possibly expected *muit adapting to a CVCV pattern of *muti is not only likely, but almost identical to 234 above. [NUA: Hp; SUA: Tep, TrC]

236 Egyptian(F) **mẖr** ‘low-lying land’; Egyptian(F) **mẖrw** ‘low place’:
UACV-706 ***muira** ‘be deep, of water’: Ls móóra ‘be deep (of water)’ and Eu múira ‘estar hondo el río [be deep, the river]’ are identical semantically, and what is midway between the two vowels of the Eu dipthong ui? High central ï, and Ls o < *ï. So if ui leveled to ïï in proto-Tak, then the Ls and Eu terms match each other well. [vowel leveling; liquid] [e1m,e2h4,e3r] [NUA: Tak; SUA: TrC]

237 Egyptian(H) **msi** ‘bear, give birth, be born, create’; Coptic mas ‘child’; Egyptian **mst** ‘mother’; Egyptian **ms** ‘creator’:
UACV-852 ***masi** ‘father’: M88-ma11; KH/M06-ma11: Eu maswa ‘woman’s father’; Eu masi ‘have a father (of women)’; Wr ma’má ‘woman’s father’; Wc kemaasi ‘man’s father’; TO maam ‘one’s father (in a clan of the buzzard moiety’ (*s > TO h, which is fragile). Add Shaul’s find, Op mas ‘father’ (Shaul and Yetman 2007). This depends on an unattested masculine match of *ms ‘father’ for the attested feminine term Egyptian mst ‘mother’. Note the parallel of two ‘create’ verbs in Egyptian (qm’ and msi) aligning with UA words for husband and father, respectively (as creators/begetters). [e1m,e2s,e3i] [SUA: Tep, TrC, CrC]

238 Egyptian(H) **mwy** ‘feucht [damp, humid], wässerig sein [be watery]’; Egyptian(H) **mwyt** ‘flüssigkeit [liquid, liquidity]’; Egyptian(H) **mwyw** ‘Krüge [jars, pl]’ or Egyptian mẖ(i) ‘be full’ or Egyptian(F) **mẖi** ‘drown, be in water, overflow’:
UACV-981 ***muya** ‘fill up, flow out, overflow’: Ca -muye- ‘flow out, fill up (of water, fog, smoke)’; Ls muuya ‘be full, vi’; Ls muuyi ‘fill, vt’; Cp muya ‘billow, rise (of dust, smoke, other fine particles)’. A spring creates a damp, watery area and has water flowing out or rising to the surface, much like a filled or overflowing pot, and in fact, a plural form **mwy-w** is ‘jugs, jars, plural’. [NUA: Tak]

239 Egyptian(F) **nʕi** ‘travel, traverse’ or Egyptian(H) nwi ‘kommen [come]’?:
UACV-1035a ***nawa / *nawi** ‘go, come, move (to another place)’: Tr nawa-ma ‘llegar [arrive], venir [come], nacer [be born]’; Tr nawi-ma ‘llegarse, acercarsele [approach]’; Wr nawá- ‘be born’; Hp nàala(k-) ‘change places, move, change residence’ (Hp l < *w); Sh(C) nawa- in Sh nawa-nukkih ‘run away’ and Sh nawa-to’ih ‘escape, get out safely’; Ch nawá’itï ‘appear, show up’; Kw naviži ‘appear, be showing’. Perhaps Cp návya’a ‘come here!’ as *w > v does happen in NUA, in fact, in Kw vs. Ch above. [*w > v in Cp&Kw]
UACV-1035b ***noi** ‘go, come, visit, return’: Yq noite ‘ir [go], venir [come]’; AYq noite ‘visit, vt’; My noite ‘go (and return)’. Num ***no** ‘(while) going’: Mn -noo- ‘be in motion while X-ing, be X-ing while going’; TSh nooh ‘moving continuously, do along or in motion’; WSh nooh ‘move about (auxiliary verb)’. [e1n,e2’2,e3i] [e1n,e2w,e3i] [NUA: Num, Hp; SUA: TrC]

240 Egyptian(H) nʕw ‘e. schlange [a snake]’; nʕt ‘weibliche schlange [female snake]’; Egyptian(F) **nʕw** ‘serpent’ (perhaps from Egyptian **nʕi** ‘travel, traverse’ in which case the UA forms seem to match nʕiw or nʕi-w):
UACV-583a ***nuyu’a** ‘to crawl, as a snake, v’: NP noyu’a 'to crawl (as snake)'; NP canuyui ‘move, drag’ (hand crawling ?); NP(B) nuyua ‘crawl (as a snake)’; TSh nuyua 'to crawl (as snake)'; Sh nuyua ‘crawl (of a snake or worm)’; Cm nuhyimi’arï 'to crawl (of snake)’.
UACV-583b ***nuhia / *nuyua** ‘snake’: NP nuyuadï ‘snake’, Sh pasinnuyua ‘water snake’; Cm nuhya’ ‘snake of any sp (archaic word)’; Wr nawí ‘corua, kind of snake’ or Wr noí ‘worm’. [e1n,e2’2,e3i] [NUA: Num; SUA: TrC]

241 Egyptian(F) **nb** ‘any, every, all’; Coptic nim:
UACV-20 ***napi** ‘all, every’: Tr nabí ‘always, each, every, all’; Tr nepi 'very, much, too much'; Cr naímih 'todo [all]’; Cr naími’i 'todos'; Cr náhimi 'entero'; Wc -nái-tï/me 'todo' (sbj/compl); Sh napai ‘each’. Because *p > h/ø in CrC, then Corachol nai < *napi. [e1n,e2b] [SUA: TrC, CrC; NUA: CNum]

242 Egyptian(F) **nb** ‘lord, master, owner’; **nbt** ‘lordship, authority (of king); Coptic neeb ‘lord’:
UACV-1802 ***napi** 'magic, extraordinary power': Munro.Cup67 *náávi-š ‘magic’; KH/M06-na40: Ls náávi-š 'charm'; Ca náavi-š 'poison'; Cp návyeni 'give an omen.' A slight semantic shift, but ‘magic power’ is much like ‘god/lord-like power’. And we see the same voweling as in the other Egyptian nb-form above, the two of which may be different semantic dimensions of an original unity.
UA *pohi-napi ‘chief’: Mn pohenábï ‘chief’; NP poinabi ‘chief.’ The -nabi of the last two (Mn, NP) better fit Egyptian semantically, though compounds add a measure of uncertainty. [e1n,e2b] [NUA: Tak, Num]

243 Egyptian(F) **nbi** ‘flame, n; burn, vi’ (> *nbit > Coptic neme ‘fire, glow’):
UA ***napi** ‘fire’: Tr napiči ‘fogón [place where fire is/was built]’ (Tr -či ‘at’, so Tr napi-či ‘fire-at’ fits well). [e1n,e2b,e3i] [TrC]

244 Egyptian(F) **nxx** ‘be old, vi; old age, n’; Egyptian(F) **nxn** ‘young’; Egyptian(F) **nxnw** ‘child’; Egyptian(F) **nxnw** ‘youth (abstract)’; Egyptian(H) **nxx** ‘alt werden [become old], lange leben [live long], erneuern [renew]’; Egyptian(H) **nxx** ‘Jüngling [youth], Knabe [boy], n’; Egyptian(H) **nxx** ‘der Alte [the old (man)]’; Egyptian(H) **nxn** ‘Kind sein [be a child]’; Egyptian(H) **nxn** ‘kleines Kind [small child], Knabe [boy]’; for Egyptian nxx to have meanings dealing with both age and youth, the common sememe is ‘grow’—grow up or grow old—and UA *nakan has the same range—grow up / grow old; it’s also possible that the stems nxx and nxn fused in some confusing fashion, which is not unlike a similar pair of alternate forms of nxx and nxn in Egyptian(H) nxx.t / nxn.w ‘Art Brote [kind of bread]’:
UACV-1098 ***nakana** ‘grow’: M67-207 *na ‘grow’; I.Num108 *nana(h) ‘(grown) man, grow’; BH.Cup *naxá ‘old man’; HH.Cup *naxáa ‘old man’; M88-na13; KH/M06-na13 ‘grow’: Mn naa ‘grow’; NP na ‘grow’; Sh nahnaC ‘grow, grow up’; Kw nahna ‘grow’; SP nanna ‘grow’; CU nana-pï ‘grown, mature’ (< CU naná-y ‘grow’; -p- suggests final -C); Cp naxánču’ve-l ‘old man’; Ca náxaluvel ‘old man’; Ca náxaluvuk ‘bec. old (of man)’; Ls naxááču ‘bec. an old man’; Ls naxááči-š ‘old person’; Cr tí’inahana ‘grow’. Note Cp naxánču’ve-l ‘old man’ and Ca náxaluvel ‘old man’ are identical except for the consonant (cluster) -nč- and -l-; whenever c and l correspond, it is likely that an original *t or *-Ct- underlies the two: *nakan-tu’pe-l. That Cp form is also the only Takic form that shows a 2nd n like the Numic forms; nevertheless, between that Cp form, the Numic forms, and the Cr form, a 3rd -na- syllable is apparent. Cf. Ca qani ‘become formed (in womb), grow’. [e1n,e2x,e3n] [NUA: Num, Tak; SUA: CrC]

245 Egyptian(F) **xnt** ‘face, n; in front of, prep’:
Tbr kota ‘face’. Intervocalic PUA *-t- > -l/r-, but *-nt- > -tt- > -t-. [e1x,e2n,e3t]

246 Egyptian(H) **xr / ixr** ‘bei [by], durch [through], unter [under]’; Egyptian(F) xr ‘with, near, under’:
UA ***ikar** ‘with, using (instrumental)’; NT karoi ‘with (instrumental, as in use)’; ST kn ‘with (instrumental; final r/d > n in ST); Wc kï ‘with, instrumental, by means of’; TO (he)kaj ‘with, by means of, because of’; CN iik ‘with, by means of, thereby’; CN iika (< *ii- ‘3rd sg’ + -ka ‘means, reason, cause’). [e1i,2k,3r] [Tep, CrC, Azt]

247 Egyptian(H) **xr** ‘fallen [to fall], niederfallen [fall down], ausfallen [fall out], abfallen [fall off]’; Egyptian(F) **xr** ‘fall’:
UACV-837a ***kuri** ‘fall’: Sr kur-q ‘fall, pl’; Ca kúli ‘fall (in a hole), stick (in), rush in’. What of Ktn kuhyïk ‘fall over flat, of a tall thing’? Or Wc kuruupiya ‘knock down’ or Eu hioru ‘fall when ripe’?
UACV-837b ***kara** ‘fall’: Ls kára ‘fall (of leaves)’; Ktn karara’y ‘fall, vi’; but also Ls qára ‘spill out, fall (as leaves, fruit, hair from the head), slide off’. [e1x,e2r]

248 Egyptian(F) **xr** ‘speak to, so say, vi’; Egyptian **xrw** ‘voice’:
Ls kára/i ‘belch, croak, ring, vi; play music, vt’. [e1x,e2r] [Tak]

249 Egyptian(F) **s’xmw** ‘species of bat’; Egyptian(H) s’xm(w) ‘Nilflughund’ but Orel & Stobova say ‘bat’: the *so’o- in **UA**CV-125 ***so’o-paCti** ‘bat’: Tr so’péci / so’picí ‘bat’; Wr so’péci 'bat'; Eu cikúrsopic 'bat (mouse-butterfly)'; Eu sopíc ‘butterfly’; My sotcik 'bat'; Yq sóocik ‘bat’; PYp ho’opisa 'bat’.
A prime example of UA’s phonological reducing capacities are the UA words for 'bat.' This set is discussed at length in Stubbs 2000a, wherein Miller’s observation (M67-25 PUA *paca ‘bat’ using Num and Tb forms) and Lionnet’s (L.Son258 *sopï-ci of SUA) are both shown to have PUA *pati’a in common with *so’o- compounded in SUA terms. The ***so’o-** of UA ***so’o-pati’a** ‘bat’ parallels the start of **Egyptian s’xmw** ‘species of bat’; and whenever UA forms derive

from something more than three consonants, the last half is generally fragile. Two things make retention of latter portions of UA words unlikely: (1) UA tends to drop or highly condense/reduce the last half of long lexemes; and (2) being compounded with something else only adds to the length and thus the severity of such reductions. Nevertheless, consider these UA words for 'bat':

UACV-125 ***so'o-paCti** 'bat'; L.Son258 *sopï-ci 'murciélago'; M88-so10; Stubbs 2000a; KH/M06-so10:
Most NUA languages—Tb pacaawa-l 'bat'; Kw paaca'aa-zi 'bat'; Ch pááca'a-ci 'bat'; Ca páli-l 'bat' and SP, CU, NP—as well as Cr háci'i 'bat' (Cr h < *p) all show *paCti'a 'bat'. Most SUA languages show *so'o- prefixed to *paCti'a: Tr so'péci/so'picí 'bat'; Wr so'péci 'bat'; Eu cikúrsopic 'bat (mouse-butterfly)'; Eu sopíc 'butterfly'; My sotčik 'bat'; Yq sóočik 'bat'; PYp ho'opisa 'bat'. The last six languages (Tr, Wr, Eu, My, Yq, PYp) have *so'o- compounded with *pati'a. Without going into the three pages of explanation (in Stubbs 2000a), let it suffice that the *pati'a portion changed according to the chart below, and six of those languages show a reflex of the compound *so'o-pati'a 'bat.'

*pati'a > *pita- (NP)
> *pali (Ca)
> *paci'a > *paca'a (Tb, Kw, Ch, SP, CU)
> *paci'i > háci'i (Cr)
> *paci > -peci (TrC: Tr, Wr, Eu) or *so'peci < *so'o-pati'a
> *paci > *-pica > Tepiman -pisa (PYp) or ho'o-pisa < *so'o-pati'a
> *paci > -ci (Yq, My) or soči-k < *so'o-pati'a

PYp, as a Tepiman language, changes *c > s and *s > h, and other examples of frequent PYp vowel metatheses (a-i > i-a) have PYp ho'o-pisa matching *so'o-paci < *so'o-pati'a. [e1s,e2',e3x] [SUA: Tep, TrC]

250 Egyptian(F) **sʕ'y** 'tremble, v':
UACV-1933 ***sowa (< *sawa)** 'shake': Tbr sowá-t 'raspa [rasp used for noise in a dance]'; CN wiwišoaa 'shake or rock s.o. or s.th.'; Tr sawe 'sacudir [shake, rock]'; Wr sawé 'sacudir [shake, rock]'; perhaps the ṣo… of Ls ṣóra/i 'tremble, shake, vi, shake s.th., vt'. Ls generally shows e < *o, but if the o assimilated from *sawa, then that would not apply. [Vs] [e1s,e2'2,e3',e4i] [SUA: TrC, Azt; NUA: Tak]

251 Egyptian(F) **sʕ'y** 'tremble, v':
UACV-856a ***sawi(ya)** 'fear, v': CN iisawiaa 'be overawed, vrefl, frighten, outrage s.o., vt'; Eu sevíce 'tener miedo [be afraid], v'; Eu sevíciúrawa 'miedo [fear], n' (sometimes *w > v); Ls ṣuwó' 'to be afraid of' (if *sawi > suwï > Ls suwo). AYq suumeiya 'afraid of, vt' may belong with another morpheme. The Num languages below often yield ï < *u if also *sawi > *suwi > *sïy.
UACV-856b ***sïya** (< *suya ?) 'afraid': Mn sïyee 'to be afraid of'; NP sïi'hu 'to be afraid of'.
[*-w- > -v-] [e1,e2,e3] [SUA: TrC, Azt; NUA: Tak, WNum]

252 Egyptian(F) **spr** 'rib'; Egyptian(H) **spr** 'Rippe [rib]'; Coptic spir 'rib':
The -sisve- portion of Cp amsisve-l 'rib' could well be a reduplication which shows the first two consonants of Egyptian spr and final -r > -i/y is frequent in Egyptian, and most Num terms for 'rib' begin with *ama-, the probable source for the first part of Cp amsisve-l 'rib'. [e1s,e2p,e3r] [Tak]

253 Egyptian(F) spd 'sharp': Egyptian(H) spd 'spitz sein [be sharp pointed], spitz machen [make sharp]': Egyptian(H) inr spdw 'radierstein [etching stone]'; or Egyptian(H) sft 'Schwert (aus Metall) [sword (of metal)], Messer [knife], n.f.', pl would be sfwt;
UACV-799 ***sipaC** 'point': Munro.Cup100 *ṣíiva-t 'point'; KH/M06-si22: Ls ṣíiva-t 'crystal wand tip'; Ca síva-t 'arrowhead'; Ktn tokšivat 'flint, flint tip of arrow'; Hp siiva 'metal, silver' (cognate Ken queries? I say yes). Note also My sibulai 'punto [point]'; Ca sívalu 'sharpen to a point'; Ca pásiva-t 'knife, sword'; Hp yoy-sivï 'arrowhead' (rain-metal); Eu siba 'raspar, acepillar, madera'; Eu sisvi wecát 'awl' and Eu vusiven 'awl'; Tb(H) siipa-t 'knife' < *sipat-ta; Sr wisipka' 'pointed thing'; Sr wisip-kin 'make pointed'; Sr wisipu'-k 'be pointed (forming a single broad point)'; and Sr wisisu'-k 'be pointed (forming more than one broad point)'. Tak -t means a final -C. My sibulai agrees more with *sipu or the fem pl sfwt of the feminine noun sft. [a/u] [e1s,e2p,e3d/t] [NUA: Tak, Hp, Tb; SUA: TrC]

254 Egyptian(F) **smẖy** 'flood, drown, sink, vt' (causative of Egyptian mẖi 'drown' at 233):
UACV-1994 ***sum** 'sink': AYq suume 'sink, vi'; Eu sumé 'evaporate, shrink, sink'; PYp huumu 'go down, sink in' (PYp h < *s). The rounding of the pharyngeal (3rd C ẖ) influenced the first vowel (before 2nd C m); all we usually have of non-initial pharyngeals is rounding, so a cluster of a bilabial + pharyngeal (-mẖ-) would be a powerful rounder of preceding vowels. Then two languages show a final high front vowel, which also aligns with the final element of smẖy. [e1s,e2m,e3h2,e4i] [SUA: Tep, TrC]

255 Egyptian(F) **sqd** ‘slope (of pyramid)’:
UA ***sikiC** ‘slanted (terrain), side’: Mn siki’napaa ‘slanted, on a slant, slantwise’; NP(LFP) sikiibaatu ‘sideways, be slanting’; NP(LFP) siki ‘side’. The glottal stop in Mn siki’napaa suggests a consonant there; and the NP terms clarify the morpheme break. [e1s,e2q,e3d] [NUA: WNum]

256 Egyptian(F) **stpt** ‘choice things of food’; Egyptian **stp** ‘cut up (animal)’:
UA forms point to UA ***sa’pa** ‘meat, fat’ whose glottal stop suggests a missing consonant in a cluster.
UACV-1433a ***sa’pa / *sa’apa** ‘meat’: L.Son232 *sapa ‘carne’; M88-sa3 ‘meat’; KH/M06-sa3: Eu sába, acc: sáta, gen: sáte; Wr sa’apá / sa’pá; Tr sa’pá / sa-sapá-ra; TO ha’apaga ‘flesh behind the upper teeth, alveolar ridge’. Wr and TO likely separated the cluster—*sa’pa > sa’apa—as we see in wrwr (221) and xlxl (630).
UACV-1433b ***sa’pï** ‘fat’: Tr sa’bé-ame ‘gordos [fat, pl], carnosos [fleshy]’; Eu sábe ‘gordo’ (probably possessive -e ‘having meat’, Eu sab-e ‘meat-having’); the -capï of Hp wimcapï ‘omentum, inside lining of stomach fat’ with fricative s > affricate c in a cluster with a nasal. This set may be an *-ï/-e possessive form of *sa’pa ‘meat’, that is, having meat/fat. ST sarba-k ‘fat, thick’—actually shows r in an -rb- cluster, aligning with a previous -tp- cluster, though normally *s > Tep h/ø, but whether borrowed or cognate, a simulation of the -t- is in the ST form. The two facts that the verb *stp* means ‘to butcher’ and the noun *stpt* means ‘choice food’ semantically align well with UA *sa’pa / *satpa ‘meat’. [c/s] [e1s,e2t,e3p] [NUA: Tak, Hp; SUA: Tep, TrC]

257 Egyptian(F) **st’** ‘weave, spin (yarn)’ > UA ***sito** of UA *sitoko’V ‘braid’:
TSh sittoko’e braid, vt’; Kw šidogo’o ‘braid, v’; Sh tasittokoiC braid, v’. [e1s,e2t,e3’] [NUA: Num]

258 Egyptian(F) **st’** ‘drag, pull, pull out, draw’; Coptic soote:
UACV-1728 ***(piC)-sutu’a** ‘(behind)-pull, drag’: Stubbs2003-16: Mn ca-sutu’i ‘pull out’; TSh sotoC ‘pull, vi’; TSh pi-sotoC ‘pull, drag, vt’; Sh -pisuta ‘drag behind, instr, vt’. The Mn form contains *ca- ‘(do) with the hand’; the CNum forms show the prefix *piC- ‘back/behind’. I reconstruct *sutu’i on the basis that 2 of the 3 show a 3rd consonant, one of them a glottal stop, the other nearly anything. All show back rounded vowels initially: Mn u < *o is not likely; but TSh o < *u is likely if the final vowel is a, as we often see such in UA *u-a > o-o. For Sh, perhaps *sutu’a > suta’a > suta. [-a/i, u > o/a] [e1s,e2t,e3’] [NUA: Num]

259 Egyptian(H) **st’** ‘Krug [jar, jug]’:
UACV-1715 ***soto’o** ‘jar’: Yq sóto’i ‘olla [pot, bowl]’; Yq soto-te ‘hacer ollas [make pots]’; AYq soto’i ‘olla, pot’; AYq soto’o-te ‘make pots’; My sóto’ori(m) ‘olla(s)’. [SUA: TrC]

Three semantic dimensions of Egyptian st’—1 pull, 2 weave, 3 jug—are all three in UA as well, and with all three consonants is noteworthy. A similar 4th form with st’ (vs. st’) follows:

260 Egyptian(H) **st’** ‘erwärmen [to warm], aufheizen [heat up], heiss machen [make hot]’:
UACV-2247 ***taku-sito’i** 'sweat': Sh takusitoi ‘sweat, v’; Cm takusito’itï / takwïsito’itï ‘perspire, sweat’. For both CNum forms, the morpheme boundary isolated sito’i ‘sweat’ as Sh taku ‘thirsty, dry’; Sh taku-pïkka ‘be thirsty’ and others show *taku to be the widespread Numic term for ‘thirsty’. [’>ø] [e1s,e2t,e3’] [NUA: CNum]

261 Egyptian(F/H) **sd** ‘tail’ > *st > Coptic **sat/set** ‘tail, penis’ (Lambdin 1983, 266; Cerny 1976, 163):
UACV-2272 ***sati** ‘tail’ > ‘dog’ (in Num) / > ‘anus’ (in Tak, Mn): I.Num179 *satii/*sati’i ‘dog’; Fowler83; M88-sa15; KH/M06-sa15 'dog’: NP satï’ï ‘dog’ (may be a borrowing from Sh Miller suggests); Sh satii; SP sarii-; WMU sarí-či; CU sarí-či; Cm sarii’ ‘dog’. Hp sïrï ‘tail’ is feasibly cognate with Num *sati ‘dog’ after vowel leveling: *sati > sïrï. The most prominent feature of a dog (vs. other animals) is its wagging tail and these Num-only words for ‘dog’ as a branch innovation are either a loan or a semantic shift. Ktn šïri-c ‘anus, stingy’ is a decent tie between Hp sïrï ‘tail’ and Num *sati ‘dog’. Mn céde ‘anus, butt, bum’ likely belongs as well; and Hp, Ktn, and Mn suggest that ‘tail’ may have been the original sememe, shifting to ‘dog’ in Num and ‘anus’ in Tak. Similar instances of V leveling occur in Hp (Hp CeCe/CïCï vs.Num CaCi; e.g., see at 1105 kidney, 1457 rain). Another potential support for *sari ‘tail’ > ‘dog’ is the SNum slow(ly): CU sarív ‘slow(ly)’; WMU sarív ‘slow(ly)’. This fits the pattern *sari-va ‘tail-at’ (-va ‘at’ being a common adverb ending in Ute); that is, one who is slow is at the “tail” end, at the tail of the one(s) in front. As in *kwasi ‘penis > tail’, so Hp may again be the lone retainer of original meaning in *sati ‘tail > dog/anus’. Hp sïrï ‘tail’ (-d- > -r- also in elk). Interestingly, even though Uto-Aztecanists must reconstruct *t for the 2nd consonant, all pronunciations are like an English d (cf. Egyptian sd) or Spanish flap r, and some Egyptian transcriptions contain t instead of d: Egyptian st (Cerny 1976, 163). [e1s,e2d] [NUA: CNum, SNum, Tak, Hp]
Or Egyptian(F) šdi ‘take away, remove’; Egyptian(F) šd ‘vulva’: Ktn šïri-c ‘stingy, anus’. [e1s1,e2d,e3i]

262 Egyptian(F) **ʕnt** ‘nail, claw’; Egyptian(H) **ʕnt** ‘Nagel [nail], Kralle [claw]’; Coptic ine:
UACV-459 ***watti** 'claw, fingernail': M67-169; M88-wa13; KH.NUA; KH/M06-wa13: Sr waţ ‘claw(s), fingernail(s), toenail(s)’; Hp malaci 'finger’; Sr waţu’ ‘claw, scratch, vt’. Add Ktn waci-č ‘claw, nail’; probably ST goota ‘scratch with claw, vi’. Hp appears to be a compound of *ma- ‘hand’ + watti ‘claw/nail’ to yield ‘fingers’ as ‘hand-claws’ and a cluster of -nt- > -tt- would more likely become c rather than r or l. In Hp, UA *w > Hp l before low vowels a, e, ö; thus, here Hp -laci matches Sr waţ or UA *watti, since Hp -c- would be from *-tt-, not *c. So Hp -laci, Ktn waci, and Sr waţ are a good match. [Hp l < *w] [e1’2,e2n,e3t] [NUA: Hp, Tak; SUA: Tep]

263 Egyptian(H) **šwt** ‘Schatten [shade, shadow], Abbild [shadow, image, likeness]’;
Egyptian(H) **šwt** ‘Schattendach [shade roof]’; Egyptian(F) šwyt ‘shadow, shade’:
CN seewal-li ‘shade’; CN tla-seewal-li ‘shade, shadow.’ For another example of *-t-ta > CN -l-li, see ‘sand’ (162) also. [e1s1,e2w,e3t] [SUA: Azt]

264 Egyptian(H) **šmrt** ‘grosser Bogen [large bow], Flitzbogen (d. Götter, Königs) [bow (of gods/kings)]’:
the **-samaaloo**-t portion of Classical Nahuatl koosamaaloo-tl ‘rainbow’ is an astounding match to the plural **šmrwt** ‘bows’ of this feminine noun. The word *koNwa ‘snake’ is often in UA words for colorful things like rainbows, because of many snakes’ bright and varied colors; thus, the koo- of CN koo-samaloo-tl, yet the rest of CN -samaloo < Egyptian šmrwt. Many other UA words for ‘rainbow’ are related.
UACV-1768 ***ko(C)-samalo** ‘rainbow’: B.Tep99a *kihónari, 99b *ki’óharai; M88-ki7 ‘rainbow’; Stubbs2000b-44; KH/M06-ki7:
Pl kusamaalu(h). Miller (M88) lists only Pl and the Tep terms in Bascom (1965/B.Tep); yet ‘rainbow’ cognates are in nearly every SUA language. Some SUA reflexes reduced (lost) syllables, probably by vowel syncope causing consonant clusters, then simplified to a single consonant, and sometimes repeated again, etc. Each cycle eliminates a syllable. In all SUA branches are cognates for ‘rainbow’:

Tr konimí/gonimí; Tr ginorá; Wr kenolá; Eu bainóra/vainóra; Tbr oráwi;
NT kiihónali (Tepiman h < *s); TO gihonalï (*s > h)
TO kiohod (h < *s); LP(B) kiuhur; LP(EF) kiáhur; Nv kiorha; ST ki’oor (*s > h / ’)
Yq kurúes; AYq kurues; My kurués;
Cr kú’usa’a; CN koosamaaloo-tl; Pl kusamaalu-(t)

We begin with s.th. near CN *koo-samaaloo > kosomalo > kisonalV > NT/TO *kihonalV, for Tep often changes m > n. Borrowing from neighboring UA languages seems apparent. For example, both Tr and TO each have two words for ‘rainbow’. TO gihonalï is nearly identical to NT kihónali, and the other TO form (TO kiohod) is similar to LP kiuhur. Tr ginorá and Wr kenolá are similar, and exhibit the interesting phenomenon of vowel-line transposition. Regarding TO and NT *kihonali as compared to Wr and Tr *kinola, the latter has lost one syllable or second consonant (h) early in the word, but has kept the first three vowels perfectly intact (-i-o-a-), simply shifting them one place toward the front of the word:

*kihonali (TO, NT)
*kinola (Wr, Tr)

The phenomenon of vowel-line transposition happens often in SUA.

Eu bainóra has pa- ‘water’ prefixed to *hinora/kinola like Tr/Wr *kinola: *pa-kinora > Eu bainóra, which shows the vulnerability of *-k- between vowels.

While Tr/Wr lost the -hV- syllable of *kihonalV, three Tep languages lost -n-, but kept -r/l-:
*kihonalV > *kihol, or like LP(EF) kiáhur (< *kinasul) suggests, a complete metathesis of syllables in
*kihonalV > *kinahol > *kinhol > *kihol / *ki’ol (ST ki’oor; TO kiohol; LP kiuhur)

The first three segments of Tbr orawi agree with the -ola/ora portion of Eu, Tr, Wr. Cr shares *kosa with Aztecan, but with extra glottal stops: *ku’usa’a. Substantial reductions all about!
*kosamalo ‘rainbow’ remained relatively intact in Azt, but reduced remarkably in the rest of SUA:
*kosamalo > *kohonalo > *kulu (in Cah *kurues)
> *kihonali (NT, TO) > *kih(n)ol / *ki’ol (rest of Tep)
> *kinola (Tr, Wr)

The ṣóóna and ṣene portions of Ls ’aṣóónax ‘rainbow’ and Cp peṣenex’a may also tie in, if *m > n.
[e1k,e2s1,e3m,e4r] [SUA: Tep, TrC, CrC, Azt]

265 Egyptian(F) **šms** ‘follow, accompany, bring, present’; Egyptian(H) **šms** ‘folgen [follow], begleiten [accompany], nachgehen [go after, seek], transportieren [transport]’; the semantic tie with **U**A ***samsa** ‘buy’ is that Egyptian verbs of ‘bring’ are often also used/translated as ‘buy’; furthermore, ‘seeking’ or ‘going after’ is what trading, buying, and selling are:
UACV-2396 ***samsa** 'buy, sell': BH.Cup sámsa ‘buy’; M88-sa21; KH/M06-sa21: Bright & Hill say this may be borrowed from a non-Cupan language: Cp sámse 'buy, vt'; Ca -sáámsa- 'buy'; Ls(Bright) sáámsa 'buy’; Ls(Elliott) sámsa ‘buy, sell’; Sr ṣaamṣa ‘sell’. [e1s1,e2m,e3s] [NUA: Tak]

266 Egyptian(F) **šnw** ‘hair, grass’; Egyptian(F) **šni** ‘encircle, enclose, cover’: Egyptian(H) **šni** ‘Haar [hair], Haupthaar [headhair], Gras [grass]’: Egyptian(H) **šni-t’** ‘Vegetation, Pflanzenkleid der Erde [herbage covering the ground], Erdhaar [earth hair]’; Egyptian(H) **šnw** ‘Pflanzen (die die Rinder fressen) [plants (that the cattle eat)]’:
UACV-1061 ***soni / *sono** ‘grass, straw, blanket’: L.Son257 *sono ‘rastrojo’; M88-so9; KH/M03-so9; Jane Hill 2007: Wr sonó ‘rastrojo de maíz [corn stubble, which is used as winter fodder]’; Wr sonógola ‘troje’; Tr sonó ‘caña, corn fodder, leaves and stalks as food for animals’; Eu sonó; Tbr sono-wolít ‘pajar’; NP sona ‘blanket, covering’; NP sona’a ‘lower mattress’; TSh soni ‘grass’; TSh pisoni ‘loin cloth’ (< piC-soni ‘back-grass/cover?’); Sh soni ‘mattress’; Sh soni-ppïh ‘hay, grass, blanket’; Tb šoŋo-t ‘little blanket’; Cm soni-pï ‘grass’; Cm sona ‘cloth cover ‘; Mn sonábï ‘hay, straw’; Mn(L) sona ‘hay’; Eu sonó ‘corn leaves’ (vs. Eu sunút ‘corn’). Ken and Jane Hill (2007) add Hp söö̱ŋö ‘corn cob’ and Tbr hona-li-t ‘rastrojo’. Note both Tbr sono-wolít ‘pajar’ and Tbr hona-li-t ‘rastrojo’ in the same language! Add Ktn hona-t ‘sleeping mat’. It is also curious that only two NUA forms show ŋ to all others’ n, and that those two are the only two that have o following ŋ, that is, perhaps snw > *soŋo, but sni > soni, but SUA sono < *soŋo. Perhaps similar for Egyptian ṯnḫ. [NUA: n : SUA: n] [e1s1,e2n,e3w/e3i] [NUA: Tb, Num, Hp, Tak; SUA: TrC]

267 Egyptian(F) **twr** ‘reed’; Egyptian(H) **twr** ‘Rohrpflanze [tube/cane/reed-plant]’:
CN tool-in ‘sedgegrass, reeds’; Pl tuul-in ‘cattails, reeds’:
UACV-1783 ***to’i** < ***toli** ‘water plant sp., cattail’: Munro.Cup96 *téé’i-š ‘water plant’; KH06-to28: Ls téé’i-š ‘cattail rush’; Cp tí’i-š ‘marsh plant’; SP to’oi-vï ‘bulrush’. Add Tb too’i-l ‘tule root’; Tb too’ibïï-l ‘tule’; Ktn toi-c ‘tule sp, wide cattail with black ear on top’; Sh(M) toippïh ‘cattail’; Kw to’i-vï ‘cattail’; Mn towibï ‘cattail’; Mn padowibï ‘cattail’; NT ááli tootóikami ‘el carrizo’; ST tootkom ‘carrizo (de tallo duro)’; PYp tookam ‘bundle of reeds’ (Shaul notes Spanish *ototilla* ‘carrizales’). These all point to *to’i, though Sh has a final gemination not apparent in the others. The -r-/-l- is lost in Num, Tb, and Tep languages, but is clear in the Aztecan languages (CN, Pl), and acts like it was part of a cluster in NUA. These tie to CN tool-in ‘sedge grass, reeds, juncia’ from which English tule is borrowed through Spanish. [r > ’] [e1t,e2w,e3r] [NUA: Num, Tb, Tak; SUA: Tep, Azt]

Devoicing of Egyptian d, g > UA t, k

268 Egyptian(F) **dwn** ‘stretch, straighten, vt; be stretched out, taut, prostrate, vi’; Coptic toown:
UACV-2208 ***tuna** ‘straight’: Mn tunaapaa ‘straight, adv’; Mn tunaapaatï ‘straight (one), adj’;
TSh tunaan(tïn) ‘straight, too much, excessive’; TSh tokwittunaan ‘really straight, straight ahead’;
TSh tokwittunaa wïnnï ‘zenith, standing straight’; Sh(M) tunnaan ‘straight’; Sh(C) tunaah-(n) ‘straighten, vt; be straight, vi’; Cm tuna/tunaa ‘straight’; probably My tennei ‘straight’ with an assimilative vowel change: *tuna > *tune > tene. [e1d,e2w,e3n] [NUA: Num; SUA: TrC]

269 Egyptian(F) **dqr** ‘fruit’ (> *dg > Coptic tiče/jiji):
UACV-979a ***taka(C)** ‘fruit’: L.Son269 *taka ‘fruta’; M88-ta10 ‘fruit (pit)’; KH/M06-ta10: Eu takát ‘fruta’; Op takkai ‘echar fruta’; My taaka; Yq taaka; Tbr taka-rá-t; Tr ŕaká ‘fructificar, dar fruto or semilla’; Tr ŕaká-ra ‘semilla, fruto (esp with seed or grain)’; Wr taká ‘hueso de fruta, semillas’; HN tlahka-tl ‘fruit’; Pl taakil fruit. Lionnet associates these with Tep *taka ‘root’, in that the pit begins the root and the above mean ‘pit’ as often as ‘fruit’. Add Cr táka’i ‘fruit’; Wc **tákáari** ‘round fruit’; Mn tadaġai ‘be fruitful’; and Kw tïkïpiya ‘fruit’; in spite of Kw’s raised/relaxed schwa-like voweling, it is likely cognate. On the other hand, Hp toko ‘fruit, edible part of food’ belongs with Mn tuku ‘flesh, fruit, berries, nuts’ and many others under *tukuwa ‘meat’. Ktn tïkï-t ‘tree sp. smooth like an alder but as big and with a leaf like a plum tree’ is dubious unless fruit-bearing. [*a > ï; *r > i]
UACV-979b ***taka** ‘root’: B.Tep216 *taka ‘root’; M88-ta43; KH/M06-ta43: TO tatk(t) ‘become rooted, shoot/grow roots’; NT táka ‘root’, NT takáádï ‘its root’; ST tak. This is likely related to TrC *taka ‘seed’, since seeds do send out roots and become roots or take root: Wr taka ‘fruit pit, seeds of trees and bushes’; Tr ŕaká ‘seed, fruit (particularly those having pits)’. [NUA: Num; SUA: Tep, TrC, CrC]

270 Egyptian(F) **dbẖ** ‘ask for, beg’; Egyptian(H) **dbẖ** ‘bedürfen [need], erbitten [ask for]’; Coptic toobh:
UACV-70 ***tïpiwa / *tïpiN** 'ask': M67-12 *tep; I.Num246 *tïpi 'to ask (for)'; M88-tï16; KH/M06-tï16: Mn tïbiyu; Mn tïpiwï (M88); Mn tïtïwï- ‘ask for (objects)’; NP tïpinkï / tïbiŋa; TSh tipiŋa; Sh tïtïpiah; Sh tïpinka (tïpiŋa) ‘ask for’; Kw tïvina; Ch tïviŋi; SP tïvi / tïvi-ŋu ‘to ask’; CU tïvïyuy; Hp tïïviŋ-ta 'ask (for), inquire of’. Miller includes these forms: Cp tepíne 'to follow, track'; Ca tépin 'to track'; Ls tópi/tupi 'to track’. However, the Tak cognates are Ls tuvyuŋi 'ask a question'; Cp túvyuŋ 'ask'; and perhaps Sr tïïvïŋ ‘find’, which share the same consonants and semantics as the Num forms, and note the alignment of SNum or CU tïvïyu-y and Tak tuvyuŋi (like medial ẖ > ŋ ‘in girl’). The medial -v- (< *-p-) and 3rd consonant ŋ might have Sr tïïvïŋ 'find' belonging here. Note the substantial similarity between Sr tïïvïŋ ‘find’ and Hp tïïviŋ-ta ‘ask’. Could a phonological merger of *tïwa ‘name’ and *tïwa ‘find’ in Sr have encouraged a semantic shift from ‘ask (seek)’ to ‘find’ for Sr tïïvïŋ? We see a *-yu-* syllable in Mn and CU, as well as in Ls and Cp; the preceding *u*'s (or first V) in Ls and Cp may have assimilated to the *u* of the following -yu-. Some forms are compounds with other morphemes. [V assim.; Tak V's; n vs. ŋ vs. ø vs. w; nasals; clusters] [e1d,e2b,e3h2] [NUA: Num, Hp, Tak]

271 Egyptian(F) **dm** ‘be sharp, sharpen’; Egyptian(H) **dm** ‘scharf machen/sein [make/be sharp’; Coptic toom: Ca tama ‘be sharp, v’; Cm tomociarï ‘sharpen to a point, v.’ [e1d,e2m] [NUA: Tak, Num]

272 Egyptian(H) **dmi** (dmr) ‘berühren [touch]’; Egyptian(F) dmi ‘touch, reach, be joined (to)’:
UACV-2375 ***tam** ‘touch’: TO taatam ‘touch, feel, pet, vt’; NT táátamai 'touch, feel, realize’.[e1d,e2m,e3i] [SUA: Tep]

273 Egyptian(F) **dw’** ‘rise early’; Egyptian(F) **dw’w** ‘dawn, morning’; Coptic to’we; Egyptian(F) **dw’yt** ‘morning’; Egyptian(H) dw’ ‘früh auf sein [be up early], aufstehen [arise, stand up]’; Egyptian(H) dw’yt ‘der Morgen [morning]’; Egyptian(H) dw’i ‘Morgendlich [in the morning]’:
UACV-2237 ***to’ay** ‘rise, come up/out’: TSh to’eh ‘emerge, come up/out, go up out’; Sh to’ai / to’i ‘come out, emerge, climb’; Sh to’etaippïh ‘is out/up, e.g., sun, moon, stars, past participle’; Sh(GL) do’e ‘emerge, come out, go out’; Cm to’itï ‘appear, come out, pl’; SP taŋa-ro’ai ‘kneel, vi’. Cm intervocalic -t- rather than r may suggest a final C, for which -y works and explains the Num vowelings. [e1d,e2w,e3’] [NUA: Num]

274 Egyptian(F) **dhnt** ‘mountain top, n.f.’, pl: dhnwt; Egyptian(H) dhnt ‘Felswand [rock wall], Bergspitze [mountain top], Bergvorsprung [ledge], Felskuppe [rock top]’: the final round vowel in **UA *tono** ‘hill’ may point to Egyptian pl *dhnwt, and perhaps an assimilation of the 1st vowel to the 2nd: *dVhnwt > UA ***tono** ‘hill’:
UACV-1456 ***ton(n)oC** ‘hill’: VVH167 *to$_u$no ‘hill’; M67-230 *ton ‘hill’; M88-to14; KH/M06-to14: TO toon-k ‘hill’; Nv tonika ‘cerro, loma’; SP tonnoqqi / tunnuqqi ‘a hill rises’; SP tonnoqq(w)i-čï / tunnuqq(w)i ‘knoll, swell in the ground’. [e1d,e2h,e3n] [SUA: Tep; NUA: Num]

Egyptian f > UA *p in initial position: UA does not have f, only *p which becomes v between vowels. Hebrew did not have f either, though it later developed an f as an allophone p, in environments similar to UA v (< *p). Egyptian f is an infrequent Egyptian consonant so that clear examples of f in UA are few enough to leave the matter uncertain. Nevertheless, it may appear that Egyptian initial f corresponds to UA initial *p.

275 Egyptian(F) **f’i** ‘raise, lift up, carry, support’: UA ***po’i / *po’iy** ‘take s.th. away, dispossess’:
UACV-397 ***po’i / *po’iy** ‘take s.th. away, dispossess’: TO wooppo’iđ ‘take away from, deprive of’; Nv vopoida ‘quitar [take from]; Tr bo’e 'quitar, disposer [dispossess]; Wr po’é-na 'take s.th. away’; Mn ca-po’a ‘lift off, open (lid)’; NP ci-pu’a ‘lift off lid with sharp obj’. The -d- (< *y) in the Tepiman languages (TO, Nv) is a perfect match for Egyptian f’y as Tepiman shows *y (> d) of PUA *po’iy. [e1f,e2’,e3i] [SUA: Tep, TrC]

276 Egyptian(H) **f’k** kahl sein [be bald], geschoren [shorn]’; Egyptian(F) f’k ‘shorn man’:
UACV-2056a ***piCka / *piNka** ‘smooth, bald’: Kw pika ‘smooth’; Kw pika-roci ‘bald-headed’ (Kw toci ‘head’ < Hebrew *ro’š ‘head’); Ch pikága ‘smooth’; TSh appiŋkoyo’i ‘be bald-headed’. For the latter part of TSh appiŋoyo’i, compare *nuyu ‘naked’. Nv tïviki ‘muy liso [very smooth], como bruñido [polished-like]’ may fit here or may be a dialect variant of LP(EF) dapek ‘liso’ and all the other Tep forms of Tep *dapak (<*yapak) ‘smooth, naked’. Nv sivopigi’ moho ‘bald’ may include an intervocalic voicing of *-pik-? Or could a prefix *ya- in Tep and a vowel change unite the Num and Tep stems (pika/paka)? Ca (Tak) puxuu contains the expected vowels for an underlying glottal stop; yet in Egyptian the glottal stop is hardly secure either, since alternate forms with and without it exist in Egyptian as well. [e1f,e2’,e3k]
UACV-2056b ***paNka / *paCVNka** ‘smooth’: other SNum forms show different vowelings: SP paüN-ŋqa- ‘be smooth’; WMU paa̲qqa-y / paáŋqa-y / paa̲ga-y ‘be slippery, smooth and shiny (like marble)’; CU paáqay ‘be smooth, slippery’. [NUA: Num]

277 Egyptian **fx** ‘loose(n), release, cast off, obliterate, leave, depart, fail (to do)’ (infinitive **fxt**):
UACV-2437 ***pu’ta/i** or ***puC**-tV ‘loose(n), untie(d)’: L.Son215 *pota 'soltarse'; M88-pu8; KH/M06-pu8: Yq búta; My búttia 'desatar'; Wr po’tá; Wr(MM) po’tá ‘soltarse [bec loose], desarramerse [bec untied]; Tr botá / bo’tá; Tr o’ta- ‘bec slack, bec loose (of knot)’; Tr o’ta-na- ‘slacken, loose, set free, vt’ (-na ‘causative’). Tr often loses initial cononants. Add PYp voragi 'naked'; PYp voragim 'strip, vt’. The first element matching *pul- in TO wul’ok ‘untie’ and Nv burioka ‘desatar’; Nv virioka ‘desatar lo atado’; Nv virioki ‘cosa desatada’; ST vulyio’ka’ ‘desatar, vt (animate obj)’ (but ST vulya’ ‘amarrar’) likely belong as well. Is Hp wilökna ‘slacken, loosen’ a loan from TO wul’ok or another Tep language? Note that the glottal stop in Wr, TO, and Tr, and gemination in AYq, all four suggest at least a medial cluster, whether ’ or s.th. else. A vowel sequence of u-a (Yq) could raise *u > o (*o-a, as in Tr, Wr, PYp). [*u-a > o-a; -a/i in Nv] [e1f,e2x] [SUA: Tep, TrC, Azt]

278 Egyptian(F) **fnt** ‘snake, intestinal worm, n; become maggoty, v’; Coptic feet:
If cognate, note that UA ***-puti** ‘worm, snake’ also clustered the -nt- and lost the -n-, as in Coptic also: Consider the puri of Tr činigú-puri ‘worm, sp’; the -buri of PB kosiburi ‘worm, sp’; and PB cuagi vuri ‘worm, sp’; PB kukumpuri ‘snake, sp.’ And perhaps the *-put portion of UA ***si’taput** ‘(red?)-snake' :
UACV-2064 ***siktaput** ‘red?-snake’ (cf. sïta 'red'): Eu setábuc ‘culebra azotadora [whip snake]’; AYq siktavut ‘red racer’; and probably Ktn tapo-č ‘corral snake’ with loss of initial syllable. We would expect Tep h < *s, so Nv sitkara ‘rattlesnake’ may be a loan from TrC. [e1f,e2n,e3t] [SUA: TrC, Tep; NUA: Tak, Num]

279 Egyptian(F) **ftft** ‘leap’; Egyptian(H) **fttw** ‘Springer [jumper], pl’; the latter would mean an unattested verb ***ftt** existed, which is what matches UA; and remember that NUA -c- is usually from UA *-tt- (or -Ct-), as *-c- > -y- in NUA (Cp, Ca, Sh). Also note the similarity between this—UA *potti ‘jump’ < Egyptian ftt—and UA *yotti ‘fly’ < Egyptian itt ‘fly’:
UACV-1249 ***puCca/i / *puCta/i** ‘jump’: Stubbs2003-13: Cp púčaqe/pučáqe ‘jump, vi’; Ca pe-púčaq ‘jump’; Eu hapóca ‘brincar [jump], corcovear [bound]’; Tr počí- ‘saltar [leap], brincar’; Tr hibóči- ‘ir a saltos, v freq’; Tr o’poči ‘freq and emph of počí-ma. Sh pocci ‘hop, v’ and Sh poppi ‘hop, v’ suggest a cluster, which would exclude this from AMR’s rule *-c- > NUA -y-. Also Cm pohbitï / popitï ‘jump, v’. [NUA u vs. SUA o] [e1f,e2tt] [NUA: Tak, Num; SUA: TrC]

Consonant Clusters: *-m’- > mw > ŋ. Clusters of m plus glottal stop, regardless which is first, tend to become ŋ, though some Numic languages actually show the m. Egyptian yields four UA examples of the cluster -m’- > -mw (> ŋ) in 280 salt, 281 lung, 284 husband, and 1246 Semitic has-sim’al > Tb aašiŋan ‘left’.

280 Egyptian(F/H) **ḫm’ / ḫm’t** ‘salt’ (Coptic hmu); UA appears to derive from *ḫVm’a(t) ‘salt’:
UA *omwa > *oŋwa / *oŋa ‘salt’: Sapir; VVH63 *’oŋa ‘salt’; M67-359 *’ona; this is in all branches except Aztecan. For UAnists, the medial consonant (n, ŋ, ŋw, m, ø) is difficult. Yet that variety for the 2nd C—n / ŋ / ŋw / m—is a nice array for the cluster *-mw-, the UA equivalent of m-plus-glottal-stop cluster. The UA forms reflect Egyptian ḫam’a(t) or ḫum’a(t). Given that ’ > w, UA *omwa reflects that quite well. The initial pharyngeal is apparent in initial o, though h is lost. Below are UA forms of **SALT:**

Mn	omábi; omaa- ‘salt, vt’	Hp	öŋa; öŋaskïyi (s. solution)	Eu	onát, ónta (acc)
NP	oŋabi	Tb	uŋaal	Tbr	oná-t
TSh	oŋwapi(cci)/omapi-	Sr	čuka’t	Yq	’óna; AYq čo’oka ‘salty’
Sh	oŋa-/onka-/ona-pin	Ca	’íŋ-il	My	oona
Cm	ona-/onaabi/ona’aitï	Cp	yewá-l; v. íŋeyu	Wr	woná
		Ls	’éŋ-la	Tr	oná / koná / noná
Kw	’owa-vi	Gb	’oŋó-r		yakáwi- ‘v. salt/season s.th’
Ch	aso-na; asómpï	TO	on	Cr	unáh
SP	oa	PYp	ona; ta’akil ‘salty’	Wc	’únaa; ‘ucíivi ‘salty’
WM	’ööá-vi	NT	ónai		kwíe.túušáari ‘earth with salt’
CU	’öá-vi	ST	’on; vasdak ‘lack salt’	CN	ista-tl; poyek ‘salted’

UACV-1865 ***omwa / *oNCa > oŋa** ‘salt’: Sapir; VVH63 *’o$_{s}$ŋa ‘salt’; M67-359 *’ona; B.Tep320a ’onai ‘salt’; 320b ’onaga ‘possessed salt’; I.Num16 *oŋa; L.Son16 *’ona; M88-’o27 and M88-wo5; Munro.Cup115 *’ééŋ-la ‘salt’; KH/M06-’o27: Reflexes exist in all branches except Aztecan. Wr shows initial *w or an initial C of intense rounding, as Wr elsewhere intensifies initial *o > wo (Stubbs 1995). For UA’s medial consonant, we see m in Mn and TSh; ŋ in the rest of NUA (Num, Tb, Hp, Tak); but we also have w in Kw and ŋw in TSh and n in SUA. Such variety is likely an underlying cluster involving a nasal and a labial. Mn and TSh (the nearer homeland languages of WNum and CNum) show m; SNum lost the nasal, showing either *w or ø; but only one NUA

language shows n, the geographically most distant, Cm. WM Ute speakers distinguish ’ööá-vi ‘salt’ and ’öáá-vi ‘back’ only by vowel length. [e1h2,e2m,e3’] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC]

Indeed, -mw- > -ŋw- or -ŋ- is quite natural phonologically, since the velar dimension of w could change the bilabial nasal m to a velar nasal ŋ quite easily, and then the w be lost; in other words, bilabial nasal m plus velar w combine to velar nasal ŋ; then ŋ > n in SUA. Yet in salt, lung, and husband, we even see some m’s in the Numic languages, as well as mo/ŋw/ŋo.

Two more examples of the same cluster follow in Egyptian sm’w > UA *somwo ‘lung’ and in Egyptian qm’ > UA *kumwa ‘husband’:

281 Egyptian(H) sm’ ‘Lunge [lung]’; pl: sm’w ‘lungs’ > UA ***somwo > *soŋo** ‘lungs’ (> SUA *sono/a):

Mn	sóno	Hp	halayna; mïma	Eu	abokadaga-di
NP	soŋo/sono	Tb	mošooha-t/mosooha-t	Tbr	wopa^{N}-s; sorá komwa-lí-t
TSh	somo/soŋwo/soŋo	Ktn	šoŋa-č	AYq	hemaha’ačim
Sh	soŋo/sonno	Ca	yávayva	Yq	saré’ečia
Cm	soomo	Ls	savá-sva-š	My	sáre’ečiam
Kw	soo-vï	Cp	qíqilye	Wr	so’locá
Ch	soo-vi	TO	hahaw	Tr	sonorá
SP	soo-vi	PB		Cr	šáïñi-mee; ta’atime
CU	sö’ö-vï	PYp	hakadaga; pl: havdaga	Wc	šaaka
		ST	habkaly	CN	--

UACV-1409 ***somCo / *soNCa > *soŋo** ‘lungs’: VVH166 *so$_{ŋ}$no ‘lung’; M67-270 *sono; I.Num182 *soŋo; M88-so7; KH/M06-so7: Mn; NP; TSh; Sh; Cm; Kw; Ch; SP; CU; Tbr; Tr, Cr; HN sooneewa’ ‘to swell up (of vipers)’; Ktn šoŋa-č; Eu soná-t / coná-t ‘bofes [lungs]’; and perhaps Hp somi(-k-) ‘draw in breath through the nose, sniff’(with 2nd C and 3rd C separated); Hp somi-lawï ‘keep sniffing’. Ktn and Eu are a nice NUA and SUA match, as NUA -ŋ- corresponds to SUA -n-. Miller includes Ls ṣavá-ṣva-š ‘light on one’s feet, lungs’; but TO and Ls both fit *sapa so perfectly, and the number of steps from *soNCa to *sapa has me preferring to keep them separate for now, as Ken Hill does, though -’m- > -p- does happen elsewhere in UA, so sm’ > s’m > sapa may be possible, but not commendable at this point. [e1s,e2m,e3’] [NUA: Num, Tak, Tb; SUA: TrC, Azt]

282 Egyptian(F) **wf’** ‘lungs’; Coptic wof:
Tbr **wopa^{N}**-s ‘lungs’ (the superscript n means a nasalized vowel, periodically consistent with a glottal stop). Also note that Coptic shows the same vowel that UA/Tbr has. [e1w,e2f,e3’] [SUA:TrC]

283 Egyptian(F) **qm’** ‘create, beget, produce’; Egyptian(F) qm’ ‘mourn’; Egyptian(H) **qm’** ‘schaffen, erschaffen [create], herstellen, anfertigen [make], erzeugen (Vater) [beget, produce (of a father)]’; Egyptian(H) qm’ ‘beklagen [lament]’:
UACV-689 ***kumma** ‘create, make’: Ktn kïm ‘make’; -ġuma- in CU maróġumay ‘create’; Mn qoomai ‘do s.th. in honor of, sacrifice for, mourn for’; NP puhagïma ‘medicine man’ (*puha- ‘medicine’ + -gïma (*u > ï) as ‘medicine-maker’). Note in the UA definitions we have two rather unrelated meanings ‘make/create’ and ‘lament/mourn’ and that both meanings are in the Egyptian as well. [e1q,e2m,e3’] [NUA: Num, Tak]

284 Egyptian(F) qm’ ‘create, beget, produce’; Egyptian(H) **qm’** ‘schaffen, erschaffen [create], herstellen, anfertigen [make], erzeugen (Vater) [beget, produce (of a father)]’; Egyptian(H) qm’ ‘der Schöpfer [the creator]; Egyptian(H) qm’t ‘erzeugnis [product(ion)]’: UA words for **HUSBAND:**

Mn	kúwa	Hp	kooŋya	Eu	kúnwa
NP	guma	Tb	kuuŋa	Tbr	kona-ká-m 'husband-haver'
TSh	kuhma(cci)	Sr	wöčahav	AYq	kuuna
Sh	kuhma/kuha	Ca	wél’isew-ily	My	kuuna
Cm	kumahpï’	Ls	kúúŋ; tó’ma-vu	Wr	kuná
Kw	kuhma	Cp	kúŋ	Tr	kuná(ra)/guná(ra)
Ch	kumá	TO	kun	Cr	kïï´n
SP	kumma	PB	kun	Wc	kïna
WM	piwá	NT	kúna	CN	--
CU	piwá; kumáa-vi ‘male animal’	ST	kun		

UACV-1240 ***kuCma / *kumCa > *kuŋa** 'husband’ (> SUA *kuna): Sapir; VVH97 *kuŋa ‘husband’; B.Tep121a *kuna ‘husband’; B.Tep121b *kunadï ‘ her husband’; B.Tep122 *kunatai ‘take a husband’; M67-504a/b *kuna / *kuma ‘husband’;

I.Num66 *ku(h)ma ‘husband, male’; L.Son107 *kuna ‘marido’; M88-ku2 ‘husband’; KH/M06-ku2. Hill and Miller also add Ca kúŋlu ‘propose to marry (of woman)’ and Cp kúŋvuwə-t ‘bride, married woman’. All Numic languages approximate *kumma as both ‘husband’ and ‘male’ or the begetter. In WMU and CU the common form for ‘husband’ is piwá, yet kumma ‘male’ exists also with a semantic shift as SNum spreads eastward:

SP kumma ‘male, husband’	SP piŋwá ‘wife, spouse’
CU kumáa-vi ‘male animal, stud, macho’	CU piwá ‘spouse, husband, wife’

Hp, Tb, and Tak show reflexes with a velar nasal: *kuŋa vs. Num *kumCa. Then all SUA reflexes have *kuna. The fact that nearly all UA languages have a term, but only vary in the type of nasal—bilabial in Num; velar in Hp, Tb, Tak; alveolar in SUA—suggests that we are dealing with a single proto-form, and that the medial consonant represents a cluster involving a nasal. Hp -ŋy-, Mn w vs. m of the rest of Num, and NUA ŋ vs. SUA n all suggest a clustered nasal. The latter syllables (-ġuma-) of CU maróġumay ‘create, v’ are the verb and are identical to CU kumáa-vi ‘male animal, stud, macho’ in the consistency of k > -ġ- between vowels . [e1q,e2m,e3’] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC]

285 Egyptian(H) **t’** ‘heiss sein [be hot]’; Egyptian **t’w** ‘hitze [heat], Glut (feuer) [glow (of fire)]’; Egyptian(F) **t’** ‘hot’; Egyptian(F) t’w ‘heat, n’; the Numic term UA *kut-tu-tu’i (fire-redupl-hot) ‘hot’ appears to contain *kut ‘fire’ with a reduplication of *tu’i > tutu’i:

UACV-1212a ***tu’i; *ta-tu’i** (> *taru’i) ‘hot’: Kw taru’i ‘to be hot’; Ch tarú’i ‘hot’; CU tarí’i ‘be hot weather, be hot place’; NP tu’i ddu’i ‘try to warm up’ suggests a compound in the others: *ta-tu’i. The TrC forms below likely share a morpheme.

UACV-1212b ***ta’ta > *tatta** ‘hot’: My tatta ‘hace calor’; Yq táta ‘hot’; AYq tatale ‘feel hot’; Wr tahtáni ‘to be hot’; Tr a’tará- ‘to be hot’; Tr ŕatá-ame ‘caliente, cálido’. Cahitan reduplication ta’ta > tata. [e1,e2,e3] [NUA: Num; SUA: TrC]

The **Cluster *-x’- > -’w- (*x > ’; *’ > w)** is treated in the next three items. Keep in mind that in this cluster the Egyptian x > UA *k and like other instances of k as first consonant in a cluster, the k becomes a glottal stop (*k > ’). The Egyptian glottal stop, in turn, corresponds to w in UA or ’w; thus, *-x’- > -’w-.

286 Egyptian(F) **px’** ‘purge, clean’; Egyptian(F) px’ ib ‘clean of heart’:

UACV-2495a ***pi’wa** ‘clean’: Wr pi’wa ‘get clean, vi’; Wr(MM) pi’wá ‘limpiarse [become clean]’; Wr(MM) pi’wé ‘limpiar superficies [to clean surfaces]’; Wr(MM) powi ‘limpiarse’ (present tense base)’; Tr bi’wá / be’wá / be’wé ‘clean, purify, wipe’; Eu pí(g)wa-n ‘limpiar, v’; Eu pigwi ‘limpio’; Eu pígwide / pivide ‘limpiar a otro’; Op pivide ‘cleanse’ (Shaul 2007); TO -pig ‘remove from, verbal suffix’.

UACV-2495b ***powa (< *pi’wa)** ‘clean, repay’: CL Azt28; M88-po20; KH/M06-po20: CN poopoowa ‘repay, make restitution‘; Pl puupuuwa ‘clean (people), pluck (feathers)’. Cf. CN siwaa-tl / sowa-tl 'woman’. [e1p,e2x,e3’] [SUA: TrC, Tep, Azt]

287 Egyptian(F) **px’** ‘kind of grain’: Wr pa’wa ‘spike or point or unopened leaves in the center of a plant’ [where the grain is in the plant]. [e1p,e2x,e3’] [TrC]

288 Egyptian(F) **wx’** ‘seek’; Egyptian(H) **wx’** ‘suchen [seek], wünschen [wish], begehren [desire]’:

UA *wi’wa / *wa’wa ‘seek, want’: Sr wii’wïn ‘want, like’; as in px’ above, also in wx’ did k > ’ as first element in a cluster and ’ > w, in other words, *-k’- > *-’w-. Also Hp wïïwa / wïïwan ‘think (about), consider’ or Hp wáŋway ‘summon, call’.

UACV-1897 ***wi’wa** / ***wa’wa** ‘look for’: B.Tep35a *gaagai-a ‘to look for’; not in M88; TO gaag; UP gaagï; LP gaag; PYp gaaga; NT gáágai; ST gaaga. To Tep, add Cr wáwawau! ‘búscalo’; Cr paráwauni ‘búscalo’; and Mn wawiya ‘chase, go after’; and Sr wii’wïn ‘want, like’.

In Numic below, the cluster doubled the -kk-: *wak’a > wa’ka > wakka:

UACV-1902 ***wakka(-y)** ‘search for’ (*wak’a > wa’ka > wakka): Sh waikki/wakki ‘look for, search for’; Cm wehkinitï; Kw wuki ‘look for’; CU w*ə*qXáy ‘look for, seek’; WMU *wah*qxáy-y ‘search, look for, vt’; past: *wah*qxáy-kye. [w rounds adjacent Vs] [e1w,e2x,e3’] [NUA: Num, Tak, Hp; SUA: Tep, CrC]

The cluster *-<u>h</u>r- > -’r- in UA: As the h became a glottal stop in a cluster in Egyptian **nhp** ‘copulate’ > UA ***na’pï** ‘join together, copulate’, so did <u>h</u> in clusters also become ’ (glottal stop).

289 Egyptian(F) **phr** ‘turn, turn about, revolve, surround, travel around’:
UACV-1839 ***pi’ri-na > *piyi(na)** ‘spin/twist thread, make rope’: B.Tep267 *vidinai/a ‘to make thread’; B.Tep268 *vidinakaroi ‘spindle’; M88-pi3 ‘twirl, darse vuelta’; Stubbs 2000a-9; KH/M06- pi3: Wr pi’rí ‘darse vuelta [turn, revolve]’; Tr bi’rí ‘torcerse [be twist, twined], enrollarse’; My biirite ‘torcer’. For Tep, *p > w and *r > d: UP wijinï; NT vidyíñai ‘make thread’; ST vidyña; TO wij|in ‘twist, spin obj’; TO widu|t ‘rock, swing, wave, flutter’; TO widwua ‘stir, beat’. Add Eu virá- ‘torcer’; Eu vírana- ‘voltear’; and Wc hiiná ‘torcer mecate’ (twist/make rope) and Cr ti’ihiihna ‘hilar’ and AYq vi’ita ‘twist, wind around, coil, vt’. As noted in Stubbs (2000a), the presence of *y in PUA *piyi(na), though clear in Tepiman *vidina, would be much less obvious in a PUA segmental sequence of *-iyi-. Due to the near phonological identity of *y* and *i*, a PUA *y between two *i*’s would likely be quite invisible, probably reducing to simply *i* or long *ii* (*-iyi > ii), as we see in Huichol *hiina* ‘torcer mecate’ (twist/make rope). The correspondence of PUA initial *p > h in Huichol matches, which also confirms the relative invisibility of *y adjacent to *i* in some UA languages. Miller (M88) does not list Huichol *hiina* in his 1988 collection (where Tep *vidina* is found); nevertheless, the sound correspondences and semantics match nicely, and it is an intriguing example of a proto-phoneme, occuring in a rather disguising phonological environment, but appearing clearly in Tepiman. However, some y are from liquids (r/l), and Tr and Wr show this to be one of those, for Wr pi’rí ‘darse vuelta’; Tr bi’rí ‘torcerse, enrollarse’; and My biirite ‘torcer’ show that the medial -y-/-d- actually comes from medial *-’r-. [e1p,e2h4,e3r] [SUA: Tep, TrC, CrC]

290 Egyptian(F) **phrt / phrty** ‘remedy, prescription’; Coptic pahre: built on the verb Egyptian phr meaning circular motion, ‘remedy’ or concoction probably from stirring the mixture/medicine. So the UA words for medicine or healing power are relevant, though with a different voweling, perhaps *puhar or *puhrat:
UACV-1160a ***puha** ‘supernatural power, medicine, healing power’: M67-281 *pu ‘medicine’; I.Num156 *puha ‘power, medicine’; BH.Cup *púla ‘doctor’; M88-pu10 ‘supernatural power’; Munro.Cup117 *púúhu-la ‘shaman’; KH/M06-pu10: Mn puha ‘supernatural power’; NP puha ‘supernatural power’; TSh puha ‘power’; Sh poha ‘supernatural power’; Cm puha ‘medicine, spiritual power’; Kw poha-vi/puha-vi ‘poison, power’; Kw poha-ga(n)-dï ‘evil shaman, witch, modern doctor’; SP pua / poa ‘supernatural power’; CU puwa-vï ‘medicine power, spiritual power’; Tb tïboohat ‘to doctor, work at curing (usually animal)’; Tb tïboohanat ‘apply medicine (to a person)’; Tb(H) tiipoohiš-t ‘medicine, herb medicine’; Cp púu-l ‘shaman’; Ca púu-l ‘medicine man’; Ca púh-lu ‘become a púul, perform first ceremony’; Ls púú-la ‘shaman’; Hp powa ‘supernatural power’; powaal-ti ‘bec. cured’; Hp powa-ta ‘cure, purify’; Miller also includes CN pa’-tli ‘medicine’; CN ilwilti ‘be deserving, worthy of s.th.’ Add Wr(MM) puhé ‘curarse, quitar la enfermedad’; Wr(MM) puhé ‘quitarle (la carga a una bestia); Wr(MM) puha / puhi ‘quitar’; Wr puhé-na/ma ‘cure, take sickness from (person), take load (from animal)’; Ch(L) puh^{w}agantï ‘doctor, shaman’; Ch(L) navuh^{w}a-ganumpï ‘medicine’; TSh pohaah ‘bewitch, hex’; Sh(C) tïci-pohah ‘make evil sorcery’ (-pohah ‘use spiritual power’). CU and Hp seem to have lost -h- then yielded to the natural excrescent -w- in the *u-a environment. Below is a semantic shift.
UACV-1160b ***puha** ‘poison’: Stubbs2003-14: NT ivóíñai ‘envenenar [to poison]’; Kw poha-vi ‘poison’; and the -wui- portion of TO hialwui ‘poison, n’; and Ktn pahavit ‘poison, dream helper’ may be a vowel-assimilation (*u-a > a-a) or a loan from neighboring Kw with assimilation. [e1p,e2h4,e3r] [NUA: Num, Tak, Tb, Hp; SUA: Tep, Azt]

291 Egyptian(F) **phr** ‘turn, turn about, revolve, surround, travel around’; these UA terms have to do with turning and circles: UA *puhaC ‘circle, look around’: Sr puah- ‘circle’; Sr puahka’ ‘circle’; Sr puahkin ‘put in a circle, make a circle of’; Sr puahï’q ‘be in a circle’. Sh pohaiH ‘look around’; TSh pohai ‘look for, search for’ [e1p,e2h4,e3r]

292 Egyptian(F) **phr** ‘turn, turn about, revolve, surround, travel around’: Wr(MM) tehpihíri ‘remolino [whirlwind]’. The -pihíri suggests a feminine noun, and the teh- is the feminine prefix. [e1p,e2h4,e3r]

293 Egyptian(F) **pds** ‘stamp flat, flatten’; Egyptian(H) breitdrücken, breitschlagen [beat broad]’:
Eu **pitása** ‘smash, flatten, vt’ (pret: pitási); Eu **pitáse** ‘be/get flattened’ (pret: pitási). Note that Eu shows all three consonants. Dozens of other UA forms show *pata / *pici and such at UACV-904a-g, but not the s, unless the 2nd and 3rd consonants are clustered (-ds- > -ts-/-c-), but not listed until clearer that such is the source.

4.3 Bilabial stops are lost or absorbed as first element in a cluster: **-bC-/-pC- > -C-**: The loss of bilabial stops (p/b) as first consonant in a cluster is a sound change common enough in world languages generally. English debt is pronounced det, losing b as first consonant in the cluster; Spanish deuda ‘debt’ nearly lost the same, but preserves in its place a round vowel; and Semitic *kabkab > kaukab > kookab ‘star’.

757 Hebrew **šipḫa** ‘maiden’ > UA ***siwa** ‘woman, girl, wife’ (treated further below)
294 Egyptian **xpš** ‘foreleg, thigh’> UA ***kapsi** (> ***kasi)** ‘thigh’;
295 Egyptian **xpd** ‘buttock(s)’ > UA ***kupta (> *kuta)** ‘buttocks’;
296 Egyptian **ib’** ‘dance’ > *yapwV > UA ***yawa/yawi** 'dance, v.';
297 Egyptian **sp’ / zp’** ‘centipede’> UA ***(ma)-siwa** ‘centipede’ (ma ‘hand’);

298 Egyptian **ʕbxn** ‘frog’> *wapkan > UA ***wakaN(-ta)** 'frog'
299 Egyptian **hpʕ** ‘chew’ > *hipwa > UA ***hiwa** ‘taste’
300 Egyptian **i’bty** ‘east, left’ > UA ***oti** ‘left’
486 Egyptian **xftiw** ‘enemy’ > UA ***kaytu** ‘enemy’
794 Aramaic **’iibr-aa’** ‘penis-the’ > ***wï’aC** ‘penis’; see also 467, 1242

294 Egyptian(F) **xpš** ‘foreleg, thigh’; Coptic šopš:
UA ***kapsi** (> **kasi)** ‘thigh’: Manaster-Ramer (1993) discusses this set and astutely reconstructs *kapsi ‘thigh’ on the strength of the cluster in Tb -ps- for ‘thigh’ and in *apsi 'arrive', both showing the same cluster -ps- in Tb, while all other UA languages show only the s, though Hp and others hint at a cluster. Strikingly, that cluster provides exactly the reconstruction we would expect for Egyptian xpš ‘thigh’:
Tb hapši-l 'thigh'; Ls qaasi-l; Hp qàasi/qahsi ‘thigh, hind quarter’:
UACV-939 ***kapsi** ‘thigh’: Sapir; VVH41 *kasi ‘leg, thigh’; B.Tep92 *kahi ‘thigh’; M67-435 *kasi thigh; L.Son75 *kasi ‘muslo’; CL.Azt67 *ïkši ‘foot’; CL.Azt250 **kasi ‘leg, thigh’; Kaufman 1981 *kapsii ‘thigh’; M88-ka7; Manaster-Ramer 1993 *kapsi; KH/M06- ka7 *kapsi ‘leg’: Tb hapši-l ‘thigh, upper leg’; Ls qáási-l; Hp qàasi/qahsi ‘thigh, hind quarter’; Wr kasí; Tr gasí/kasí; CN kees ‘thigh, leg’ fits as well; CN kešiil-li ‘groin’. The Tep forms have h/ø < *s: TO kahio ‘leg’; LP kai/kahi; Nv kaio ‘pierna’; PYp kahir; NT káhi; ST kai. Also of interest are SP pïŋkap-pï ‘upper leg’; TSh nuŋkwappï / huŋkwappï ‘leg’; CU pïká-vï ‘thigh, lap’; CU pïká-vï-n ‘my thigh, lap’; NP huggabbï ‘thigh’ (-gab-/-kap- portion). SP and CU parallel the Late Egyptian possessive structure pe-(pron)-xapši wherein the pronoun is usually one segment—vowel or consonant. [*-ps- > -s- in most] [e1,e2,e3] [NUA: Hp, Tb, Tak, Num; SUA: Tep, TrC, Azt]

295 Egyptian(H) **xpd** ‘Hinterbacke [buttock]’ (usually in dual); **Egyptian xpdwy** ‘buttock(s)’:
UACV-336 ***kupta** ‘buttocks’: Ls kupča-t ‘buttocks’; Cr kïcá ‘buttocks’; Wc kïcá ‘buttocks’; Cp xútaxwi ‘back’ whose -t- suggests a cluster -Ct-, because intervocalic *-t- > -l- usually in Cupan. The first three (Ls, Cr, Wc) perfectly agree in *kupta, because PUA *u > Cr/Wc ï, PUA *p > ø in CrC even without the medial cluster, and NUA -c- < *-Ct- usually, as the -t- in Cp. A bilabial as first element of a medial cluster has been seen to be fragile elsewhere in UA (e.g. *kapsi > *kasi ‘thigh’). M67-126 cites Sr kukt-č ‘anus’ which may involve reduplication or may belong with *kwita, where Miller had it. Terms like CU kutú-pï (< *kuCtuC-pï) ‘buttocks’ and SP kučuŋ’wa ‘sit on one’s haunches’ may belong here or at *kwiCta, if the two are not related themselves. Tr gósi/kósi ‘buttocks’, which does have o < *u, further lenited the affricate to a fricative: *kucV > kosi. Affrication of *-t- to *-c- is common in UA: e.g., CU kwica-y ‘defecate, vi’ (<*kwitta). Think on Hp hoovi ‘buttocks’ but Hp qàasi < xpš. [bilabial loss as 1st C in a cluster; t > c] [e1x,e2p,e3d] [NUA: Tak, Hp, Num; SUA: TrC, CrC]

296 Egyptian(H) **ib’** ‘tanzen [dance], laufen [run]’: *yapwV > UA ***yawa/yawi** 'dance, v’:
UACV-635a ***yawa/i / *yaCwa/i** 'dance, v’: Wr yawí ‘fiesta, ceremony, dance, n’, Wr yawi- ‘dance (especially of women), v’; Wr yautá-ni ‘dance, v’; Tr awí-mea ‘dance, v’; Eu dáve/dawe ‘dance, v’;
Eu dáhdauh 'dance, n'; Tbr mi-nyamwa-lí-t 'rain dance’ (Tbr ny < *y; mw < *w; so Tbr suggests *yawa);
Cp čayewe ‘to do a woman’s dance, v.’; Cp yawe ‘sing (of bird), v’ since verbs of sing and dance and fiesta often overlap semantically. Remember that bilabials are assimilated or disappear when first element in a cluster, so this suggets a voweling of *yab’i > *yabwi > *yawi. [SUA: TrC; NUA: Tak]
UACV-635b ***yï’ïwa / *yi’iwa** (< ***yaCwa** ?) ‘dance, v’: Yq yé’e 'dance, v'; Yq yí’iwame 'dancers';
My yé’eye/yi’i-; AYq ye’e; yeye’eme 'dancers'; AYq yi’iwa 'a dance'; yi’iwame 'act of dancing’. The glottal stop in all the Cah languages may reflect a lost -C- in a cluster, simply lost in Tr/Wr (*yaCwa > *yawa), but realized as glottal stop in Cah, then separated. [SUA: TrC]
UACV-1018 ***yapi** ‘hurry’: Mn yabi’ísu ‘hurry!’; NP yabi ‘hurry, adv’; NP yapi ‘fast’; NP yabisu ‘quickly’; Wr yapí ‘pronto’; Wr yapíri ‘muy pronto’; Wr yapisí ‘to hurry’; maybe TSh yawï(sï)’quickly, fast, in a hurry’. Both NP and Wr show *yapi and have been associated with *ya’i. While such a tie may be, these have an extra morpheme that the above lack, even if related: *ya(’i)-pi? Note that 3 of 4 show an s-syllable also. [e1i,e2b,e3’] [NUA: Num; SUA: TrC]

297 Egyptian(F) **sp’/zp’** ‘centipede’; Egyptian(H) **sp’/zp’** ‘Tausendfüssler [centipede]’:
UACV-2598 ***masiwa** ‘centipede’ (*ma ‘hand’ and *sipwa > siwa): M67-82 *ma; L.Son130 *ma-siwa; M88-ma23; KH/M03-ma23: Eu másiwa; Yq masíwe; My masia; TO maihogi; PYp maihig; Nv maiokka (< *mahioga < *masiwa). Wr ma’yáka, Tr maagá / ma’agá, and Tr mahará may derive from Tep loans: *masiwa > Tep *mahiga > mahaga (Tr) and > ma’yaka (Wr). [e1s,e2p,e3’] [SUA: Tep, TrC]

298 Egyptian(H) **ʕbxn** ‘Frosch [frog]’; Egyptian(F) **ʕbxn** ‘frog’ > *wapkan > UA ***wakaN/C(-ta)** 'frog':
UACV-971 ***wakaN-ta** > ***wakatta** ‘frog’: M67-192 *waka ‘frog’; I.Num265 *waako(o) ‘frog’; BH.Cup *waxa ‘frog’; HH.Cup *waxaa ‘frog’; Fowler83; M88-wa12 ‘frog’; KH.NUA; KH/M06-wa12: Kw wagata/wogata ‘frog’; Sr waqät / waka^{r}t; Ktn wakata-t; TSh wakatta ‘toad’; Ch wagáta-ci ‘frog’; NP wakatta ‘toad’; Cp wáxači-ly ‘frog’; Ca wáxačily, pl wáxašly-em ‘frog’; Tb waagaaiš-t ‘little frog’; Ls waxáw’ki-la ‘type of frog’; Ls waxáá-wu-t ‘type of frog’; NP(McD) wakasa’a; SP waaġoo-(ci); Sh waako ‘frog’. Fowler (1983) cites SP wahata / wagata; Tr ’awaka. Add TSh pawoko/pookoo ‘bullfrog’; Yq wahté’ele ‘toad’. Mn wazaġá’; Mn(M88) wacqa’(wa) ‘frog’ shows metathesis. Is NP pamogo ‘frog’ influenced by TSh pawoko? Most show the 3rd C clustered, except Tb woohnaa-l ‘bullfrog’ shows Tb h < PUA *k < Egyptian x, and also shows the n: *wabxana > *wokana > *wohna in contrast to Tb waagaaiš-t 'little frog' which appears to be a loan from a Cupan language; cf. Cp pl: wáxašly-em 'frog’. The n appears to have been lost early, except in Tb, but is apparent in a cluster -Ct- in most. Yq, Ch, Cp, Ca, and Tb have extra syllables: *wakatta(-l(i)).
*wakattali > waktele > wahte’ele (Yq)
*wakattali > wakattil > wakacil (Tak)/waka(i)š- (Tb, Ca’s pl.)
[*-t- > -č- in Ca, Cp; Mn metathesis; wa > wo in Kw] [e1,e2,e3] [NUA: Num, Tak, Tb; SUA: TrC]

299 Egyptian(F) **ḫpʕ** ‘chew’; Egyptian(H) **ḫpʕ** ‘kauen [chew], in Mund hin- und herbewegen [move here and there in the mouth]’; this tie depends on an Egyptian voweling ḫipʕa, such that intermediate *hipwa > UA ***hiwa** ‘taste’: Yq híiwe ‘probar [taste]’, AYq hiiwe ‘check on, sample, taste’, and My hiiwe ‘taste, v’. Again, the bilabial as 1st element in a cluster is assimilated, like the above. [e1,e2,e3] [TrC]

300 Egyptian(H) **i’bty** ‘östlich Seite [left side], Osten [east]’; Egyptian(F) **i’bty** ‘east, left’; Coptic yebt ‘east’: Though lacking initial y/i, the other 4 of 5 consonants are apparent in **UA *oCpoti** ‘left’: CN oopooč-tli ‘left, left-hand side’; Cr ne-’uhtah ‘my left.’ The Cr u agrees with Azt o and UA *o, and if Cr lost intervocalic -p-, like it usually does (or the voiceless h may be the p’s remnant), then the two derive from *opotV. The –p- in Azt suggests a cluster (*ya’baty? > *yo’boty > UA *oCpoti); otherwise, its disappearance in Azt is likely too. The first round vowel o is a typical reflex of the glottal stop ’. Two other cognate groups represent a syllabic collapse initiated by the loss of a vowel, resulting in a cluster, then the disappearance of the first consonant of the cluster, a common process in UA (Stubbs 2003): *opoti > opti > oti.
UACV-1305a ***opoti** ‘left’: CN oopooč-tli; Cr ‘uhtah. The Cr u agrees with Azt o and UA *o, and if Cr lost intervocalic p, like it often does, or if voiceless h is the remnant of -p- (*p > Cr h/ø), then the two match well, deriving from *opoti. In fact, these may tie to *otti below with loss of *-p- in a NUA cluster (*opoti > opti > otti > oci) as suggested by the *-c- in Sr ööc, ööci’ka’ ‘left-handed one’ and Ls ’éčva-š, in contrast to the -l- we would expect if not a clustered -tt-. [Cr loss of intervocalic -p-]
UACV-1305b ***otti-(pa)** ‘left (hand)’: BH.Cup *’ecva ‘left (hand)’; HH.Cup; M88-’o18; KH.NUA; KH/M06-’o18: Sr ööc ‘left’; Sr ööci’ka’ left-handed one’; Ls ’éčva-š 'left hand'; Cp iṣvá; Ca ‘išva; Tbr ote-wi-ná ‘left’. Sr ö, Ls e, Cp i, and Ca i, all agree with UA *o. The usual medial consonant reconstruction for NUA -c- is -tt- (*otti) because PUA *c > y in NUA. And the most common cause of *t > c/č is a following high front vowel; so *oti / otti is the preferred reconstruction. The Cupan languages show a following -va syllable, while Sr and Tbr only show the oti portion. In fact, the Tbr form may be the link between the Tak forms and Tr and Wr, though Tr, Wr, and Tbr all show a common compound, the latter half of which the Tak languages lack. Add Ktn oci’(ŋa) ‘left hand’ and the oi- of NP oi-naggwa ‘left side’ (o(y)i < *oci).
UACV-1305c ***otï-wina** ‘left’: Tbr ote-wi-ná ‘left’; Wr o’ená; Tr owená; Tbr ote-wi-ná. Something like *otïwina > *otwïna > *o’wena (Tr, Wr) would account for these TrC forms. Is TO oogig ‘left’ a loan from these TrC forms? Though with differing affixes for different compounds, both NUA and SUA show the stem *otti-, ultimately from *opoti. [e1i,e2’,e3b,e4t,e5i] [NUA: Tak, Num; SUA: TrC, CrC, Azt]

301 Egyptian(F/H) **mnt** ‘thigh’ usually duel Egyptian **mnty** ‘thighs, dual’:
UACV-945 ***macci / *maCti** ‘thigh, upper leg’: M67-436 *mac ‘thigh’; M88-ma17 ‘thigh’; KH/M06-ma17: CN mec-tli ‘thigh, leg’; My máccam ‘muslo’; Pl mec- ‘leg (in compounds)’; HN mec-tli ‘thigh’; Eu morika ‘thigh’; Eu morite ‘thigh, gen.’; Eu morita ‘thigh, acc’; Ca mi-š 'hip, thigh' (construct)' (< *mo); Tbr mo- ‘thigh’. Add Yq máča-m ‘leg, thigh’. [e1m,e2n,e3t] [SUA: Azt, TrC; NUA: Tak]

302 Egyptian(H) **xnm** ‘riechen [breathe (air)], einatmen [inhale], geniessen (Speise) [enjoy, eat (food)], erfreuen [enjoy]:
UACV-777 ***kuCma/i / *kunmi** (Kaufman)/ ***ku’mV** 'chew, nibble': VVH88 *ku$_u$mi/*ku$_u$ma 'eat' (as corn, to nibble); M67-152d *ku/*ko 'eat'; L.Son104 *kumi 'masticar'; Kaufman1981 *kunmi; Dakin 1982-30; M88-ku12; KH/M03-ku12: TO kuum 'chew, crunch'; Wr ku’mi; Tr gumí / kumu 'eat small things, like corn'; My kúume 'chew'; Wc kïmée 'mochar, eat small bites'; Cr kï’ïma / kï’ïmi 'eat’. In light of the glottal stops (Wr, Cr), we may be dealing with another consonant, i.e. a cluster or a glottal stop as well. Dakin (1982) ties these to CN kimičin ‘mouse’ (as a nibbler, good inclusion). Ken (KH/M06) and Jane Hill (2001) add SP kummia ‘old Indian name for corn, rarely used now’; Hp kokoma ‘dark red, almost purplish corn’; Hp koma ‘coxcomb, Amaranthus cruentus, a plant used to make red piki’ (Hill queries whether the two preceding are cognate; I would say so); CU kïmïy 'corn'; TO kuum ‘eat, chew on s.th. that comes in little pieces’; Cm kukïïme-pï ‘parched corn’. Add also AYq kumme ‘chew’; PYp kuum 'chew’; WMU kïmwí/kumwí 'corn'; TO kuumikud 'corncob’ literally as 'eating tool’. Note Kaufman’s *kunmi, as the very reconstruction. [NUA: Num; SUA: Tep, TrC, CrC, Azt]

As the nibbler, the jackrabbit has the same consonants as ‘chew, nibble’ at 463 (abbreviated below):
463 Egyptian(H) **xnm** ‘inhale, smell, eat, enjoy’: **UA**CV-1757 ***kaNmu** / ***kanmï** (Kaufman) ‘jackrabbit’

As for nibbling/tasting or ‘have a taste / taste good’, Kaufman’s reconstruction has k-nm- like Egyptian xnm:
303 Egyptian(H) **xnm** ‘inhale, smell, eat, enjoy’:
UACV-778 ***kaNma(C)** / ***kamma < *kanma** (Kaufman1981) 'taste, have taste or a quality of taste, such as sweet or salty’: I.Num50 *kahma ‘(have a) taste’; M88-ka2 'be sweet or salty'; Kh/M06-ka2 ‘be sweet or salty’: Mn qama (< *qamma) 'taste, v’; NP kama; TSh kama/kamma; Sh kammaC; Cm kama/i 'have a taste, be tasteful'; Kw kama 'taste, vi’; CU kamáy (Miller *kammay) 'taste, have taste, taste good'; CU kamá-tï (< *-ttï) 'tasty, good tasting’. Add Ch(L) kama- ‘have taste or flavor, vi’. This also appears in compounds such as Ch piya-gama 'sweet’. In M88-ka2, Miller includes M67-427 *kaka ‘sweet’; L.Son71 *kaka 'dulce’ as *kaka may be a reduplication of *kaCma ‘taste’. ST kaak 'have a certain taste'; Yq kám-ta 'swallow, put in mouth'; ST kaam / kaamta / kaamik 'carry/hold in the mouth' may be semantically pivotal between *kaCma 'taste' and *kaCma 'mouth, cheek’ and possibly tie them together. Sh and CU may suggest a final -C. Relative to Kaufman’s reconstruction *kanma, note Ca ken-ma ‘delicious, tasty’. [e1,e2,e3] [NUA: Num; SUA: Tep]

Relevant to ‘nibbling, tasting’ is the place where it happens (cheeks, mouth), and relevant to rabbits’ puffy cheeks as prominent when nibbling/eating:
304 Egyptian(H) **xnm** ‘inhale, smell, eat, enjoy’:
UACV-828a ***kaCma** ‘cheek(s), mouth’: Sapir; VVH87 *ka$_u$ma ‘mouth, cheek, to taste’; B.Tep91 *kaama ‘cheek’; M88-ka26; KH/M06-ka26 ‘cheek’: TSh kamma ‘taste’; Sr qäŋ, pl: qaŋam ‘beard, facial hair’ (cognate? Miller queries, and I say yes.); TO kaam ‘cheek’; PYp kaama ‘cheek’; PYp kamar ‘face’; LP kama/kaam; NT kááma ‘cheek’; ST kaam ‘cheek’; CN kam(a)-tl ‘mouth’; HN kamak-tli ‘mouth’; HN kama-wia’ ‘speak to’; Pl kamačal ‘jaw’; Pl kamak ‘cheek’. Likewise, NP gamu ‘chin’ and Yq kámta ‘swallow, put in mouth’ may tie these to *kama ‘taste’ as suggested by VVH.
UACV-828b ***kaCma(C)** > ***kaŋa / *kana** ‘beard, facial hair’: if Sr qäŋ ‘beard’ and Ktn kaŋa-c ‘beard’ are includable in KH/M06-ka44 ‘chin, whiskers’, then Mn qana ‘beard’ and Tb kaŋaa-l ‘facial hair’ seem so also, though we shall assign different letters for different nasals. Sapir cites Tb gaŋa ‘beard’ (kaŋaa-l ‘facial hair’ in Voegelin and Munro) and Kitanemuk qaŋa and CN kan-tli ‘cheek’ (Simeon), perhaps a related form of CN kama-tl above. Add WMU ganáqqö’ / qaná-qqö-pp*ü* / gannáqwö’ ‘jaw, chin, n’; SP qannaqqo’o(N) / qannaqqo’-mpi ‘chin’; CU kaná-qö-pü ‘chin’. [medial m/n/ŋ] [e1,e2,e3] [NUA: Num, Tb, Tak; SUA: Tep, TrC, Azt]

Several UA *kamma forms mean both ‘taste’ and ‘sick’ as if in the sense of ‘experience’ or ‘partake of’ whether sweet (taste) or bitter (illness):
305 Egyptian(H) **xnm** ‘inhale, smell, eat, enjoy’:
UACV-1979a ***kaCma > *kamma** ‘hurt’: Mn ca-qama ‘hurt (physically)’; Mn qama ‘be sick, hurt’; TSh kammah ‘be sick, sore; ache, hurt’ (vs. TSh kamman ‘taste’); TSh kammanna ‘verbal noun of kammah; thus, TSh tama kammanna ‘toothache’; Sh(C) kamma- ‘be in pain, ache, be sick’; Sh kammah 'ache, dull pain’. What of Nv tuakama 'is pierced’? Note two similar terms Sh tïmmai ‘sick’ and Sh tïmmai ‘taste (food)’ have both meanings, as also Sh kamma is both ‘sick’ and ‘taste’, perhaps in a sense of ‘experience’ or ‘partake of’ whether sweet (taste) or bitter (illness). [NUA: WNum, CNum]

UACV-1979b ***na-kaCmi > *na-kammi** ‘sick’: Ch nagámi ‘sick’; SP nakammi ‘be sick’; CU naġámi ‘sickness, illness’. This is likely tied to *kama ‘(be in) pain’ with the na- prefix. [e1,e2,e3] [NUA: SNum]

Loss of initial i/y in stems of more than three consonants**:**

Initial i/y is often lost, and consistently in stems of more than three consonants. In fact, such a loss of initial consonants often happens in Egyptian itself:
Egyptian itnw and Egyptian tnw ‘be difficult’; Egyptian igr/igrt and gr/grt ‘furthermore, moreover’; Egyptian ixt and xt ‘thing’; Egyptian ixr / xr ‘by’ Similarly, UA forms often lack the initial i, but reflect the rest:
306 Egyptian **irṯt** ‘milk’ > UA ***rïti/*rïci** ‘milk’;
300 Egyptian **i’bty** ‘left’ > UA ***opoti** ‘left’;
307 Egyptian **irtyw** ‘blue’ > UA ***tïyawi/*tayawi** 'blue/green';
308 Egyptian **išdd** ‘sweat’ > UA ***-sul/-sud** ‘sweat’;
309 Egyptian **itrw** ‘river’ > UA *t(r)wV/*tiwï ‘river.’
345 Egyptian **ifdw** ‘four’ > UA ***wattiwi** ‘four’

306 Egyptian **irṯt** ‘milk’ (> *irtt/irt > Coptic eroote):
UA ***rïti/*rïci**: Wr rïci ‘milk.’ As t > c is frequent before high front vowels, with loss of initial i-. [e1,e2,e3]

300 Egyptian **i’bty** ‘left, east’; Coptic yebt ‘east’ (treated earlier) > UA *opoti ‘left’: CN oopooč-tli ‘left, left-hand side’; and many other SUA forms, yet they all lack initial y/i, the other 4 consonants are apparent. See at 300.

307 Egyptian(F) **irtyw** ‘blue’: (the last three consonants match UA perfectly, and if -rt- were clustered, it would likely only strengthen or double the -tt-, then with loss of initial i/y as usual, UA ***tïyawi / *tayawi** 'blue/green' matches Egyptian. Remember in Tep (TO, LP, Nv, PYp, NT, ST) *y > d, *w > g:
UACV-263 ***tayawi** > ***tïyawi / *tïyowi** ‘blue/green’: B.Tep249 *tïïdogi 'green, blue'; L.Son305 *tïyo ‘verde, azul’; M88-tï46 ‘green/blue’; KH/M06-tï46: *tïyawi > TO čïïđagi; LP tïïdïg; Nv stugdogi; studogivita; NT tïïdó(gi) 'blue / green'; ST tʸïïdo’. Add PYp teedag and Eu tadei 'blue’. For a reconstruction of *tayawi, TO, PYp, and maybe Eu show the 2nd vowel as *a*, while other Tep forms likely assimilated *a* > *o*, anticipating the following *w. And Eu tadei 'blue' shows the original first vowel *tayawi, while the other languages assimilated, anticipating to the points of articulation of t and y and w, remaining high between the high fronted consonants on both sides of *a, thus motivating ï. Cahitan *tïwïli (My teweli 'blue, sky color'; Yq téwe 'azul'; Yq tewéli 'azulito'; AYq tewei 'dark blue’) may belong since syncope of a vowel and assimilation are common in the Cahitan languages: *tïyawi > *tïywi > *tïwï. For loss of medial syllables in Cah, compare ‘bat’: *so'o-pati > so'opeci > Cah sooci-k (249) and ‘frog’ *wakanta > Cahitan wahte ‘frog’ (298). [reductions; *V > o/_w] [e1i,e2r,e3t,e4y,e5w] [SUA: Tep, TrC]

308 Egyptian(F) **išdd** ‘sweat’; Egyptian(H) **išdd** ‘Schweiss [sweat], n’:
UA ***pa-sur** 'sweat, v': In the Tepiman compounds, the first syllable is *pa- ‘water’ (> Tep va-/wa-), so consider matters after initial wa-/va-, and remember that *s > h in Tep, and d > l/r in some languages.
UACV-2249 ***pa-sura** 'sweat': TO wahud / wahul- ‘sweat, vi’; TO wahulðag 'sweat, n.; sweaty, adj.';
Nv vahurhu ‘sweat, v’; Nv sivahurhudaga 'sweat, n’; PYp vahar 'sweat, v'; PYp vahagdar 'sweat, n’;
NT vaahúraryi 'sweat, vi’; ST voor ‘sweaty’ (pl ST vapor). Also likely are the latter two syllables of Cr táisï’e ‘sweat, vi’; Wc kwaašiiya ‘sweat, n’, for Cr -sï’e < *surV, and Wc assimilated the V a bit more toward y. ' The first two consonants (Egyptian **išdd**) may be apparent in Sr yïṣka’ ‘sweat, perspire’ and Cr taísï’e ‘sweat, v,’ while the Tep languages show the 2nd and 3rd consonants, and the 4th in NT.This is another word in which PUA *pa ‘water’ appears compounded in Tep. [*r > ’ in Cr] [e1i,e2s1,e3d,e4d] [SUA: Tep, CrC]

309 Egyptian(H) **itrw** ‘Strom, Fluss [river]’ > Coptic yo’or:
UACV-1818 ***pa-tiwa / tawi** ‘river’: these UA forms are compounded with UA *pa- ‘water’ in Uto-Aztecan *pa-**tiwa** / **tiwï** ‘river’: Eu bacíwe’e ‘rio [river]’; My bátwe ‘rio’; Yq bátwe ‘rio’; Wc hátïa (< *pa-tua since Wc h < *p and Wc ï < *u); CN aa-tlawi-tl ‘valley, canyon, gully’; CN aa-tooyaa-tl ‘river’. These Cahitan forms in -pa10 seem better here with Eu and CN. UA also has the Hebrew form Hebrew **yə’or** ‘river’ (799): UA ***yawa(y/n)** 'river, canyon’ which itself is a loan from Egyptian and quite matches the Coptic forms, yet UA *tiwï better preserves the t and w, the other two of the four consonants, that the Hebrew and Coptic forms are missing. UA loses the first C, consistent with the other five items losing initial i- in UA, while Coptic and Hebrew’s loan from Egyptian kept the 1st and 3rd consonants more clearly: Egyptian itrw > Hebrew yə’or (losing t and w, 2 of the 4 consonants, though the glottal stop may residually be the lost t and the round o an assimilation from the following w): Coptic yo’or(e) ‘river’ approximates the Sahidic and Achmimic dialects, yor in the Bohairic dialect, and ya’ar in the Fayyumic dialect (Loprieno 1995, 47). [SUA: TrC, Azt]

310 Egyptian(F) **s'** 'maggot':
UA *sa'(w)a / *si'a 'louse': Ca sa'wa-l 'louse (of hair)'; Ls sa'la-t 'body louse' (perhaps sa'-); Hp si'a 'nit, egg of head louse'. Many Num languages also show *si'a 'louse, worm, bug'. Num lost the glottal stop's rounding in 'sand' also, but Hp shows w in Hp tïïwa < Egyptian t' 'earth'. Note the similarities between Ca sa'wa-l 'louse' (< Egyptian s') and Ca se'we 'ask' (< Hebrew š'l 'ask'). They show identical consonant representations for identical consonants (*s > s, *' > 'w), but a difference in vowels—one assimilating toward the final -l in Hebrew (though missing in Ca), raising and fronting the vowels, as in Ca e-e vs. a-a.
UACV-1399a ***pusi'a(C)** 'louse': I.Num161 *pusi'a/*posi'a 'louse'; Fowler83; M88-pu14 'louse'; KH/M06-pu14: Mn pusí'a; NP poziabbi 'louse, flea'; TSh posia-cci; Sh posia-cci. Fowler also lists Sh puzi'a and NP pozi'a, both showing glottal stops, as does Cm pus*i*'a / pusi'*a* 'head louse'. With two languages showing *u, I think *u > o. Miller also lists the SNum forms, which likely lost medial -si-:
UACV-1399b ***po'a** 'louse': Kw po'o-vi; SP po'a-vi; CU pö'a-vi; Ch poo'a-vi / poo'aa-vi 'body louse'; Ch(L) poo'^{w}a-vi 'louse'; WMU pöö'a-v*i* / pöö'á-v*i* / pő̈'a-v*i* / pö'æ-v*i* 'louse, lice, flea'.
[reduction or syllable loss in SNum] [e1s,e2'] [NUA: Num, Tak]

311 Egyptian(F) **ddf̲t** 'snake, internal bodily worm'; Coptic jatfe:
Sr sïväţ-ţ 'body louse'; Sr fits well since 3 of 4 consonants appear and the only missing C would likely be the first element in a cluster, as in the Coptic form, and the first element in a cluster is usually lost in UA. Both Coptic and UA Serrano sïväţ- suggest a proto-form similar to *ṣadfaṯ > *sVpVt. Note also the following:
UACV-2596a ***sipuli** > *sipuyV 'worm': Cp sívuye-l 'worm, maggot'; Ca sívuy-al 'worm'; Ca sivuy-iš 'being wormy, having many worms'; Nv kosiburi 'gusano'. Missing si-, perhaps Ktn purpur 'worm sp'. [r>y]
UACV-2596b ***sipuyu** 'rotten, wormy': Cp sivúyu'i-š 'rotten, decayed, adj' (cf. Cp sívuye 'worm, maggot'); CN popoyoo-tl 'rottenness, decay, n'. However, Egyptian sp' 'Tausendfuss, Tausendfüssler [centipede]' is quite similar as well. [slight V discrepancy] [e1s4,e2d,e3f,e4t] [NUA: Tak; SUA: Tep, TrC, Azt]

312 Egyptian(F) **kmt** 'a jar, n.f.':
CN koma-tl 'vessel, container'; CN te-koma-tl 'clay pot' (te- presumably from te-tl 'rock'). [e1k,e2m,e3t]

313 Egyptian **nyw** (of, belonging to, pl possessions)
Ktn **niw** 'possession, belongings (used in the indirect possession construction):
Ktn ni-niw tameata 'my watch'; Ktn mo-niw kooče 'your dog'.

314 Egyptian(F) **'t̲p** 'load (cargo on animal or ship); be heavy-laden'; Egyptian(H) **'tp** / **'t̲p** 'beladen [to load]'; Coptic ootp:
UACV-388 ***hitapa** 'carry': Mn hida 'carry, hold using both arms'; NP hida 'carry in arms'; Eu hítava-n / hitáwa-n 'carry'; Wr ihtába-ni 'carry a heavy load'. [e1',e2t,e3p] [NUA: Num; SUA: TrC]

315 Egyptian(F) ptr/pty 'who? what?'; Egyptian(H) **ptr / pwtr** 'wer ist? [who is it?], was ist? [what is it?]':
UA ***piri** 'what': Tr piri 'what (interrogative pronoun)' (*putVr > *puti > *puri > piri). SNum *pu 'what?' e.g. WMU pu-'ni-k 'what-do-?' [e1,e2,e3] [SUA: TrC; NUA: Num]

316 Egyptian(F) **ẖbs** 'garment, covering'; Egyptian(H) **ẖbs** 'Gewand [garment], Kleid [garment]; Coptic hoobs 'clothe, cover'; Coptic hbos 'covering, garment':
UA ***upa** 'wedding robe': Hp oova 'wedding robe' (Hp o < *u). All is quite as expected (pharyngeal ẖ > (h)u, b > UA *p) except that the final consonant is missing. [e1h2,e2b,e3s] [NUA: Hp]

317 Egyptian(F) **i'dt** 'net'; Egyptian(H) **i'dt** 'Netz [net]'; Coptic ate:
UA ***yuta**: Ls yúúla-pi-š 'rabbit net'. Ls l < UA *t < Egyptian d, and Ls -p- (instead of -v-) suggests a final consonant, like Egyptian -t. [e1i,e2',e3d,e4t] [NUA: Tak]

318 Egyptian(H) smx 'vergessen [forget], vernachlässigen [neglect]'; Egyptian(F) **smx** 'forget, ignore':
UACV-962 ***suma** / *sumiCa 'forget': M67-134 *sum / *cum 'disappear'; M88-su4 'disappear'; KH/M06-su4: Mn sumi'a- 'forget'; Kw na-sumaa- 'forget'; CU sumúay 'forget'. Perhaps Sr umi'|k 'forget' as *s > h in Sr; Ktn amihïk / ami'hïk 'forget, vt'; Cm nasuwacirï 'forget'; Cm nasuwaci 'lose s.th'; Ch tï/na-sumïa 'forget, leave behind'; NP sïmu'wa 'forget'; TSh nasuŋwaci 'forget'; Sh na-suwaci 'forget'; and perhaps Hp sùütoki 'forget'; Hp(S) sïhtoki 'forget'. [m/w] [NUA: Num, Tak, Hp]

319 Egyptian(F) **psi** ‘cook’; Coptic pise; Egyptian(F) **psw** ‘preparation, of food and drink (verbal noun)’; Egyptian(H) psi ‘kochen [cook], backen [bake]’; Egyptian(H) **psw** ‘verkochung [cooking]’:
UACV-270 ***poso** 'boil' (perhaps < *pasu): CL.Azt66 posooni ‘to foam’; posoonal ‘foam’; M88-po21; KH/M06-po21: Wr pasu ‘cook by boiling’ may represent the original voweling with an early leveling widely apparent: *wasu > *poso. CN posooni ‘boil, foam (of turbulent sea), get very angry’; CN poosonal-li ‘foam’; Pl pusuni ‘foam, froth, v’; Z posoni ‘foam, v.’; etc. To these Aztecan forms, add Cah *poh-: Yq pohte ‘hervir’; AYq pohta ‘boil, vt’; AYq pohte ‘boil, vi’; AYq pohtia ‘boil for s.o., vt’; My pohte ‘está hirviendo’. Numerous other examples show s > h in a cluster for the Cahitan languages, e.g. *tasikali > tahkali ‘bread’. Parallel to Yq pohte is Ktn vo’rïk ‘boil, vi’ though Ktn voro’ ‘boil, vt’ raises questions. Ca pis-múlul ‘come out, bubble up, boil, v’ also belongs, since Ca i < *o. Consistent with UA *tïku < Egyptian txw vs. Egyptian txi and UA *piso < Egyptian bšw vs. bši, here also UA consistently verbalizes the noun form (Egyptian psw) over use of the Egyptian verb form (Egyptian psi). [*s > h/_C] [e1p,e2s,e3w] [SUA: TrC, Azt; NUA: Tak]

320 Egyptian(H) **xpx** ‘rauben [rob]’ > UA ***kïpïk** ‘take’: Yq kebék-ta ‘take, grasp’. [e1x,e2p,e3x] [TrC]

321 The Egyptian glyph for the consonant ‘**m**’ is an **owl**; however, the original word from which that glyph derives is unknown; it undoubtedly started with m and was probably short; Cerny shows Egyptian m- / mu- (construct) / maw ‘owl’ as possible morphemes for the first part of Coptic mulaj ‘owl’ (<*’mwld); in that light, UA words for ‘owl’ are noteworthy: all reflexes of the various UA languages begin with *mu-; some have only the single syllable mu, while others suggest a second consonant or cluster or additional morpheme(s) that surface as *muhu in Numic, *mu’u in TrC, and moŋwï in Hp.
UACV-1590 ***muhuN / *muhum** ‘owl’: M67-312 *muhu ‘owl’; I.Num97 *mu(hu(h)) ‘owl’; BH.Cup *muhuta ‘owl’; L.Son153 *muhu ‘buho’; Fowler83; M88-mu10 ‘owl’; Munro.Cup86 *múúhu-ta > *múú-ta ‘owl’; KH.NUA; KH/M06-mu10: Mn muhu ‘Pacific horned owl’; NP muhu ‘owl’; TSh muumpi-(cci) ‘horned owl’; Sh mom-picci; Kw muhu-ci; Ch muhúmpïci; SP mooC-(ppïci) ‘hooting owl’; CU múu-pï-ci; Tb muuhun-t, muhumbiš-t; Cp múú-t; Ca múú-t; Ls múú-ta ‘horned owl’; Gb múhut; Sr muum-t; Ktn muŋ-t ‘great horned owl’; Hp moŋwï; Eu muhút; Op muh; Yq múú’u; My múú’u; Tbr mu-tá; HN kwa-mohmoh-tli’ ‘night owl’ (kwa- ‘forest dwelling, wild’). Add Tr mo’tapa ‘owl sp’ as Tr tápani ‘owl sp’ provides a convenient morpheme break for Tr mo’-tapa. Sr muum-t showing -m- even adjacent to -t- recommends -m- as the 2nd nasal, unless it is the beginning of an old reduplication. Tak -t absolutive and especially Ls -ta suggest a final consonant. [e1,e2,e3] [NUA: Num, Hp, Tb, Tak; SUA: TrC, Azt]

322 Egyptian(H) q’yt ‘hochgelegenes land [high-lying land], Hügel [hill]’ from Egyptian(H) q’i ‘hoch sein [be high]’; Egyptian(F) q’i ‘tall, high’; Egyptian(F) q’yt / q’iit ‘high ground’:
UACV-1455a ***kawi** ‘mountain, rock’: M67-289a/b *kawi/*kai ‘mountain’; I.Num49 *kaipa ‘mountain’; BH.Cup *qawíca’ ‘rock’; KH.NUA; HH.Cup *qawíiča ‘rock’; L.Son79 *kawi ‘cerro’; M88-ka8 ‘hill, mountain’; Munro.Cup74; KH/M06-ka8: Cp kawí-š ‘rock’; Ca qáwi-š ‘rock’; Ls qawíí-ča ‘mountain, hill’; Gb xay ‘sierra’; Sr qaiič; Ktn kay-c; Eu kavít / kawí(t) / hawi ‘cerro [hill]’; Tbr kav ‘cerro’; Wr kawí ‘cerro’; Tr gawí ‘montaña, sierra, tierra, campo’; My káwwi; Cr áh-ka’i ‘slope on backside of hill’; Miller includes Pl ahku ‘up, above, over, on high’. KH.NUA also notes the reduplicated forms: Sr qaqaiič ‘mountains all over the place’ and Gb xaxáy of similar meaning. Loss of bilabial in Gb again; cf. believe (567), man (76). Add Op kagi (*w > Op g). But TO kawulk ‘hill’ < *kapul-k is from a different source (< *kapul-k vs. *kawi). Note the other liquid reflex in TO kawud` ‘closely, short’. Ls qawíí-ča and Sr qaiič are a perfect reflection of an earlier *qa’iit-ta, with the glottal stop rounded and most impressively -č- at the morpheme boundary with the noun suffix -ta added to a stem that ends in -t, because only a doubled *-tt- > -č-/-c-, a single *-t- > -l-.

323 Egyptian(H) q’yt ‘hochgelegenes Land [high lying land], Hügel [hill]’ < Egyptian q’i ‘hoch sein [be high]’:
UACV-2370a ***ko’ay / *ko’aiC** ‘top’: TSh ko’e/ko’i-cci ‘peak, point, top; crown of head’; Sh(M) koi ‘point, top’; Sh(C) ku-kko’ai-cci ‘hills’; Cm ku’e ‘top, summit, on top of’. Numic’s reflection of q’yt rounds the anticipating vowel and keeps the glottal stop. [e1,e2,e3] [NUA: CNum]
UACV-2370b ***kwiyV** 'top': SP ukkwiya ‘top’; SP kwivuaa ‘top’; CU kwiyú 'top of head’. [NUA: SNum]

324 Egyptian(F) **k’w** ‘sycamore figs’; Egyptian(H) **k’t** ‘Frucht [fruit]’ (with a possible reference to sycamore fruit); Egyptian(H) **k’w** ‘unreife Sykomorenfrüchte [unripe sycamore fruit]’:
UACV-183 ***ku’u / *kuhu** 'elderberry': KH.NUA; M88-ku34 'elderberry'; KH/M06-ku34: Cp kú'u-t; Ls kúú-ta 'elderberry'; Ls kúú-tpa-t 'elderberry bush'; Sr kooht / kuuht; Ktn kuhuč ‘fruit of elder tree’; Gb kohút / kuhút / húkot/húkat 'saúco'; Ca kú’ut 'cattail, soft-flag’. Add Tb kuuhupi-l 'elderberry’. [e1,e2,e3] [NUA: Tak, Tb]

325 Egyptian(F) **k’nw** ‘vineyard’; Egyptian(H) **k’nw** ‘Weingarten [vineyard]’:
UA ***kunuki** 'elderberry': Mn kunugíbï 'elderberry bush'; SP kunnuġui 'huckleberry'; the *kunu portions align very well with Egyptian q’nw. [e1,e2,e3] [Num; Tb]

326 Egyptian(F) **x'w** 'plants, flowers'; Egyptian(H) **x'w** 'Kräuter [plants], Blumen [flowers]':
Tb kuu-l 'yellow flower.' [e1,e2,e3] [Tb]

327 Egyptian(F) **q'r** 'bundle'; Egyptian(H) **q'r** 'bundel [bundle], tasche [pocket]';
UACV-112 ***kawaC** 'pocket, bag': M88-ka38; KH.NUA; KH/M06-ka38: Ca káwkun-ily 'pocket, bag, purse';
Sr qawaa-taŋa-ţ / qawaatïŋaţ, poss'd: -qaawtaŋ 'pocket'; Ch kawa'a 'kind of big packbasket made with string'. Cp qáwkuni-ly 'bag, sack'. The last part of Ca and Cp (-kuni) is *kuna 'bag', and Sr -t- means a final consonant: *kawaC. [e1q,e2',e3r] [NUA: Tak, Num]

328 Egyptian(F) **q'r** 'bundle'; Egyptian(H) **q'r** 'bundel [bundle], tasche [pocket]'; the similarity of UA *kawaC 'pocket, bag' and UA *kawaC 'packrat', and both semantically derivable from q'r 'pocket, bag' make me think that the *kawaC 'packrat' below is from the same Egyptian root; especially amenable is Ls qáw-la 'woodrat' whose -la suffix is infrequent and happens when the stem ends with a liquid or nasal:
UACV-1464 ***kawaC** 'rat, packrat': BH.Cup *qawala' 'rat'; M67-340 *ka/kawa 'rat'; I.Num47 *ka(wa); M88-ka13 'rat'; Munro.Cup107 *qaawa-la 'rat'; KH.NUA; KH/M06-ka13 *kawa: Mn qawa; NP kawa 'packrat'; TSh kawan; Sh kaan; Kw kaa-ci 'woodrat'; SP kaa-ci; CU kaac'a-ci 'packrat, gopher'; Hp qaala 'packrat'; Tb haawa-l 'wood rats'; Sr qää-ţ; Gb xar; Ktn ka-č; Ls qáw-la 'woodrat'; Ca qáwa-l; Cp qáwe-l; Ch(L) kaaci 'rat'. Ls -la often means a final liquid or nasal consonant. This is in all branches of NUA, but not in SUA. [iddddua] [loss of intervocalic -w- in SNum, Sh, Gb, Sr, like mtn, or ?Aramaic qwy 'gather'?] [e1q,e2',e3r] [NUA: Num, Hp, Tb, Tak]

329 Egyptian(F) **qd** 'go round'; Coptic koote 'go round, turn'; Egyptian(H) qdi 'umhergehen [walk about], umgeben [surround], herumstehen um (jdn) [stand around (someone), sich umkehren [turn back, turn around]'; Egyptian(H) qd 'Umkreis [neighborhood]'; Egyptian(H) qd / qdd 'schlafen [sleep]'; Egyptian(H) qdqd 'bummeln [wander], schlendern [stroll]'; semantically, Egyptian 'to dwell/live/be at a place/area (neighborhood), walk around there, return regularly, sleep there' etc, is summed up by the UA meaning of 'dwell, live, be':
UACV-2006 ***katï / *kattï** 'sit': Sapir; VVH42 *ka$_{ţ}$tï; M67-381a *kate; 381b *ka; BH.Cup qá 'be'; L.Son76 *katï 'sentarse'; M88-ka3 'sit'; KH.NUA; KH/M06-ka3: Mn qatï; NP katï (< *kattï) 'sit, sg'; TSh katï; Sh katïC; Cm kahtï 'sit, live'; Ch karï 'sit, sg'; Kw karï 'sit, stay, live, be alive'; SP qarï; CU karí; Tb halït~'aahal 'sit, live'; Cp qa' 'be there, there it is'; Ca qál 'be, exist (of animates)'; Ls qál 'live, be'; Gb xá/xaró 'estar'; Sr qaţ/qaţï 'be, stay, dwell, live, remain, be alive, have to, be possible'; TO kaač 'lie lifeless, exist over an area'; Op katte; Op karu 'impf verb suffix: was verb-ing'; Eu kací; Wr kahtí 'estar sentado, sg.'; My káttek 'estar sentado'; Yq káatek; Tbr katé 'estar, estar sentado, vivir, estar en'; Wc kaatéi 'estar sentado, vivir'; Sapir includes Cr ka 'be, sit'; Pima kacï 'lay'; and CN kaa (pret: ka', katki, pl. kate') 'be'. Of interest is that SP has two identical forms in SP qarï 'sit, dwell' and SP qarï 'protect' which 'surround' above aligns with. Some suggest *-tt- > -t-/-c-. [*t > l in Tb, Tak, not Sr, > r in Num; Gb o] [e1q,e2d] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

330 Egyptian(F) **gwn** 'sack'; Egyptian(H) **gwn** 'Sack':
UACV-114a ***kuna** 'bag, sack': Munro.Cup10 *kúúni-la 'bag, sack'; KH.NUA; KH/M06-ku11: Kw kuna-bï-zi;
Ch kúna-vï; SP kuna; WMU kuná-v*ü* 'bag, sack'; CU kuná-vï; Ls kún-la; Cp kúni-ly; Ca kúni-ly; Gb -kun.
UACV-114b ***kana** 'bag, sack': Cr ka'aní 'talega' and Wc kanána 'cinturón, víbora para dinero'. With a V assimilation (*u-a > a-a), these two groups may belong together, especially in light of CN's tendency for anticipatory assimilation and CrC's affiliation with Azt. [e1g,e2w,e3n] [NUA: Num, Tak; SUA: CrC]

331 Egyptian(F) **qny** 'be yellow'; Egyptian qnit 'a yellow pigment'; Egyptian qnt/qnit 'yellowness (?) of eyes' > Cp **kenekene'e**-š 'yellow'; pl: kekne'-čim. [e1q,e2n,ei3] [NUA: Tak]

332 Egyptian(F) **qrẖt** 'serpent spirit, as guardian of a place or princes of ancient family' (sometimes bird determinative instead of serpent); Egyptian(F) pl: **qrẖwt** 'serpent figures in gold'; Egyptian(H) **qrẖt** 'Uradel [ancient nobility]'; Egyptian(H) **qrẖ** 'Freund [friend], Alliierter [ally], Partner':
UA *koNwa 'snake' reflects a -rẖ- cluster (< *qVrẖat), as well as the feminine ending -at > -a. Tr kayewá 'variety of venomous snake' might show a separation of that cluster (< *qaraẖat), and Eu korós 'a kind of large snake that kills jackrabbits' is another interesting look for such consonants. Cp qeqiŋi-ly 'king snake' and Ls qiqeŋ-la 'ring snake' < Tak *koŋo all reveal Tak -ŋ- from the -rẖ- cluster (a liquid-pharyngeal cluster), very natural; and while *kowa has been a common reconstruction, Kaufman (1981) *konwa and Joe Campell (1976) *koŋwa, predate me in constructing a nasal *koNwa (note Tak -ŋ-). Of interest is that the Egyptian determinative is sometimes a bird instead of a serpent in light of the 'feathered-serpent' compound. Yet most striking is that CN kooaa-tl means both 'snake' and 'twin', a rather odd pair of meanings, and the

Nahuatl loan is the source of North American Spanish cuate ‘twin’ also meaning ‘close friend, pal’ (Bills and Vijil 97), and Egyptian qrḫ(t) has both meanings—‘serpent’ and ‘partner’—both written with cobra image:
UACV-2058 ***koNwa** ‘snake’; ***tï-koNwa** ‘rattlesnake, rock-snake’: Sapir; M67-395 *ko / *kowa 'snake'; I.Num 219 *toko(h)wa check'snake, rattler'; L.Son88 *ko 'serpiente'; B.Tep116 *ko’oi 'snake'; Munro 1973; Kaufman 1981 *konwa; Fowler83; M88-ko12 'snake, rattlesnake'; KH/M06-ko12: many forms contain the prefixes *pa- ‘water’ and/or *tï- (> *to-) ‘rock’, as Sapir and Miller have suggested: Mn toqoqqwa 'snake'; Mn patagówa 'watersnake'; Mn toġóqa 'rattlesnake'; NP togoggwa ‘rattlesnake’; TSh koko 'gopher snake'; TSh pa-suku/tokowa ‘water snake’; Sh tokoa ‘snake, rattlesnake’; Sh kokon ‘bull snake, blow snake’; Sh pasinkokon ‘water snake’; Kw tokowa 'rattlesnake'; Kw koko 'gopher snake'; SP toŋoa-vi 'rattlesnake'; CU togoa-vi; TO ko’oi/ko’owi 'rattlesnake'; Nv ko’o; PYp ko’o; NT kói/kóyi; ST ko’; Eu vakoc 'culebra'; Yq báakot; My baákot; Wr kuhuá 'snake sp.'; Tbr koó-t; Wc kúú; Cr ku’uku’u-se 'snakes'; Cr kuku (Sapir); CN kooaa-tl 'snake, serpent, worm, twin'; Pl kuuwa-t 'snake’. Munro (1973) includes Ls qiqeŋ-la 'ring snake' (with reduplication), Cp qeqeŋi-l^{y} ‘king snake’ (Ls loan?) and shows *w as one source for Ls ŋ and so for other Tak languages as well. Joe Campbell (1976) marshals evidence for underlying ŋ or *koŋwa, to which SP toŋoa- with nasal aniticipation is consistent, and which Kaufman (1981) also reconstructs with a nasal *konwa. Yet Tep shows no sign of g (< *w), only glottal stops and w, much like the *r > ’ in a cluster, then separated as in *wïrwïru > *wï’ïwïru ‘big’ and *kolkoli > *ko’okoli ‘sick’. So a cluster *-rw- > -Nw-, a liquid nasalized in NUA, and *-lw- > -’w- (> ko’owi) glottalized then separted in Tep fits well. Is Tep -ogo or -Vgo- frequent medially? [e1q,e2r,e3h2,e4t] [NUA: Num, Tak; SUA: Tep, TrC, CrC, Azt]

333 Egyptian(F) **qd** ‘go round’; Egyptian(F) qd ‘use potter’s wheel’ (which spins): Coptic **koote** ‘go round, turn’: UA ***koti / *kuri** ‘turn, go around’: Wr kuri- ‘twirl, spin’; Tr guri- ‘turn, spin’; AYq kuria ‘turn, wind, stir’; PYp kutligda ‘twist, turn, vt’; PYp kootim ‘surround’; Ch koto’o-ŋu ‘turn around and return.’
UACV-1445a ***kuta/i** ‘mix’: Kw -kuri- ‘move in a circular manner’; Kw či-kuri ‘poke, stir’; Kw ma-guri ‘stir with the hand’; AYq kuuta ‘stir, mix, vt’; AYq kuuti ‘mixed’; My kuutía ‘mezcla [mix]’; Eu kurá- ‘amasar [knead]’.
UACV-1445b ***koti** ‘stir, mix’: Hp qöri-k-na ‘stir, mix, plow, vt’; Ls qéli ‘stir, mix (as food)’. Ls e and Hp ö both correspond to PUA *o. Note that *koti and *kuti differ only in a slight change of round vowel, perhaps an innovation in non-Num NUA, easily possible with a previous final vowel -a: *kuta > kota/koti. [e1q,e2d] [NUA: Tak, Hp, Num; SUA: TrC, Tep]

334 Egyptian **qd** ‘pot’; Egyptian **qd** ‘potter’; Egyptian **qd** ‘use the potter’s wheel’;
Coptic koot ‘turn, potter’; Coptic koote ‘go round, turn’:
UA has several forms showing *koti, perhaps with different prefixes: *tï-koti, and wa-koti.
UACV-1710 ***tïkori** ‘dish’: Eu tékori ‘plato, carrete [plate]’; Tbr teka-lí-t ‘olla [bowl]’; teko-lí-t ‘olla [bowl]’. Lionnet’s morpheme boundaries are often wrong: Tbr te-koli-t is more likely. [e1q,e2d] [SUA: TrC]

335 Egyptian **qd** ‘pot’; Egyptian **qd** ‘potter’; Egyptian **qd** ‘use the potter’s wheel’;
Coptic koot ‘turn, potter’; Coptic koote ‘go round, turn’; with article, Egyptian **wʕ-qd** ‘a pot’:
UACV-1714 ***wakori** ‘pot’: Hp wikoro ‘bottle, jug or vase with a narrow neck’; Yq wáko’i ‘comal’;
Wr wa’kári ‘potsherd’. These three forms have much in common, since UA liquids go to glottal stop in Yq, and sometimes remain liquids in Hp (Shaul 1985). So the consonants are consistent. In the first vowel, two of three show *a*, and in the second vowel two of three show o, though Hp o and Yq o do not match exactly. [-r- > -’-; Liq in NUA/SUA] [e1q,e2d] [NUA: Hp; SUA: TrC]

336 Egyptian(F) **nxt** ‘strong, stiff, hard’; Coptic nuušt; Egyptian nxt-ʕ ‘strong of arm’:
UA ***nokat** ‘upper arm’: Eu nokat ‘upper arm’. This is a semantic shift—strong > upper arm—and what muscles symbolize strength even today? –those of the upper arm. [iddddua] [e1n,e2x,e3t] [SUA: TrC]

337 Egyptian(H) **r’-ib** ‘Magen [stomach]’ lit: mouth-(of)-heart’: If we keep in mind that Egyptian r ‘mouth’ is more fully r’ with a glottal stop, then Egyptian r-ib < *r’-ib, and the round o with glottal stops in UA are noteworthy; in addition the juxtaposed possessive would put the final -b as first consonant in a cluster, making it disappear as outlined in 4.3 (294-300); however, with a suffix, like -a ‘her’, we would expect exactly what we see in *to’i without a suffix and SUA *to’pa (< to’ib-a) with a suffix:
UACV-2191 ***to’i** 'bone, belly': CL.Azt92 *-ïhtï-k ‘in, inside’ (mentioned by CL as possibly cognate)’; M88-to9 'belly/panza'; Munro.Cup11 *téé’i-la; KH/M06-to9: Ls téé’-la 'belly'; Cp tí’i-ly 'bone'; Ca té’-i-ly 'bone’ and Ca tí’ily 'belly, stomach, waist'; Ls téé’-la 'belly'; Sr tö’|ţ. Munro suggests that there may be two sets involved because of the semantics and not entirely consistent vowel correspondences, since the e in Ca 'bone' should correspond to Ls o and Cp ə. Sr tö’|ţ 'belly, stomach' suggests *o, with which the first vowels of the Cupan languages agree also. Jane Hill (p.c.) notes Yokuts toţ (Newman, 218), allowing the possibility of borrowing one way or the other. CN i’te- / i’ti-tl ‘belly’; CN -i’tek ‘within, inside, postp’; Pl ihti ‘belly, abdomen’. Campbell,

Langacker, Miller, and Hill all list the Azt forms, but with some question. As glottal stops are highly anticipated, I find *to'i > Azt i'ti quite probably cognate. [NUA: Tak; SUA: Azt]
UACV-2190 ***topa** 'belly, stomach': M67-417 *to 'stomach'; L.Son306 *to 'panza'; M88-to9 'belly/panza'; KH/M06-to9: Wr tohpá; Tr ŕopá; My toppa; My tópa'ara 'panzó'; Eu toa. As Miller noted, Eu toa (<*towa / tova <*topa) probably belongs with loss of intervocalic bilabial, and *to'pa < *to'ib-a for these. [-p- > ø in Eu] [SUA: TrC]

338 Egyptian(F) **swḫ** 'loincloth'; Egyptian(H) 'Schurz [apron], Mantel [coat]':
Wr sa'wela 'loin cloth, breech cloth'. Finding another example of a cluster -wḫ- or -ḫw- resulting in UA -'w- would be preferred. [e1s,e2w,e3h2] [TrC]

339 Egyptian(H) **ḫmt / ḫimt** 'Frau [woman], Ehefrau [wife]';
Egyptian **t'-ḫimat** 'the-wife'; pl **ḫmwt**; Coptic hime:
UACV-2585 ***tïhima** 'spouse': Wr tehimá / tehíma 'esposo, esposa'; Ls to'ma 'wife'; Ls tó'ma-vu 'husband'. Wr e and Ls o both correspond to PUA *ï, UA's schwa or ə, so the two correspond well, with a syllable reduction in Ls. These match the definite article form: Egyptian t'-ḫimat 'the-wife'.
UA ***tïhima** 'spouse'; ***hamut** 'woman': one of Egyptian's alternate forms actually includes medial i and also Coptic hime < *ḫimat. The pharyngeal ḫ did not have the rounding effect in Coptic that it did in UA; however, alternate forms occur in Egyptian often enough that the Egyptian dialect in question may have had a different kind of h—h̲ or h—for this word. Though not attested, such would have Coptic te-hime 'the wife' and Wr tehimá/tehíma 'spouse' being nearly identical, which aligns with Ls tó'ma 'wife, n; for man to marry a wife, v' (Ls o < *ï/e). The Cah languages below (Yq, AYq, My) show a nice match for the Egyptian pl ḫmwt, and consistent with the other UA forms, show a non-pharyngeal h or h̲ in Cah *hamut 'woman,' pl *hamučim 'women': Yq hámut 'woman', pl: hámučim; AYq hamut, My hammut 'woman'. Another consistency is that both UA terms—***tehima** 'and ***hamut**—match the Egyptian sg and pl respectively and both exhibit a lack of pharyngeal rounding in UA, the two terms being consistent with each other.
[e1h2,e2i,e3m,e4t] [NUA: Tak; SUA: TrC]

340 Egyptian(F) ḫmt 'woman', pl: **ḫmwt**:
UA(Cahitan) *hamut 'woman', pl *hamučim 'women': Yq hámut 'mujer [woman]', pl: hámučim; AYq hamut 'woman'; My hámmut 'mujer [woman], hembra [female], pl: hamúučim 'mujeres [women]'. Interestingly, we have the Egyptian feminine plural -wt built into the UA singular and then the Hebrew plural -im attached to that, and in case anyone think that strange, it is worth mentioning that the same thing happened in Hebrew: the Hebrew feminine plural suffix -oot added the Hebrew masculine plural construct suffix -ee when the plural noun is possessed, and the vowels -oot-ee in UA rise to *-uti > uči.

Instances of **Egyptian h̲** are less numerous in Egyptian too and thus its correspondences less certain, but some parallels suggest behavior like h (341, 299), though an instance of behavior like ḫ may be in 342.

341 Egyptian(F) **h̲ʕq** 'shave'; Egyptian(H) **h̲ʕq** 'rasieren [shave], scheren [shear]':
Hp hèewi 'scrape out, scrape clean'. [e1,e2,e3] [Hp]

342 Egyptian(F) **sh̲r** 'milk, v'; Egyptian(F) **sh̲rt** 'milking':
UA *soyti 'milk, v': Ca siyči 'milk (as cow, gum plant), v.' (Ca i < *o and č < t). [e1,e2,e3] [Tak]

299 Egyptian **h̲pʕ** 'chew, move around in the mouth'> *hipwa > UA ***hiwa** 'taste' treated at 299 above.

Medial or **non-initial f** is less than certain. Some possibilities suggest UA *p (< f, 282, 343, 344), as it is in initial position; others suggest *w (345, 346), which reminds us that some may be coincidental similarities. On the other hand, a rule like clustering with another consonant triggering Egyptian f > w, but f > p for intial or intervocalic occurrences may explain them all, if early clusters were later separated. For f > p is also less than natural, unless there occurred a creolization or merger of a smaller group, having f in their language, with a larger group who had only p and w, but no f, in their pronunciation repertoire, which pronunciations eventually dominated. Doing other labio-velars (like the kw in the Semitic-kw) in clustering or geminating environments is consistent with f > w also in clusters.

282 Egyptian **wf'** 'lung': Tbr **wopaN** 'lung'; the superscript -n in extinct Tubar likely means a nasal vowel.

343 Egyptian(H) **kf / kf'** 'entblössen [denude, uncover]'; Egyptian(F) kf 'uncover, unclothe, doff clothes, strip, deprive, despoil, clear (of sky), gather (flowers)':
Hp qàapï-k 'peel off, scale off, lift/come off as a sheet, v' (the glottal stop may be anticipated to cause the doubling of *-'p- > -pp-; perhaps Ca kívlu 'be stripped off, be naked.' [e1k,e2f,e3'] [NUA: Hp]

344 Egyptian(F) **kf'** 'hinder parts of bird, base, bottom (of jar)': Cp kəpawe 'hip'. [iddddua] [e1k,e2f,e3'] [Tak]

345 Egyptian(H) **ifdw** 'vier [four]':
UACV-2627 ***wattiwi** 'four': M67-511 *wa 'four'; I.Num268 *wa(h)cï; KH.NUA; M88-wa11; KH/M03-wa11: Sr wačah *'four'; Ca wíčiw; Ls wasá'; Cp wíčiw; Gb wačá'; Mn wacï; Mn wacikwí-i/tu 'four'; NP waccï; NP* wacïggwi'yu; TSh waccï(wi); TSh waccïwi(tïn); Sh wattïwih-tïn; Sh wa-ccïwih-; Kw wacuu; Kw wa-cuu-yu; check preceding Num; Ch wacïw; SP wacïŋwi-; WMU k*oh*ččúwini / w*oh*ččúwini; CU wəcúwi-ni. Ken Hill adds Ktn waca 'four'. WMU k*oh*ččúwini introduces an interesting case of a Num language developing a sound change similar to Tep, after vowel assimilation: *wa > wo > ko. Other instances of WM Ute showing k < *w exist as well. Sr wačah and Ls wasá' suggest vowel assimilation also occurs in Ca wíčiw, Cp wíčiw. [*-tt- > -c-] [e1i,e2f,e3d,e4w] [NUA: Num, Tak]

346 Egyptian(F) **ɧfd** 'climb'; Egyptian(H) **ɧfd** 'aufsteigen (zu himmel) [rise/climb up (to sky/heaven)]':
UA *hu(w)at 'climb, rise': Sr hoääč-k 'climb'; Sr höõc-q 'arise, get up'; Sr hiõõc-q 'go up (as through the air)'. [e1h2,e2f,e3d] [Tak]

347 Egyptian(H) wr / wl / w'r / wnr 'Rohrflöte [reed flute]':
UACV-912 ***wiru** 'play a reed flute': M88-wi18 'to play a (reed) flute'; KH.NUA; KH/M06-wi18: Ca wíiru; Ls wííru; Sr wiiroi'n 'play a reed flute'; Sr wiiroi'ni-t 'reed flute'; Ktn wiro'i / wiroi'i 'play (instrument)'; Ktn wiro'i-n-ihwa'-t 'flute, any musical instrument'; WMU viyu'/eviiyu'ni 'flute, whistle' even shows the glottal stop found in Sr, in fact, is very similar to Sr wiiroi'n. Kw woyo 'flute' (archaic) belongs; and WMU iə̲'nəp 'flute' is similar to Kw woya'a-nï(m)bï 'musical instrument, flute' (archaic). TSh wooino 'flute' and NP kocokkwoino resemble the first 3 segments of the Kw form. Ken Hill lists CN wiiloo-tl 'dove' querying whether related or not. A decent possibility! [r > y (Sr, WMU, Kw); w > v in WMU] [e1w,e2r] [NUA: Tak, Num, Hp; SUA: Azt]

More examples of initial t̲ > t:

348 Egyptian(F) **t̲hm** 'hunt'; Egyptian(H) **t̲hm** 'jagen [hunt]':
UACV-1901b ***tïm** 'look for': CN teemoaa 'look for'; Ls tóma 'go on a bear-hunting party'. Because UA *w > Tbr m^w, some see Tbr ha-tetemo 'hunt' and Tbr temo 'find, see' to be from < UA *tïwa 'find', but a tie to CN teemoaa is as likely. [SUA: Azt/Tbr] [e1t,e2h,e3m] [NUA: Tak; SUA: TrC, Azt]

349 Egyptian(F) **t̲s** 'neck': CN toski-tl 'throat, voice'; CN toskak 'throat'. [e1t,e2s] [SUA: Azt]

350 Egyptian(F) **t̲s** 'to tie, weave, join, order, arrange, marshal (troops)'; Egyptian(F) **t̲sw** 'commander':
UACV-1853 ***tïsa** 'order, v': B.Tep237b *tïhani 'to order'; 237a *tïhanai 'he orders'; M88-tï18; KH/M06- tï18: TO čehani 'order, v'; UP čïhañi; LP tiahiñi; NT tïáñi; ST tyiñi. In Bascom's NT dictionary: NT tïááñi 'command'; NT tïáánïdami 'boss'. (*s > Tep h/ø) Ls tóšŋu- 'command, order'. [e1t,e2s] [NUA: Tak; SUA: Tep]

220 Egyptian(F) **t̲sw** 'commander, protector' (< t̲s 'order, arrange'): NP, CU, WMU ***tïsu** 'knowing, smart'.

351 Egyptian(F) **t̲s** 'tie, weave':
UACV-2106 ***tuCtusi > tu'rusi** 'spider': part of M88-tu6: Wr tu'lúsi 'araña [spider] o tipo de araña [type of spider]'; My túurus, pl: turús-im 'araña'; Tr turusí 'araña venenosa [poisonous spider]'. [iddddua] [SUA: TrC]

More examples of initial g:

352 Egyptian(F) **gw'** 'pull tight, be choked':
UACV-1725 ***kawa/i** 'drag, pull': Ls xááwa/i 'be dragged, swept, vi; drag, sweep, vt'; Cp xúwe 'pull'. [Vw > uw, initial x] [NUA: Tak]

353 Egyptian(F) **gr** 'be silent, quiet, still': Tr **kiri** 'tranquil, quiet'. [e1g,e2r]

354 Egyptian(H) **gr**/**grt** 'auch [also, too], ferner [further(more)]'; Egyptian(F) **grw** 'also, further':
Wr **garí** 'also' (Miller 1996, 138); Tr ga/ka 'an emphatic'. [e1g,e2r]

355 Egyptian(F) **grḫ** ‘night’; Coptic čoorh:
UACV-2610 ***kï(C)aNwi / *kïyawi** ‘yesterday’: Sapir: Kw kïïawe; Ch kïaw(i); SP kïaŋwi; WMU gïáo / kïáw; CU kïaw; Tbr kiri-mwiy-o ‘de noche [at night]’; Tbr kiri-mwa-ł-t ‘noche [night]’; Lionnet over divides Tbr syllables, and given Tbr mw < *w, these both align with *kiriwi-/kiriwa-. Sapir ties the SP form with CN kaawi-tl 'time' and Tepecano takaw. That is possible since SNum and CN have only one vowel different (*kïawi > kaawi) and in light of CN’s tendency toward anticipatory V assimilation (e.g., sand). Tb(V) ’ïwï’a’ŋ ‘yesterday’; Tb(M) ïwa’aŋ ‘yesterday’ is worth keeping around to think about, though the reconstruction given considers Num and Azt, but not Tb. This semantic change is parallel to the semantic change of UA *tuk ‘night’ (in most UA languages) but to Hp tooki ‘last night.’ Compare Hp tookila ‘night’; Hp tooki ‘last night’; and Hp löö-tok ‘day before yesterday, lit: the two-night (ago)’ in which ‘night’ comes to mean ‘yesterday/last night.’ [Anticipatory V assim in CN in green, sand, yesterday] [NUA: SNum; SUA: Tbr, Azt]
UACV-2611 ***kïntu** 'yesterday': TSh kïntu(sï); Sh kïntun; Cm kïtu. [iddddua] [NUA: CNum] [e1g,e2r,e3h2]

356 Egyptian(F) **grḫ** ‘complete, finish off’ > Tr gare/kare ‘be able, finish’; Wr kahu ‘finish, be able’. [e1g,e2r,e3h2] [TrC]

357 Egyptian(H) ggt ‘Niere [kidney]’; Egyptian(F) **ggt** ‘kidney, n.f.’; Egyptian ggt is a feminine noun, so Egyptian t’-ggt ‘the kidney’ with the definite article:
UACV-1256 ***takkiC**- ‘kidney’: NP ddakipona; TSh takkippono; Sh takkip(p)oon; Cm ta’ki’; Ls tákalak-may (reduplicated). [e1g,e2g,e3t] [NUA: Num, Tak]

358 Egyptian(F) **kns** ‘pubic region’; Egyptian(H) **kns** ‘scham [shame, private parts]’:
Wr kohsí ‘anus, vagina’. For another n-plus-sibilant cluster reducing to the sibilant (-ns- > -s-), see (129) Egyptian wnš ‘jackal’ where one language kept n in the cluster, while the others lost the n. [e1k,e2n,e3s] [TrC]

359 Egyptian(F) **ktkt** ‘quiver, v’: Wc kace/kaci ‘tremble, shake’; Cr ra-tee-ka’ahci ‘shake it, vt’ (ti > ci). These would align with a non-reduplicated **kt** rather than **ktkt**. [e1k,e2t] [TrC, CrC]

360 Egyptian(F) **šw** ‘dry, dried’; Coptic šowe: Tb(V) šuu’ ‘dry, vt’; Tb(M) suu’at ‘hang up to dry’.[e1s1,e2w]

361 Egyptian(F) **šw** ‘sun, sunlight’: UA ***siw** ‘hot’: Ca siw ‘become hot’; Ca siw-ma ‘hot’; Ca siwi-š ‘heat’; CN šiu’tlatla ‘be hot’. [iddddua] [e1s1,e2w]

362 Egyptian(F) **sxi / zxi** ‘hit, smite, v’; Egyptian(F) **sxt** ‘a blow, n.f.’; Coptic sooš (or 1263?):
UACV-2318 ***sïk** ? or ***sok** ‘beat, throw (with power, furry)’: Ca séqay 'whip'; Ca pe-séqay 'whip, throw (one's power at s.o. to kill him)'; CN šookoaa 'hurl s.o. or s.th. down in scorn’. We would expect 1st V Ca i (< *o); however, assimilating i-a > e-a is frequent. [e1s,e2x,e3i] [NUA: Tak; SUA: Azt]

363 Egyptian(H) srqt / s’qt / slqt ‘Skorpion (ein Sternbild [constellation]), n.f.’:
UACV-1887 ***saka** ‘scorpion’: L.Son228 *saka ‘escorpion’; M88-sa16; KH/M06-sa16: Op sakkara; Eu sákra; Yq sákkau; My sáka’awi-m; Wr sahkála. (For other Wr -hC- < -CC-, see 358) The siaa’ of SP siaam’moġo-ci ‘scorpion’ may belong, but not yet securely enough to count it. This is likely from *sarqat-ta > sakka-ra with the 1st r lost in a cluster. [e1s,e2’,e3q] [SUA: TrC]

364 Egyptian t’-srqt / t’-s’qt ‘the scorpion’
UACV-1891 ***taska** ‘scorpion’: Cr taska-(te) ‘scorpion(s)’; Wc tee-rïká ‘scorpion’. [*r>s?] [e1s,e2’,e3q] [SUA: CrC]

365 Egyptian(H) **xdw / xddw** ‘fische [fish(es)], coll. pl’: UA *kïcu ‘fish’:
UACV-892 ***kïcu(C)** ‘fish’: Sapir; BH.Cup **keyúl?; HH.Cup *kiyúul; L.Son103 *kucu ‘pescado’; Fowler83; M88-ku20 ‘fish’; Munro.Cup45 *kiyúú-l/kəyúú-l; KH.NUA; KH/M06-kï18: NP kuyui ‘Pyramid Lake sucker’; SP pa-kïu ‘fish’; Hp paa-kiw; Tb kuyuu-l; Cp qeyú-l; Ca kíyu-l; Ls kiyúú-l / kuyúú-l; Sr kihuuţ; Ktn kihuč; Gb kyur; Eu kučú-t; Tbr kičú-t; Yq kúču; My kúču; Tr kočú; Wc kecï.

*kicu	> *kicu (Tbr, Wc)	SUA
	> *kucu (Eu, Yq, My, Tr)	SUA
	> *kiyu (Ca, Cp, Ls, Sr, Gb, Hp kiw < *kiyu)	NUA
	> *kuyu (Tb, Ls, NP)	NUA

Manaster-Ramer (1992) cites this set, which nicely demonstrate his "Northern UA sound law: *-c- > -y-" since all the SUA languages show c, while NUA languages show y and two h. Some show the 1st V as high-front (Tbr, Wc, Ca, Cp, Sr, Gb, Hp, SP) and others show u (mostly in SUA languages: Eu, Yq, My, Tr, and two in NUA, Tb, Ls), and I like AMR and Ken Hill’s vowel choice because a doubled -dd-/-cc- with final -w would leave the 1st V unstressed and variable, and ï is a good choice for an unstressed vowel. Yet whether *i/ï-u > u-u (the 1st assimilated to the 2nd) or *ï/u-u > i-u (the 1st V assimilating to the palatal -c-/-y-) is

debatable. Tr o (oft < *u) and Wc e (less likely from i than an unaccented dissimilation from *ï) lean toward *kïcu/*kucu. Doubled -dd- > -c- may underlie -c- (vs. s) and Sr and Ktn medial -h- may suggest a cluster. AMR (1992) reconstructs *kïcuC, with a final consonant, while Munro (1990) kiyúú-l, with an absolutive -l (as also in Tb), not -t, may suggest no final stem consonant, and -w could yield either. PYp kekota 'fish, vt' may be related by consonant harmony. [*-c- > -y- in NUA] [e1x,e2s4,e3w] [NUA: Num, Tb, Tak, Hp; SUA: TrC, CrC]

366 Egyptian(H) **xdw / xddw** 'fische [fish(es)], coll. pl': UA *kicu/*kucu 'fish' with pa- 'water' prefixed:
UACV-893 ***paNkwi / *pakkwi < *paN-kuyu < *paC-kucu** 'fish': I.Num146 *peŋkwi/*paŋkwi 'fish'; M88-pa9 'fish'; KH/M08-kï18 *kïcuC (AMR): Mn pákwi (< *pakkwi M88); NP paggwi; Sh penkwi; TSh paŋwi / peŋwi; Kw pa-gïï-zi; Ch paġű-ci; SP pa-kïu; CU paġű; Hp paakiw. Add WMU pagűü / paġűü / pagű 'fish, n'. I agree with Hill's tying this to kï18 *kVcu above, yet it is a compound that the above is not, and the nasalization is from the pharyngeal and liquid/nasal at end of *pa- 'water' (1165). [e1x,e2s4,e3w] [NUA: Num; Hp]

367 Egyptian(F) **tẖwy** 'pea': Wr tohi 'acorn.' At 191, note a similar preservation of h in Egyptian **thi** 'go astray, reject' > Wr toha 'separate, go different routes.' [iddddua] [e1,e2,e3] [SUA: TrC]

368 Egyptian(F) **qrrt** 'cavern': Hp koro 'small cavity, cave, or hollow in a cliff or wall'. A doubled/geminated -rr- would more likely remain r. [e1,e2,e3] [NUA: Hp]

369 Egyptian(F) **nẖm** 'take away, carry off, save, rescue'; Coptic nuuhm:
UA ***nuŋ** / ***nuk** 'take' (though the medial consonants are difficult to reconstruct, a cluster of -ẖm- we would expect to be difficult, and ŋ among other things are reasonable expectations for such a cluster):
UACV-403b ***nuŋu** 'hold, carry': Ca núŋu 'carry, take along'; Cp neŋú 'have, hold, vt'. [NUA: Tak]
UACV-404 ***nuk** 'carry, take, get': My nuksiika 'cargó [he carried]'; My a'a nuksiime 'lo carga [he carries], sg sbj)'; My a'a nuksakka 'lo cargan [they carry], pl sbj'; AYq nuksiime 'llevar [take, carry], sg.sbj'; AYq nuksaka 'llevar (pl. sbj)'; Yq nukseeme 'lleva sg sbj'; Yq nuksaka 'llevan (pl sbj)'; Cp nuke 'get, vt'. Cp has the two forms, both listed for consideration, though one may not belong. [e1n,e2h2,e3m] [NUA: Tak; SUA: TrC]

370 Egyptian(F) **ẖ'** 'behind, around':
UA *huwï 'around': Kw huweegi 'around'; Mn howée 'around, on the edge'; SP oa- 'around'; SP oa-ġittuġwa '(circling) around', that is, the SP oa- morpheme. Besides Egyptian **ẖ'** by itself, like most Egyptian prepositions, it is also subject to frequent compounding. The usual compound preposition is Egyptian r- ẖ', which may be reflected in Mn ahowée / howée 'around, on the edge' (as Egyptian r > a in Coptic often); but ***m-ẖ'** is also a reasonable probability, though unattested. Relative to *m-ẖ' consider:
UACV-451 ***mahowi** '(go) around': Sh ma-hoi 'around' (Miller 1996b, 712); Mn ahowée / howée 'around, on the edge'; Cm mahoinitï 'go in circles, encircle'; TSh mo'eki 'around, encircling'.
UACV-453 ***mo'a** 'put in': Wr mo'á-ni / mo'a-má 'encerrar [encircle, enclose], meter pl objs [put pl objs in s.th.]'; Tr mo'á 'meter, encerrar'. [e1,e2,e3] [NUA: Num; SUA: TrC]

371 Egyptian(H) **xpd** 'Hinterbacke [buttock]' is usually in dual: **Egyptian xpdwy** 'buttock(s)':
NP(Y) hobbodo 'back, backbone'; NP(LFP) hopódo 'back, spine' parallels the Egyptian dual very well. Egyptian xpd yields another set above—*kupta > *kuta—which Hp hòota 'back' resembles if k > h.
A voweling resembling *hupitu > *pitu with reductions of the first syllable also follows.
UACV-96 ***piC** 'back, last': M67-17 *pi 'back'; I.Num162 *pih (pref.) 'back, behind, buttocks'; M88-pi12; KH/M06-pi12: Mn pi 'back, buttocks'; NP pi 'back, bottom'; Sh pi- 'with buttocks or back'; Cm pi-hima 'carry behind, as on a horse'; SP piC- 'buttocks, rear'; CU pimi-cuh 'back to, returning towards'; CU pimi-na-kkwa-ppï 'behind, in the back'; Tb pičool 'buttocks'; Ktn pita-č 'youngest, last'. Num *piC has been a staple in Num morphology so long that we can let it stand awhile longer for tradition's sake, but compounds that included it (below) may yield evidence to suggest that *piC (and *piCto) are reduced from *hupiC or *hupiCto, in which case NP hobbodo / hopodo represent a fuller form. [NUA: Num]

Compounds for 'behind, in back of' may suggest that *piC (above) is a shortened form of *hupiC:
UACV-97a ***hupiC-na(-Nkwa)** 'back side of': Mn -hupinaqwé-tu 'behind, in back of'; Mn hupinaqwe 'outside'; NP obi-naggwa 'after, behind, postp'; Cm (ï)pinakwï 'behind, postp'; initial *(h)u-, is lacking below:
UACV-97b ***piC-na-Nkwa** 'back side of': TSh pinnaŋkwa(sï) 'behind, in back of, after, last, postp. and adv.'; Sh pinna 'last one, previous one'; Sh pinnaihtïn / pinnaiki 'following, behind'; Sh pinnankattï 'in back of'; Sh(C) pi-nankwaC(-ttïn) 'in back of'; Sh(C) pinna(ih) 'last one, remaining one, old age'; Cm (ï)pinakwï 'behind, postp'. Almost identical to CNum is SP pinaŋqwa 'after awhile, soon' and the rest of SNum as well, though less clearly (Ch píikayu 'later'; WMU piináux / pinná-k*u* / piináu*hqwa* 'later'; CU piná-k*wa* 'later'; CU piná- 'next, later, following, second'). In

light of Mn and NP showing *hupi-nakwa > *upi-nakwa > pi-nakwa, as well Cm's optional vowel in Cm (ï)pinakwï, all suggest that *piC may be an abbreviated *hupiC, and with the above forms as compounds of *hupa/hupi 'back' and other suffixes, which length would encourage loss of the initial syllable and perhaps allow a gradual and eventual reinterpretation of morpheme boundaries and fossilization of the fusion *pina: *hupi-na > *-pina. This compound likely contains *ŋakw 'side, from' at 'side' (918). [NUA: Num]

Festivals, singing, and dancing

Because festivals involve feasting/eating, singing, and dancing, words for festival/eating, singing, and dancing often overlap semantically; that is, any can come to mean the others.

372 Egyptian(F) **dnit** 'a festival' > UA ***tuniti**: Wc tunuici-tïa 'do ceremonial singing'. [iddddua] [e1,e2,e3]

180 Egyptian **ḫby** 'be festal, make festival' > UA ***hupiya** 'sing, song'; treated above at 180.

226 Egyptian **wnm** 'eat': UA ***wïnima**... 'dance, v.': Hp wïnima 'dance, vi, sg'; Ch wïnïmi 'dance, v'. TO wiinim 'dancer in a harvest ceremony' may be a loan, since normally *w > g in TO, but note the TO semantic dimensions of both dancing and harvest (for eating).

396 Egyptian **ṯnf** 'drink, dance, v' > **UA *tani** 'dance, v'.

4.4 Late Egyptian article prefixes

Egyptian article prefixes include **pV- (< *pa')** 'the (masculine singular)**'; tV (< *ta')-** 'the (feminine singular)'; nV- (< ***na')-** 'the (plural)'; **wʕ-** 'a/an/one' indefinite sg article of either gender'. Though no longer productive (recognizable as such), many UA forms show a short prefix (pa-, ta-, na-, wa-) in the expected place of the Egyptian article prefixes fossilized as prefixes to some nouns. However, we must be careful, because very common prefixes in UA are *tï- 'rock' and *pa- 'water'; thus, such possibilities must be eliminated. The forms hardly show the glottal stop, which is fairly typical of short high-frequency words, and the same lack exists in Coptic as well, since Coptic often shortened them to p-, t-, n-, void of any vowel.

373 Of considerable interest are three synonymous variants for Tr bumblebee: Tr napári, ɾapára, wapára. These have undergone a vowel change from Egyptian bit 'bee' which is a feminine noun. The possible article prefixes for masculine and feminine nouns in Egyptian are as follows:

	Masc	Fem
Indefinite singular: a/an	wa-	wa-
Definite singular: the	pa-	ta-
Plural 'the' either gender	na-	na-

So the Tr noun for bumblebee not only matches the Egyptian feminine noun itself (with vowel assimilated), but appears to have variants that are simply the three possible articles prefixable to Egyptian feminine nouns fossilized as prefixes to the same noun in Tr: wa-, ta-, na-.

374 pa- 'the' (masc), ta- 'the' (fem), na- 'the' (plural of either gender):
Ktn namumuk 'first'; Ktn pamukit / pamukpit 'first, ahead'; and Ktn lamumuk 'first'; -muk is a common reflex in UA for 'first' and seemingly prefixed to these three forms are three separate prefixes (na-, pa-, la-) to -mu(mu)k, as in the Tr forms for bumblebee. These Ktn forms nicely reflect 'the first' though the last one, la-, may not be from Egyptian tV-.

375 Egyptian **t-/t'-/tV-** (often t-/te- in Coptic) 'the' (fem sg) and n-/nV- 'the' (plural of either gender):
The te- vs. naa- in UA words for 'belt': Ca tepaqa-l; Ch naapagapï; both sharing *-paka- (1146).

376 Egyptian t-/t'-/tV- (often t-/te- in Coptic) 'the' (fem sg): The *tï- in UA *tïpasori 'mountain lion' vs. the *pï- in Tep *wï-pso 'bobcat' (remember that Tep w < *p; thus, UA *pï-paso for masculine).

377a Egyptian **p-/p'-/pV**- (often p-/pe- in Coptic) 'the' (masc sg):
The pa- in Ca pásivat 'knife' subtracting UA *sipaC/*sipu 'sharp, metal' (cf. 253 Egyptian spd 'sharp').

377b Egyptian **p-/p'-/pV**- (often p-/pe- in Coptic) 'the' (masc sg):
The pa- in Ca pa'vu'u-l (< *pa'-pu'u-) 'medicine man' vs. Ca puu-l 'medicine man', *pa'-pu'u- is more powerful than a puu-l 'medicine man'; in other words, in contrast to 'medicine man', Ca pa'vu'u-l may be considered "the" medicine man—all puns intended.

377c The pa- in Ca pásna-t 'tar, pitch' compared to the other UA forms for 'pitch, sap': NP sanapi; TSh sanappin; Sh sanaC-pin; Sh sanakkoC; Cm sanahkena 'sap'; Kw sana-pï; Ch sana-pi; SP sannaC-(ppi); CU saná-pi; Tb šaanot; Ls sáánu-t; Ca sáán-at 'gum'; Cp saana-t 'pitch, gum'; Sr haanat 'tar'; Hp saana 'pitch, gum of tree'.

377d Cp pi'muki-š 'ghost, spirit' (that is, the dead) in light of PUA *muki 'die'; the pi'- in Ls pi'muk 'be sick, die' as a denominative verb like PUA *muki 'sick, die' in the rest of UA, though Ls pi' 'bewitch' and Ls pi'-áni 'bewitch' are suggested to be the first morpheme, which may well be and would invalidate this tie.

377e In addition to many UA languages showing *kapsi 'thigh' (294), a few forms align with a *pï- prefix: SP pïŋkap-pï 'upper leg'; CU pïká-vï 'thigh, lap'; CU pïká-vï-n 'my thigh, lap' (-n 'my'); TSh nuŋkwappï / huŋkwappï 'leg'; NP huggabbï 'thigh' (-gab-/-kap- portion). SP and CU parallel Late Egyptian possessive structure pe-(pron)-xapši, wherein the pronoun is usually one C or V, or they may simply be 'article + noun.'

377f The pa- in Mn papuhi 'grass' vs. Mn puhi 'blue, green' (< Syr bwħšyn(')) 'green herbs'; so *pa-puhi 'the green' or 'the vegetation/grass'.

378a Egyptian t-/t'-/tV- (often t-/te- in Coptic) 'the' (fem sg):
The te- in Wr tehima 'spouse' in light of Coptic te-hime 'the-woman' and TrC hamut 'woman'.

378b Egyptian t-/t'-/tV- (often t-/te- in Coptic) 'the' (fem sg):
The *tï- of UA *tï-solwi 'quail' (UACV-1751) from Semitic *salway/*salwiim.

378c Egyptian tV-ɦ'tyw 'fine linen' > AYq taho'o(ri) 'clothes, clothing'; Yq tahí'ori 'ropa [clothes]'

378d Egyptian tV-sxt 'the grass' > Hp tïïsaqa 'grass' (See at 174).

520 Egyptian(F) sin 'clay'; Egyptian sint 'clay seal, n.f.' (this fem noun would prefix t'/tV- for definite):
Ca tésnat 'clay for pottery or painting, pot, olla' (< Egyptian *t'-sinat).

379 Egyptian n-/n'-/nV- 'the' (pl):

379a/88 the na- of Wr nalágeloci 'snail'; Tr narákuri 'snail' as compared to Hebrew **ʕaluqa(t)** 'leech'; Arabic **ʕalaq** 'leeches'; Arabic **ʕalaqat** 'leech'; Syriac **ʕalqaa**, **ʕilaq-taa** 'leech, anything clammy or sticky, n.f.' from the root ʕlq 'stick, adhere'; and UACV-2057 *walaka 'snail': CN wilaka 'caracol de monte'; Tr warákoara 'caracol'; Ls muvílaqa 'snail'; Wr alágaloci 'snail'.

379b Tr saye/sayi-ra 'enemy', Tr plural: **na**-sayira.

380 Egyptian **wʕ** 'one/a/an': UA *wa 'one' is reconstructable from several UA languages, notes Langacker (Langacker 1977, 120):

380a Hp -wa 'one in particular' (Hill 1998, 876).

380b The ga- (< *wa-) in PYp ga'ipur 'dress' vs. *ipul/ipud 'shirt' (91) (keep in mind that PYp g < *w); in fact, ga- (< *wa-) is the indefinite article in several Tepiman languages.

380c The wi- in Ls wískun 'chipmunk' in light of UA *sikku 'squirrel'

380d the wï- in NP wïnaga'apï 'a shawl' vs. NP naga'aggï'hu 'put shawl over s.o.'

381 Egyptian(H) wrt ẖq'w 'Geier [buzzard, lit: great (of) magic]'; the attested Egyptian form is the feminine wrt ẖq'w, and while the UA form is possibly from a masculine counterpart *wr ẖq'w, more likely is that the syncopated cluster -rtẖ- > -rthu- / -l(t)u- with the pharyngeal > u, but devoiced -r- > -s- preceding two voiceless consonants in 3 languages, in Hp, Tb, and Cr, as no r:s correspondence is established for those 3 languages otherwise:

UACV-343 ***wirhukuN** 'buzzard, turkey vulture'; M67-67 *witu 'buzzard'; I.Num277 *wi 'buzzard'; L.Son339 *wiru 'aura'; Fowler83; M88-wi8 'buzzard'; KH.NUA; KH/M06-wi8:

PUA	*wirhukuN 'buzzard, turkey buzzard, zopilote'
Mn	wiho
NP	wi'ho/wiho
TSh	wihnumpi(cci) / wihumpiccih / wiyombic
Sh	wikkumpiccïh
Kw	wikku-mahaa-zi
Ch(L)	wikkumpï-ci
SP	wikkuN
CU	wəkúci-ge-tï (< * wVkkúci)
Hp	wisoko
Tb	wišokombiš-t 'song of the turkey buzzard'
Sr	wirok-t
Ktn	wirukuh-t
Yq	wiiru
My	wiiru
Tr	wirú
Tbr	wilú
Wc	wirïkï
Cr	viskï
CN	wiiloo-tl, pl: wiiloo-me' 'dove'
Pl	wiilu-t 'bird, dove'

Amongst the usual 2nd consonant liquids in SUA, Uto-Aztecanists have no explanation for the devoicing of UA **r* to *s* in the Hp, Tb, and Cr terms for 'turkey buzzard'. In fact, they hardly acknowledge the existence of s, and have attempted a reconstruction only three times. Miller's *witu assumes intervocalic *-t- > -r-; Iannucci reconstructs *wi, since anything more must deal with Numic's overwhelming variety beyond initial syllable; and Lionnet reconstructs *wiru, which serves well for SUA, but does nothing for the 2nd syllables of Numic: -kku, -hnu, -'ho, etc. However, the Egyptian compound may help explain UA; otherwise, how do Hp s and Tb š correspond to UA liquids? The Egyptian compound with medial -rVtẖ- or syncopated to cluster -rtẖ- eventually devoiced liquid r > s adjacent to two voiceless consonants -tẖ-, different than the -rẖ- cluster in 332. Notice that Wc (in SUA) and Sr, Ktn, and Hopi (in NUA) show all three syllables of *wirẖukuN, while the rest are reduced to two syllables. The 1st syllable *wi- is apparent in all 20 languages. Eight languages show the 2nd syllable *-ru; three others show devoicing of *r > s. Cr, Wc, and most of NUA show a 3rd syllable *-ku; and Tb and Num show some nasalization after that. Except for the CrC branch, most of SUA lost the third syllable, leaving *wiru in most of SUA. In Numic, syncope (vowel loss) appears to have clustered *-rk- which led to the loss of r or doubling of k in most instances (*wiruku > *wirku > *wikku or *wirku > *wiho in WNum), though the n in one TSh form (wihnumpi) suggests the presence of PUA a liquid. [*u > Num ï; *r > ' in NP (cf. 'blanket')] [e1w,e2r,e3h2,e4q,e5'] [NUA: Tak, Tb, Hp, Num; SUA: TrC, CrC, Azt]

382 Egyptian(H) **tš** 'ausspeien [spit out]'; Egyptian(F) **tš** 'spit out':

UACV-2118 ***tusaC / *tusiC** 'spit, v': M67-405 *tu 'to spit'; I.Num232 *tusi 'spit'; M88-tu13 'spit, v.'; KH/M06-tu13: Mn tuhi; NP tuhi; TSh tusiC; Sh tusiC; Cm tusi; Tb tuhat~'utuh 'to spit'; Tb tuhil 'spit, n'; Hp töha 'spit, v.' (vowel is wrong); Hp töhaki 'spit, n'. While CNum has *tusiC, we may have an innovation of *s > h in WNum, Tb and Hp. Only Hp shows *o, which may be lowered from *u by following a. The final consonant in CNum may be from the infinitive tšt. [e1t,e2s1] [NUA: Num, Hp, Tb]

383 Egyptian(H) **ps** / **pss** 'Gefäss [vessel, container]':

UACV-1706 ***pasa(ta)** 'pot': Stubbs2003-17: Sr pahaat 'pot, bottle, olla, jug, water container'; CN a'paas-tli 'earthen bowl, tub'; Ls péšli-š 'pottery vessel, dish, vessel of any kind'. Because *s > Sr h, these point to s.th. near *pas. Ls likely assimilated or raised and fronted the first vowel. [e1p,e2s] [NUA: Tak; SUA: Azt]

384 Egyptian(H) **inqt** ‘Netz [net], n.f.’:
UACV-1519 ***ikkaC / *iCkaC** ‘carrying net’: BH.Cup *’íkat ‘carrying net’: M88-’i3 ‘net’; Munro.Cup79 ’íika-t ‘carrying net’; KH/M06-’i3: Cp íkat ‘carrying net’; Ca ’íka-t ‘carrying net’; Ls ’íika-t ‘carrying net’. Intervocalic -k- in all Cupan languages suggests a geminated *-kk-, and final -t shows in Tak -t vs. -l. [e1i,e2n,e3q,e4t] [NUA: Tak]

385 Egyptian(H) **bʕnt** ‘Hals [neck]’; Egyptian(F) **bʕnt** ‘neck’:
Eu ***poici**ka ‘nape of neck’. Rounding for the pharyngeal and the cluster *-nt- > -c- is frequent (see Hebrew batt ‘daughter’ and Egyptian bnty ‘breast’), if -ka is another morpheme. [e1b,e2ʕ,e3n,e4t]

386 Egyptian(F) **tkn** ‘be near, draw near’: TSh **tïkïnaa**(cci) ‘close to, near to, nearby’; Sh tï-kïnnax ‘near, narrow’ (morpheme break debatable). [e1t,e2k,e3n]

387 Egyptian(H) **ẖwi** ‘fliessen, fluten [flow, flood]’; Egyptian(F) ẖwi ‘surge up, overflow’:
UACV-367 ***huwiC** ‘canyon, water way’: Kw huyu / huwi-pi-dï ‘canyon’; Ch huwípi (< *huwippi) ‘wash, canyon’; SP uiC ‘canyon, gully’; WMU wíí-pp*ü* / wii-pp*i* ‘flood, where flood flows/washes, a wash, canyon, n’; CU wíi ‘be flooding, vi’; CU wíi-’a-ga-tï ‘valley, gully, canyon, lit: that has flood’. Might Ktn wïvït ‘level ground, valley’ belong? Like *hupiC > piC ‘back’, this also lost the first syllable, in fact, same syllable *hu-. [NUA: SNum]

388 Egyptian(H) **gnn** ‘schwach [weak], schlaff [loose, limp], träge sein [sluggish, inert]’:
Eu **kanán**ki ‘lame, limp, maimed’. [e1g,e2n,e3n]

389 Egyptian(H) **i’rt** ‘Haare (vom Tierfell) [hair (of hide)], seiten-locken [side-locks (of hair)]’:
UACV-1112 ***yulV** ‘hair, head’: M88-yu28; Munro.Cup59 *yúú-la ‘hair of the head’; KH.NUA: Sr ayu’ ‘head, hair’; Cp yu-l ‘hair’; -yu ‘head, hair (poss’d)’; Ca yúluka-l, -yúluk’a (poss’d) ‘head, hair’; Ls yúú-la, -yu’ (poss’d) ‘head, hair’. Jane Hill (p.c.) adds Cm yupusi’a ‘head louse’ (cf. *pusi’a ‘louse’). Ls -la as absolutive suffix (vs. -l or -t) usually means a final liquid in the stem (Ls -la < *-L-ta), as in CN -li vs. usual -t(l) also showing a vowel after a liquid cluster, or that a liquid cluster encourages the final vowel to remain; otherwise, the word would end with two consonants which hardly happens in UA anywhere. So Ls and Ca may both show medial liquid, whatever the vowel may be afterwards, and Cm -p- (< *-pp-) suggests s.th. clustered with -p- as well. [Ls *-L-ta; Sr a- prefix] [NUA: Tak, Num]
UACV-1113 ***yuwi** ‘hair, strand’: Jane Hill (p.c.): Tb yuuwi-l ‘string’; Hp yoowi(’at) ‘cornsilk, loose strands of fiber on edges of yucca leaves’. [e1i,e2’,e3r] [NUA: Hp, Num]

390 Egyptian(H) **ḏwt** ‘stechmücke [mosquito, gnat], sandfliege [sandfly]’:
UACV-924 ***suti** ‘mosquito, gnat’: the -suri of Tr ičísuri / učósuri ‘mosquito’; Cp súyily ‘gnat’ (Cp suye ‘sting, vt’) after *-ti > -ci > yi; but Ca muhúlily ‘mosquito’? less likely Aramaic(S) sərïiq ‘gnat, mosquito’. [e1s4,e2w,e3t]

391 Egyptian(H) **ishb** ‘schakal [jackal], Fuchs [fox]’, less likely Egyptian s’b ‘jackal’ with vocative i-:
UACV-567 ***isap** / ***isa’apa** ‘coyote’: M67-109 *’is; I.Num20 *isa/*ica; BH.Cup *’iswït ‘wolf’; Munro.Cup31 *’ísi-l ‘coyote’; Fowler83; M88-’i2; KH/M06-’i2: Mn 'issa'a 'coyote'; NP ica'a 'coyote'; NP isa ‘wolf’; TSh 'icappï 'coyote'; TSh 'isampapi 'wolf'; Sh isapai-ppï 'coyote (mythological name)'; Tb 'išt ‘coyote’; Ca 'isi-ly ‘coyote’; Cp 'isi-ly; Ls ’is-wu-t ‘wolf’; Gb 'isát ‘lobo’; Hp iisawï, pl: ii’ist 'coyote'. Note that the Tb form aligns with the Hp pl. The -c- in NP and TSh, but -s- elsewhere, is a frequent UA c vs. s enigma. [c/s] [e1,e2,e3] [NUA: Num, Hp, Tb, Tak]

392 Egyptian(H) **k’mwtt** ‘ähre (des Getreides) [ear (of grain)]’; the UA form aligns well with the last four consonants, with loss of the first; and the 2nd is often obscure in any case:
UACV-536 ***mura** ‘ear of grain’: M67-149 ‘ear of corn’; L.Son158 *mura 'espiga'; M88-mu1 'grain of wheat, tassel’; KH/M06-mu1: TO muda 'tassel'; Eu murát 'espiga'; Yq móa ‘espiga’; My mówwa espigar; Wr mulá 'espiga'; Tr murá 'espiga'; Cr mwée-yu 'spike/espiga’. Add NT muurádadï ‘la espiga’ and Nv murhadaga ‘espiga’. Note that both Cr and Cah show *-r- > -’-. > -ø-. [Liquid > ’ > ø in Cah; *u-a > o-a] [e1,e2,e3] [SUA: Tep, TrC, CrC]

393 Egyptian(H) **qm’y** ‘Farbe [color]’; another example of last three consonants after loss of the 1st:
UACV-517 ***ma’ai / *mayï** ‘color, be the color of, paint’: NP namayïadï ‘mixed colors’ (perhaps contains the na- prefix); Ch ma’á 'to paint, mark'; Wc kapé-maïye 'coffee-color'; Wc kwíe-máïye 'earth-colored’ (kwie ‘earth’); Eu vámei/bamai 'oscuro [dark]'; Eu bamei 'medio verde [greenish], pardo [light brown]’ (probably 'water-colored'; otherwise, what else would be both green and brown?); Eu mái/ma’ai 'pardo, color’. [’/y] [e1q,e2m,e3’,e4i] [NUA: Num; SUA: TrC, CrC]

394 Egyptian(F) **d'** ‘copulate’; Egyptian(H) d’ / d’d’ ‘kopulieren, koitieren [copulate]’:
UACV-530 ***toC** 'copulate': M67-100 *to ‘copulate’; M88-to11 ‘copulate’; KH/M06-to11: Tb tooyan~’oodoyan;
Ls tó’ma ‘(of a man) to marry a wife, (of animals) to mate’; Ls -tó’ma ‘wife’; Ls -tó’ma-vu ‘husband’. One problem with this pair, listed in both M67 and M88, is that we should expect Ls e < *o; however, Cp tily’á’a ‘make love’ matches Tb well, because it has the expected vowel—Cp i < *o—and it also shows y, like Tb does, and -l- < -t- reduplication. Note also the -to- syllables in Tr nató ‘fornicar (varios), practicar el cóito’; Tr netó/wetó ‘fornicar, practicar el cóito extramarital’; Tr ŕoki / loki / eloki-mea ‘fornicar, abusar la mujer, violarla’. [e1d,e2’] [NUA: Tb, Tak; SUA: TrC]

395 Egyptian(H) **ngg** ‘Gackerer [cackler], Gänserich [gander/male goose]’:
UACV-732 ***nakï** 'goose': Fowler83: NP nagïddï ‘goose’; TSh nïkïnta ‘goose’; Sh(M) nïkïntan ‘goose’.
[*-Nt- > -dd- in NP] [e1n,e2g] [NUA: Num]

396 Egyptian(H) **ṯnf** ‘trinken [drink], tanzen [dance], v’ (if consonants separated):
UACV-637 ***tani** 'dance, v’: Ls táni 'do a certain dance, v’; Ls tan’i-š 'that certain dance'; Cp táne 'dance, vi’. Note the Ls noun has a glottal stop that the verb does not, like Aramaic nouns also. [e1t,e2n,e3f] [NUA: Tak]

397 Egyptian(H) **ḫti** Rauch [smoke], Dampf [**vapor**]; Egyptian(F) ḫ’ti ‘cloudiness, of sky’; Egyptian(F) ḫ’ti ‘bleariness, of eyes’; Egyptian(H) ḫ’ti ‘Bewölkung [clouds], Trübung [cloudiness], Wolken [cloud]’:
UACV-654 ***(pa)-uci / uti** 'dew, vapor, frost, n’: NT vauši 'rocío'; Wc háïci ‘sereno, rocío’; Hp oy-nïp-ti ‘become covered with frost’. NT and Wc agree well with *pa-uci, since Wc h < *p; Wc ï < *u; NT s < *c. They likely contain *pa- 'water’. The *oy-* of Hp oy-nïp-ti ‘become covered with frost’ also fits *uci, because *-c- > NUA -y-, and *u > Hp o, and NP(B) huzi-bï ‘frost’; NP husia’hu ‘frost’ suggests *uci < *uti / *uCti. The TrC forms below, like Eu vapúsika ‘rociar’, may be loans from Tepiman with consonant harmony breaking up the vowel dipthong: *pa-uci > Tepiman *pa-usi > *papusi.
UACV-653 ***pusi** 'dew, v’: Eu vapúsika 'rociar'; My baa-puh-tia 'está rociando’.
[*-c- >-y- in NUA; Wc ï < *u; Tep s < *c; s > h in cluster] [e1h2,e2t,e3i] [NUA: Hp, Num; SUA: Tep, CrC, TrC]

398 Egyptian(F) **k’p** ‘cover, hide self, droop (eyebrows);
Egyptian(H) klappen (Augenbrauen) [close shut (eyebrows/eyelids)]’:
UACV-469 ***kuppa / *kuCpa** ‘close (eyes)’: The meaning ‘close eyes’ extended to ‘close’ generally in some languages and shifted to ‘sleep’ (eyes close) in other languages; yet we divide them semantically as Miller did:
a. M88-ku14 ‘sleep’: Cp kúpə-; Ca -kúp-; Ls kúp-; Cr hi’ipe ‘lie down to sleep’. Medial -p- (instead of -v-) means a doubled *-pp- or a previous cluster that became such: *-Cp- > -pp-
b. M88-ku15 ‘close the eyes’: Eu kupú; Yq kúpe, kupek, kupikte; My kupíkte, imp: kupe’e; Tr kupi / kupu-; Wr kuhpi; Wr kuhpéca ‘wink, blink the eyes’; Tr kupí- ‘cerrar los ojos [close the eyes]’; Tr kupi-ca- ‘parpadear, cerrar y abrir los ojos’; Tr kupí ‘tizón, palo quemado y humeante’; Wc kïpe; CN i’kopi 'to wink, blink, close eyes’.
c. M88-ku16 ‘close’: TO kuup ‘close, lock, vt’; NT kuupa/i ‘close’; ST kuupa ‘close’; Nv kupu ‘close, v’. Let’s add PYp kuupa 'shut, cover’. The lack of fricatives for the medial bilabial may mean a medial C cluster.
[C cluster] [e1k,e2’,e3p] [NUA: Tak; SUA: Tep, TrC, CrC, Azt]

399 Egyptian(H) s’w ‘zerbrechen [break (to pieces)], demolieren [demolish]’:
UACV-298 ***si’u** 'break to pieces': Yq síu-ta 'romper'; Yq sí’u-te 'rajar'; AYq siuta ‘tear, vt’; AYq siute ‘be torn, vi’; Tr si’o-kame 'broken to pieces'; Tr si’o-ca-ma 'destroy, break to pieces' (*u > Tr o,u);
Wr ci’wána 'break off a little piece’. [c/s] [SUA: TrC]

400 Egyptian(H) **sʕr** ‘Dorngestrüpp [thorn bush(es), thorny undergrowth], Dickicht [thicket]’:
UACV-355 ***sawaro** ‘saguaro cactus': Tbr samwiró-t; Yq sáuwo. Spanish saguaro (sawaro) is thought to be a UA loan, perhaps Opata sawaro. [liquid; V > i/_L; for a-a-o > a-o in Yq, cf. deer] [e1s3,e2’2,e3r] [SUA: TrC]

401 Egyptian(H) **ḫnt/ḫnw** ‘Wasserlauf [watercourse], Sumpfige Niederung [swampy lowland]’:
UACV-372 ***hunuC** ‘canyon’: TSh hunuppin ‘ravine, gully, narrow canyon, gorge, ditch’;
Sh(M) hunuC-pin ‘ditch, ravine, wash’; Tb humboyaam 'Kelsi canyon’. NP(B) hunagapïni ‘hollow, ditch’.
[n > m/_bilabial] [e1h2,e2n,e3w] [NUA: Num, Tb]

402 Egyptian(H) psšt ‘Matte [mat] (made of the psš plant), n.f.’:
UACV-244a ***ha-pït** 'blanket': KH.NUA; M88-ha15; KH/M06-ha15: Gb havót 'blanket'; Sr havïït 'clothes, blanket’. Ken Hill adds Ktn havï-t ‘skin, blanket, clothes’ and considers the possibility of Hp havìi- ‘sleepy’. This *ha-pït ‘blanket’ is likely related to *pïta 'mat’, below, possibly with a ha- prefix for these Takic forms, similar to TrC's *hi-* prefix: Tak *ha-pït; TrC *hi-pïta. [*ï > Gb o]

UACV-244b ***(hi-)pïta** 'woven mat': M67-277 *peta 'mat, bed'; CL.Azt194 *pətla 'woven mat'; CL.Azt 317 **pata; L.Son205 *pïta 'estera'; M88-hi2 'sleeping mat/petate'; KH/M06-hi2; M88-pï8 'mat, bed, petate'; KH/M06- pï8: Eu hipét; Wr ihpetá; Tr péra; My hípetam; Cr péeta 'mat, bed, petate'; CN petla-tl 'woven mat'; Pl petat; Po -pot/b'tet. Cr péeta is likely a loan (as also the Azt forms), but Cr hitá-ri with the expected *p > h is a genuine CrC cognate. Takic shows a *ha-* prefix, and some TrC forms show a *hi-* prefix, while others show only ***pïta***; yet all have *pït(a) in common. Miller lists many of the same forms in M88-hi2 and M88-pï8; therefore, Miller's two sets pï8 and hi2 are here combined. [Wr prefix = CN] [NUA: Tak; SUA: TrC, CrC, Azt]

403 Egyptian rd 'foot, leg', dual: rdwy:

UACV-937 ***tara** 'foot'; Sapir; VVH28 *tala 'foot'; B.Tep217 *tara 'foot'; M67-187 *ta/*to 'foot'; I.Num202 *tah- 'instrumental prefix, (with the) foot'; L.Son276 *tara 'pie'; M88-ta12 'foot'; KH/M06-ip4 'with the foot': Mn taC 'foot'; NP taC 'foot'; Sh taC- 'with the feet'; Kw ta- 'with the foot'; SP taC- 'with the foot'; Sr tamukpi' 'heel'; Hp tana 'hoof, foot'; TO tad; LP tar; PYp tar; Nv tarha 'pie'; NT tára; Eu tarát 'pie, rastro'; Wr talá 'planta del pie'; Tr rará 'planta del pie, pie, pata, huella'; CN tlaloaa 'run, flee'. We might also consider Cp táyi 'thigh'; Wc téuri 'thigh'; and Cr tïhči 'thigh'. The following verbs may or may not be of help in determining a possible second or final consonant: NP mayu'i 'to warm hands up'; NP taddu'i 'warm foot up'; NP tu'i ddu'i 'try to warm up'. Comment on Gb kóre 'pisar'; Tr re'-kesá 'pisar'; What of Tb 'ïŋgï-l 'foot'; CN ikši-tl 'foot'; and perhaps Tb 'igin 'swing foot up'; Are the *kïsa forms (mostly Tep)—are they Azt loans? [NUA: Num, Hp, Tak; SUA: Tep, TrC, CN]

404 Egyptian(H) **ɧ'dt** 'Korb [basket]':

UACV-118 ***hoCca** / ***huCta** 'basket, jar': Sh occa (ottsa) 'jug, pitched basket for carrying water'; SP occa (ottsa) 'water jar'; Tbr hoca-nyí-t 'colote, clase de cesto cilíndrico hecho de bambú rajado [kind of cylindrical basket made of split bamboo]'. The preceding three align nicely. Perhaps the semantic similarity between Tbr and Hp ' large carrying baskets made of sticks' should intrigue if something like *hu'(a)-ca/ta underlies the matter: Hp ho'apï 'wicker burden basket'; Hp ho'àa-ta 'load pl. obj's'. Is the Hp -pï from the Num -pï absolutive suffix? Regardless of Hp, the Tbr and Num forms agree in four segments and the Hp glottal stop may be a reduction of that cluster. [NUA *-c-, -'- cluster] [e1,e2,e3] [NUA: Num, Hp; SUA: TrC]

405 Egyptian(H) **sbr** 'wein [wine]':

UACV-195 ***sïpi** 'berry tree': Hp sïïvi 'sumac'; Hp sïvipsi 'sumac berry'; Tbr sipí 'capulin [type of cherry-like tree]'. [iddddua] [ï-i > i-i] [e1s,e2b,e3r] [NUA: Hp; SUA: TrC]

406 Egyptian(H) **b'** 'Bock [buck, ram], Widder [ram], Seele [soul]'; the pair of meanings in UA 'bighorn sheep' and 'all living creatures' are an astounding match for the same pair in Egyptian b' 'ram' and 'soul' :

UACV-208a ***pa'aC / *pa'at** (*paa'at (AMR)) 'bighorn sheep': M67-369 *pa 'mountain sheep'; M88-pa34; Munro.Cup75 *páá'a-t 'mountain sheep'; KH.NUA; KH/M06-pa34 *paa'at (AMR); Jane Hill 2007-44 *paa'at: Sr paa'-t; Ca pá'a-t; Ls páá'a-t; Cp pá'a-t; Gb pá'a-t 'mountain sheep'; SP pa'a-vi 'animal (any living thing but man and plants)'; CU pa'a-vuku 'livestock'. Ken Hill rightly adds Ktn pa'-t 'mountain sheep' and Ch tïvipïa pa'a 'all people and animals that live on earth'. Hp paŋwï 'bighorn sheep', pl: paavaŋwt, shows a unique second syllable, yet elsewhere does ' > Hp ŋw (1409 spider). Interestingly, Manaster-Ramer proposes UA *pa'at, which aligns with an Egyptian feminine, as might Ktn tïvo'i-t 'animal, meat, all animals' < Egyptian t' b't.

Alexis Manaster Ramer (in 1991 "Blood, Tears, and Murder" and 1991 "UA *tw") proposes that a cluster of -tw- underlies Hp -ŋw- in this and other terms: in *pa'at-wït > *paŋwï 'bighorn sheep (lit. bighorn-big')' and in the Hp reflexes of 'blood' and 'crow'. Lexemes for 'bighorn sheep' are mostly in NUA. Davis (1989) and Jane Hill (2007) note the similarities of Hp paŋwï and Kiowa-Tanoan (KT) forms such as Tewa pæ̱æ̱h 'deer' with nasalized (underlined) vowels. The KT form is probably the loan source for Navaho bi̱i̱h. 'deer'. Miller and Hill rightly include the SNum forms, which are here separated by letter only for the different semantic considerations.

UACV-208b ***pa'a** 'living beings': Kw pa'a-vi 'meat' whose unexpected animacy also suggests it originally meant bighorn, as Azt *naka 'meat' and SNum *naka 'bighorn'; Ch pa'á-v*i* 'worm'; Ch tïvipïa pa'a 'all the people and animals that live on earth'; SP pa'á-v*i* 'animal, any living thing except man and plants'; WMU pa'á-v*i*/v*ü* 'insect, bug, maggot, n'; CU pa'á-v*i* 'insect, larva, worm' and CU pa'a-vuku 'livestock'. Yet SNum does not seem to show a final -C like Tak and Tb. [medial cluster] [e1b,e2'] [NUA: Num, Hp, Tb, Tak]

407 Egyptian(F) **nbd** 'plait, wrap up' > NP nobia, nanobi'a 'wrap, roll up blanket.'

408 Egyptian(H) **g'** 'singen [sing]': ***ka** 'sing': Kw kaa; SP kaa; WM káay; CU káay. Falling tone suggests *kawa or ka'a > kaa, with loss of the intervocalic consonant in Num. [e1,e2,e3] [SNum]

409 Egyptian(F) nk ‘copulate’; Egyptian(H) nk ‘koitieren, kopulieren [copulate]’:
UACV-533 ***naka** ‘copulate, cover, close’: Ca náki ‘join o.s. to, get together with, close, vi’; Ca naki-n ‘put together, join’; TSh naake ‘mate with, copulate (usually of animals)’; NP naga’aggï’hu ‘put blanket over s.o.’; CU naġá-tií ‘cover with, wrap around, spread over’; Ls(E) naka/i ‘be closed, blocked, vi; close, block, cover, vt’. Sr näc-q ‘stick together, copulate’ and Sr näcï’|q ‘be stuck together’ may belong if another morpheme created a cluster s.th. like *nak-tu. Also likely is the -nek of My baánek ‘se inundó de agua’ as in ‘water-covers’. This whole set likely ties to *naki ‘want, love’. [NUA: Num, Tak; SUA: TrC]
UACV-2467 ***naki** ‘want, like, love’: M67-452 *naki 'want'; L.Son164 *naki 'desear'; CL.Azt184 *nïki, 284 **naki; M88-na2 'like, want'; KH/M06-na2: NP naki 'chase'; Eu nake 'querer [want, love], amar [love]’; My nákke 'amar'; My -neke 'future suffix'; Op naki; Yq nák; Wr nahki 'querer, noviar'; Tr nakí 'querer, desear, requerir'; Cr na-’a-ráa-nahči 'it pleases me'; Wc náaki 'love, like'; CN nek(i) 'want, use, accept, engage s.o. in an enterprise'; Pl neki 'want, wish’. Add PYp naak 'want food'; NT naákyi 'like'; Hp paanaqmoki 'thirsty' and Hp paanaqa-w ‘thirst, lack of water’ likely contain paa- ‘water’ and *naka / *naki 'want, desire’, i.e., water-want. Might Ca -nax ‘supposed to (do s.th.)’ (Seiler 1977, 95) or the allomorphs Cp neqa and Ca nék-en to Cp menmáx ‘will come’ (neqa ‘is coming’); Ca ménvax ‘come’ (nék-en an allormorph) tie with these, since ‘run/go’ and ‘want’ are semantically tied elsewhere in UA. SP naaġi ‘seize’ may well belong also. Cf. above *naka ‘copulate’. [k > č in Cr] [e1,e2,e3] [NUA: Num, Hp, Tak; SUA: Tep, TrC, CrC, Azt]

410 Late Egyptian **bn … iwn’** negates verbs with a two-part negative, before and after the verb negated. WMU ka … wa’ uses the common UA negative *ka as first element, the second element has three of four segments in common with Egyptian’s second element. Nasal consonants often become nasalized vowels in WMU, so -wa’ with a nasalized vowel has w, nasal, and glottal stop, and in the same order as Egyptian -iwn’; and long Egyptian words with initial i- lose the i- in UA (306-309). [e1,e2,e3] [NUA: SNum]

411 Egyptian(H) ḫʕ / ḫʕw ‘Körper, Leib [body]’; Egyptian ḫʕwt / ḫʕʕwt ‘Freude [joy], Jubel [rejoicing] (from Egyptian **ḫʕi** ‘sich freuen, jubeln [rejoice]’; remember Tepiman n corresponds to NUA ŋ:
UACV-265 ***hoŋa** 'body’: TO hon 'body'; Nv hona 'cuerpo'; PYp hona 'body’. Ls heŋča-wu-t ‘cheerful, contented’ is key: Ls ŋ corresponds to pharyngeals and to UA *w also in woman, name (Munro 1973) and to SUA n; and Egyptian ḫʕ unites the meanings ‘happy’ and ‘body’. See next two items. [SUA: Tep; NUA: Tak]
UACV-1811 ***hono-mar** ‘rib’: TO ho’onma ‘rib (of the body)’; PYp hona-mar ‘rib’; PYp hona ‘body’; NT óónomai ‘la costilla’. These Tep forms may be a compound with -mar ‘child/little one’ as in the body’s little ones, the body’s children/appendages. [e1,e2,e3] [SUA: Tep]

412 Egyptian(H) ḫʕi ‘sich freuen [be glad, happy], jubeln [rejoice]’; Egyptian ḫʕwt ‘Freude, Jubel’; Egyptian ḫʕʕw ‘sich freuen’: Ls heŋča-wu-t ‘cheerful, contented’.

413 Egyptian(H) ḫʕ’ ‘Kind [child], Knabe [boy]’:
Ls hiŋé’-ma-l / hiŋéé-ma-l ‘boy’. Ls even shows the 3rd consonant glottal stop, besides the first two consonants matching in the last three sets: Egyptian ḫʕ > Ls hVŋ.

414 Egyptian(F) irp ‘wine’: Ch(L) iyaavi ‘wild grape’. [e1,e2,e3]

415 Egyptian(H) ḫnn ‘Penis, Phallus, männliches Glied’:
UACV-1564 ***hun** ‘penis’: M67-316; M88-hu8; KH/M06-hu8: Cr kaíín^{y}i; Wc hïnárí. PUA *huna > CrC *hïna. Cr likely has another morpheme ka- and fronted *ï > i. [e1,e2,e3] [SUA: CrC]

416 Egyptian(H) **ḫn** ‘pfeiler [pillar]’ > Ls húna ‘sit up straight, vi, raise, lift, vt’. [iddddua]

417 Egyptian(H) **ḥ’y** ‘Ehemann [groom], Gatte [husband], Gemahl [spouse, husband]’
Yq hú’i ‘miembro viril [penis]’; Yq hú’iwa ‘flecha [arrow], punta de la flecha [arrowhead]’; My hú’iwa ‘flecha [arrow]’. [e1,e2,e3]

418 Egyptian(F) rd ‘foot’, often dual: rdwy ‘feet’:
UACV-1768 ***taru** 'roadrunner': M67-351 *tal; M88-ta21 'roadrunner'; KH/M06-ta21: TO táḍḍai; My táaruk; Yq táruk. We must add the tar- of PYp tarpui 'roadrunner'; the latter part -pui is the *pu’i/puwi ‘road’. A compound with *taru/*taro is the observation of Sapir below. [iddddua] [SUA: Tep, TrC]

419 Egyptian *wr-rdw(y) ‘great (of) legs’ or in UA terms ‘long legs’:
UACV-424 ***wiC-talo** 'roadrunner': Sapir: CN witlallo-tl 'a tall bird that flies little but runs very fast' (Simeon); SP wïcca 'roadrunner’. The frequency of Num c < *-Ct- supports the tie. Note also the similar vowelings of CN -tlallo and Cah *taru... above, suggesting a prefix *wiC-/wïC- in the CN and SP forms, such as *wïr ‘big, great’ as in ‘long-legs.’ [iddddua] [*-Ct- > -cc-; wVC- prefix] [e1,e2,e3] [NUA: Num; SUA: Tep, TrC, Azt]

420 Egyptian(H) **twt** ‘vollkommen [perfect], vollständig [complete]’:
UACV-156 ***tutuli** ‘beautiful’: Yq tutúli 'bonito [attractive]' (used by women); Yq tutú'im 'cosas bonitas [pretty things]'; Yq tú'ute 'componer [put together, fix up, adorn], limpiar [clean], adornar [adorn, beautify]’; AYq tutu’uli ‘handsome, pretty’; My tutu’uli ‘hermoso [beautiful]’; My tú’uri ‘está bueno, bien [be good, well]’; My a’a tú’ure ‘le gusta [please]’; My a’a tú’uli ‘le agrada [gratify]’; My tú’uwa ‘bondad, lo bueno [good(ness)], n’; reduplication *tuttuti > tutuli / tutu’i; perhaps the -ʈï(ţ) of Sr ceikʈï|ţ 'beautiful, pretty one, n’ though additional data for isolating the meaning of *-tï(t) would be nice. Keep in mind that -’- < -l- (or even from < -t-) is common in Cahitan. [e1,e2,e3] [SUA: TrC]

421 Egyptian(F) **twt** ‘statue’ [or standing image]:
UACV-2166 ***tuC / *tutu** ‘stand’: Tb tulu’ula 'stand up from sitting'; Ls túú’ ‘stand’ pl. inanim.; ST tuut ‘be standing, subj pl inam’; ST tuttu’ ‘stand, vt (inan pl obj’s)’; Nv tutu ‘be standing, inam subj’; PYp tuutu ‘be standing, erect (pl inan subj)’; TO čuuč ‘stand, pl’. The *tuC- of Ls wixé’tu-t ‘pine sp., Pinus coulteri’ belongs as well. While the match in meanings is not exact, statues and standing images in Egypt (plural) do stand and stand tall, and most interesting is that most of these UA languages have this as a verb for inanimate objects, not people or animals. [iddddua] [e1,e2,e3] [NUA: Tb, Tak; SUA: Tep]

422 Egyptian(F) rdi ‘give, put, grant’; Egyptian rḏi > rdi (in middle Egyptian) ‘geben [give], geben (als Preis) [give as price], verkaufen [sell]’; to give the price of is ‘to buy’, so this also means ‘buy’ and ‘sell’:
UACV-2401 ***tari** 'sell': Wr tariké ‘sell s.th. to s.o.’; Wr tala-ní ‘buy, vt’; Tr ŕari-mea ‘buy’; Tr ŕarinéa-ma ‘sell’. Initial r > t and intervocalic -d- > -r-. [*-d- > -r-] [SUA: TrC]

423 Egyptian(F) ywty ‘who … not, which … not, one without, a not-haver’
Kw yuwa’i ‘negative’; Kw yuw-aa-tï ‘negative’.

424 Egyptian(H) nw ‘sehen [see]’: Tr no- ‘observar [observe], examiner [examine], contemplar [contemplate], mirar [look at]’; Tr newa ‘ser visible’.

425 Egyptian(F) **ʕš’** ‘many, numerous, much, plentiful’; Egyptian(H) **ʕš’** ‘viel [much], zahlreich sein [much, be numerous]’:
UACV-16b ***oso** ‘more, much, very’: Wr osó ‘more’; Wr oso-pici ‘the most’; Yq ousi ‘more, much, very’; AYq ousi(a) ‘1. hard, sturdy, strong, 2. much’. With loss of first vowel, **UA**CV-16a ***so** (< *oso) ‘many’: TSh soo 'many'; Sh soon 'many'; Cm soo 'many, much'; SP šooC ‘very’; Hp soo 'all, many' (vowel is wrong, Miller notes; perhaps loan from Num; or Hp *sa’ ‘as much or as many as’. [e1,e2,e3] [SUA: TrC; NUA: Num, Hp]

426 Egyptian(H) **ʕnr(t)** ‘Kiesel [flint]’; UA forms reflect ʕnrt, with ending -at, and glottal anticipation:
UACV-65 ***wi’naC** ‘flint, arrowhead’: Ch(L) wïn’napi ‘flint’; Ch(L) huu wïn’na-wa ‘arrow’s flint’; SP wï’naC- / wï’na-ppï ‘arrowhead’; Kw wina-huwa ‘obsidian arrowhead’; Kw wina-pi 'obsidian blade’. [e1,e2,e3] [NUA: SNum]

427 Egyptian(F) **ʕ**nx ‘to live, v, (living) person, n’:
UACV-141 ***onka / *oŋa** ‘baby’: I.Num15 *oŋa(a)(’a) 'baby, child, young (of animals)’; M88-’o15 ‘baby’; KH/M06-’o15: NP(Yerington) oha'a 'baby'; NP(McDermitt) onka’a; NP oŋa’a ‘baby’ (Snapp, Anderson, Anderson 1982, 20); NP(B) oha’a; Mn ’owaa’ ‘sound of baby crying’; Mn owaa’-cci-cci’ / owaa’-nugu’ ‘baby’; TSh ohmaa(cci) 'little baby' (Dayley); Sh ohmaa 'baby'; Sh pa’ohmaa ‘water baby’; WSh ohaa(cci) ‘baby’; WSh pa’ohaa ‘water baby’; Cm ohnáa' 'a baby'; SP oa-C/N 'young of animals'; SP ïŋaa’- ‘baby’, SP paa-ïŋaa’-ppici ‘water baby’; Ch ïŋa’apici. A medial cluster *-nk- > -ŋ- in NP and SP further lenites elsewhere, Iannucci’s reconstruction *oŋa serving well. TSh and/or Sh have forms with and without -m-, so the -maa forms likely contain another morpheme, perhaps *mara ‘little’. [medial cluster w/hm/hn/ŋ/ø] [e1,e2,e3] [NUA: Num]

428 Egyptian(H) ʕnx ‘sich bewusst sein [be conscious of]’: Ktn winikaï’ ‘remember, v’.

429 Egyptian(F) nny ‘be weary, inert’; Egyptian(H) nni ‘müde [weary], träge sein [lazy, inert], faul sein [be rotten, lazy, lame], erschlaffen [go limp, become exhausted]’:
UACV-106 ***nina** ‘bad, useless’: Dakin 1982-57: Tr nina- ‘harm, hurt, do/say bad’; CN neen ‘in vain, futilely, profitlessly’. [iddddua] [SUA: TrC, Azt]

430 Egyptian(H) š’ ‘Vegetation, Weideland [pastureland]’; a plural: Egyptian **š’w** ‘Feldpflanzen [vegetation, field plants], Blumen [flowers]’:
UACV-262 ***sawa / *sakwa** ‘blue, green’: M67-50 *sakwa ‘blue’; M88-sa10; KH/M06-sa10: TSh sakwa ‘green’; Kw sakwa / sako ‘blue’; SP sakwa ‘blue/green/gray’; CU saġwá-ġa-rï ‘green, blue’; Hp sakwa. Ken Hill adds Ch sagwamuvin’naŋkavï ‘turqoise’. Add Ch sawá-ga 'green’; WMU sawá-ga-r / sowa-ga-r / saġwa-ga-r ‘green (to mean blue, it often requires help, e.g. sky-green)’, which sometimes faintly includes ġ; and perhaps Ca sáw-et ‘unripe’. Jane Hill (p.c.) notes also Mn saġwanowí’ ‘green garden worm’. What of forms under *siwa / *si(y)o 'green, blue’? [iddddua] [e1,e2,e3] [NUA: Num, Tak]

431 Egyptian(CDD) b'k(t) 'document'; UA *po'ok/*po'oC 'write'; Egyptian b'kt 'work, task':
UACV-713 ***po'ok** 'mark, draw, write, read': Mn taqapoo 'mark'; NP bo 'write'; Sh poo / tïpoo 'write, mark'; Cm tïboorï 'write'; Kw po'o 'mark, write'; Ch po'ó 'draw, write'; SP po'oC- 'mark, write'; WMU pö'ő-y 'draw, write, mark, go to school, v'; WMU pö'őC- (when compounded); WMU pö'ő-tti'i / pö'ő'-ti'i 'teach, v'; WMU pö'őqqwa-tt*ü* 'book, s.th. written, n'; CU pö'őy 'write'; CU pö'ő-pïní-'ni 'read'; CU pö'ő-tií 'teach'. All of SNum shows a final consonant. Add Tb(H) pokpookinat 'tattoo, vt'. [NUA: Num, Tb]

432 Egyptian(H) p'q 'eine Gebäck (Fladen oder Oblate) [type of biscuit, baked good (round flat cake or wafer]'; Egyptian(F) p'q 'a flat thin cake or biscuit':
Hp piiki 'wafer bread' (a fine thin delicate bread, like sheets of cracker)'. Must have lost ' early.

433 Egyptian(H) p'q 'fein [fine], dünn [thin]'; Egyptian p'q 'Blatt (Wertvollenmetalls) [leaf/sheet (of precious metal], Metallfolie [metal foil, sheetmetal]'; Egyptian p'qt 'feines Blech [fine sheetmetal or metal plate]'; Egyptian p'qyt 'Scherbe [broken piece, fragment], Tonscherbe [potsherd, pottery piece]':
UACV-1266 ***pikkaC / *pikkat (AMR)** 'knife': M67-246 *pika 'knife'; L.Son196 *pika 'cuchillo'; M88-pi13 'knife'; AMR 1993c *pikkat 'stone'; KH/M06-pi13 *pikkat 'stone': SP pikka 'hard, sore'; Ls piká-t 'stone knife'; Tb piga-t 'stone knife'; Hp pikyay'ŋwa 'axe'; Eu vikát; Wr tehpiká 'cuchillo [knife]'; Tr ripiyá/ri-pigá 'cuchillo, navaja'. [iddddua] [Tr, Tb voiced g; Hp ky; *k > ø in Tr] [e1,e2,e3] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC]

434 Egyptian(H) **g'p** 'schneiden [to cut]':
UACV-289 ***kappi** 'break, cut': M88-ka37; KH.NUA; KH/M06-ka37: SP kappi-/kapi- 'cut, break through'; NP kaapi 'break, cut off' (in I.Num60); Ca qápi (< *kappi) 'break'; Sr qapi' 'break (by bending) multiple obj's'; Kw kavi 'cut, cut down'; Kw kapi-nü 'cut off'; Ch kapák*i* 'snap, break'; WMU q*ah*ppáq*i* 'snap, break'; Ls qapúti 'chop, cut off'. These may tie with *koppi below. [e1,e2,e3] [NUA: Tak, Num]

435 Egyptian(H) **g'p** 'schneiden [to cut]'
UACV-290 ***koppi** 'break': M88-ko15: I.Num60 *ko(h)pi/*ko(h)pa/*ka(a)(h)pi/*kï(h)pa 'break, cut'; KH.NUA; KH/M06-ko15: Mn toC-qopi 'cut'; NP koppi'i'hu 'break board'; CU koppokki 'break, snap'; Tb hoboo'at 'be in pieces'; Tb hoboo'in 'cut in pieces'; Sr qöp(k) / qö^{r}pö^{r}' 'break, shatter (of hard surface, like glass, pottery, eggshell)'; Hp qöhi(kna) 'break'. Ken Hill adds Ktn kopïk 'break, vi'; Ls qépa 'splinter off'. Both *kappV and *koppV are consistant for consonants (*k-pp), but the first vowels vary between a/o, though the 2nd vowel's a/i variation is common in UA. But the fact that Sr and Ls have distinct forms for each recommends their separation, until new data directs differently. [iddddua] [initial *k > h in Tb; a/o] [NUA: Num, Tb, Tak, Hp]

436 Egyptian(H) sm' 'Lunge [lung]':
UACV-303 ***sumaC** 'breathe': I.Num187 *su(w)ah 'breathe'; M88-su16; KH/M06-su16: Mn suwaqa; NP soŋaha (Miller reinterprets it as sonkaha); Kw soo-ki (< *sookki) 'breathe'; Kw soo-kopi 'pant'; SP šuaC 'breathe'; SP šuaqqa 'breathe'; CU söá-qay. Add TSh sumakkain 'breathe, vi' and TSh suma-ppï / soma-ppï 'breath, soul' and Sh(C) suaC / suakkaih 'breathe'. Miller's inclusion of Hp somi 'sniffle, breathe deeply' is good. These are very close to and thus easily confused with *suwaC 'want, etc'; however, TSh sumakkain 'breathe, vi' and TSh suwaC 'want, desire, think, feel' (Semitic swy 'desire') show a difference of medial *-m- vs. *-w- in TSh. On the other hand, WSh and SNum yield single -m- > -w-, creating mergers like WSh suaC 'think, want, need, feel; seem; breathe' which makes sorting difficult. Yet even SP distinguishes SP šuaC 'breathe'; SP šuai 'be glad'; and SP šummai 'have in mind' whose cognate sets are here, at 'want', and at 'think' respectively. Add Ch(L) suwapï 'breath' (which also suggests a final -C); Cm sua'sua'miarï 'breathe', which shows a glottal stop at the place of germination; Cm suahketï 'breathe'; AYq hasohte 'breathe hard'. Though many languages agree with *so, the lowering influence of following *a* is reason enough to stay with Miller's su. The identity of 5 of 6 segments in Mn and HN (*su_aka) and both showing bilabials for the differing consonant is of interest. This term kept an intervening vowel between the 2nd and 3rd C (*sumaC) in contrast to sm'w / *som'o > *somwo/*soŋo 'lungs'. [iddddua] [medial -ŋ-,-m-, -w-] [NUA: Num, Hp; SUA: TrC]

437 Egyptian(H) **mht** 'eine insekt [an insect]'
UACV-316 ***matta / *maCti** 'tick': BH.Cup mac- ? 'tick'; Fowler83; M88-ma1 'tick/garrapata'; KH.NUA; Stubbs 2000a-6; KH/M06-ma1: NP madabi (< *matapi); Kw muu'maa-ci; CU mata-ci (< *matta-ci); Cp máči-l^{y}; Ca máči-l; Ls 'amáča; Sr maca-c; Hp màaca; TO maamş; Wr macá; Tr mačá; Wc mate. Ken Hill adds Ch matavi, which is also in Ch(L) mata-vi 'tick, flea'. Add Ktn muma-c 'reddish tick'. NP, CU, and Wc suggest a cluster, perhaps medial *-Ct-; in fact, CU and Ch have underlying medial *-tt-, in contrast to CU mara-ci < *mata-ci 'mortar', though NP suggests ungeminated *-t- in d surfacing instead of t (Stubbs 2000, 132). Tak medial *-t- instead of -l- also suggests a cluster something like *-Ct- or *-tt-; thus, we might posit *maCti(a); for Cp and Ca do show i as the second vowel. Add Mn mitábi/midábi 'tick' which has metathesized its vowels in a pattern similar to *pati('a) 'bat' and NP pitahana'a 'bat' (Stubbs 2000, 127-8). [iddddua] [NP t = Num c, WNum V metath like bat] [NUA: Num, Hp, Tak; SUA: Tep, TrC, CrC]

438 Egyptian nʕw ‘s. paaren, durchdrehen [to mate, press through]’
UA *nawi ‘together with’: My nawwi ‘juntos’ [together]; Yq nau ‘juntos’; Ca -new ‘with s.o., active accompaniment’.

439 Egyptian(H) **šnd̲t** ‘Dornakazie [thornbush]’:
UACV-350 ***sacani** 'saguaro cactus': B.Tep56 *haasani 'giant cactus'; Fowler83; M88-sa23; KH/M06-sa23: TO haašani 'saguaro cactus'; NT aasáñi; LP harsani (Fowler83). Add ST haašáñï. A cluster of -nd̲- > -c- is expectable; yet LP harsani shows another decent reflection of that cluster. [SUA: Tep]

440 Egyptian(F) **t̲si** ‘raise, lift up’; Egyptian(F) t̲st ‘ridge, range’; Egyptian t̲st ‘Gebirge [mountains], Gebirgsrücken [mountain ridges]’:
UACV-463 ***tïcayi** 'climb, raise': TO češaj ‘climb, ride, raise, elevate’; Nv tïsadï ‘subir de lo bajo’; PYp tesedi ‘climb, mount’; NT tïïsaidyi/tïsaadyidyi ‘subir’; ST čïsdi’ 'climb easily'; ST tïsdia’ 'climb’. [SUA: Tep]

441 Egyptian(F) **nms** ‘to clothe with the head-cloth’; Egyptian(F) nms ‘royal head-cloth’;
Egyptian nms ‘Tuch [cloth]’; Egyptian ‘in Binden hüllen [cover/wrap in bands], ankleiden [dress]’:
UACV-471a ***noma** 'cover': Hp nööma ‘wrap, cover up, vt’; Eu nóma ‘tapar, cubrir’; Eu va-nóma ‘inundar, vt’ (water-cover); Eu va-nóme ‘inundarse, vi’. [Hp ö < *o]
UACV-471b ***nama** 'cover’: NP namabima ‘cover’; NP namatïmpï 'cap, cork'; Wc náma ‘cubrir [cover], tapar [put top on]; Wc náme ‘cubierto [covered], tapado [topped]’. Another possible pair: Sh namasua-ppïh ‘best clothes’; Cm namahku ‘clothes’. [active, vt/stative, passive, vi -a/i] [NUA: Hp, Num; SUA: TrC, CrC]

442 Egyptian(H) **n’yt** ‘Weberei [weaving mill], Spinnerei [spinning mill], Textilmanufaktur [weaving]’;
Egyptian(F) n’t ‘weaving room’; these nouns suggest an unattested verb **n’** ‘weave, make woven product’:
UACV-485 ***nawi** ‘apron, skirt’: Tb nawii-l ‘woman’s apron’; Tb(H) nawwii-l ‘woman’s apron, double-apron skirt’; Ch(L) nawi ‘apron’; Cp -nawílyqam’a ‘front apron made of string’ (rare poss’d absolutive in -l);
Ls náwxami-š ‘gift, feather skirt, glass beads’; TO iinagi/naagi ‘skirt of ancient style’; Sr naawt ‘dress, n’;
SP naŋwi ‘apron’. Note that ’ > SP ŋw, as in bighorn sheep and others. In light of *nawi ‘hang down’, might that tie to this *nawi ‘skirt, apron’ as s.th. that hangs down? [NUA: Tb, Tak, Num; SUA: Tep]

443 Egyptian(H) **ʕnxt** ‘Getreide, Korn [grain]’:
UACV-540 ***(w)o’na** ‘corn cob, olote’: Wr wo’ná / ho’oná-ra; Wr wo’ná-bosori ‘cooked corn on the cob’;
Tr o’na/ko’ná. Ken and Jane Hill add CN ooloo-tl; Pl ulu-t; TSh onnoC-cci ‘pine cone hook’; Kw onoci ‘hooked stick used to pull down pine cones’. Jane Hill (2001) makes a good case for Hopi öö-vi’at ‘cob heel’. [NUA: Num, Hp; SUA: TrC, Azt]

444 Egyptian(H) ’sx ‘(ab)sicheln [sickle (off)], ernten [harvest], (ab)mähen [mow (off)], schneiden [cut]’; or
Egyptian(H) sx ‘abschlagen [knock off], abhauen [cut off, cut down]’; or Egyptian sk ‘fällen (baum) [fell (a tree)]’:
UACV-614a ***sika / *siki** 'cut hair, clip, mow': VVH115 *siki/sika 'to cut hair, mow'; M67-118 *sik 'cut'; L.Son238 *sika/sik-i 'cortar'; B.Tep64 *hikiti 'to cut'; M88-si1 'cut hair, mow grass, etc.'; KH/M06-si1: TO hiik 'clip, cut, mow (grain, etc)'; PYp hikica ‘cut, vt’; LP iktï/hïktï, pl. hïkïmia / ikumiaku; NT iíkai ‘cortar’; NT ikíítïïkïi ‘cortar’;
NT ícumai ‘picar’; ST hiktyi; ST hiika; Wr sihka / sihki; Tr seká/sikí; My síkka 'cortar pelo'; Tbr sika ‘cortar’; Cr tyí’i-sih-če 'he is slicing it with a knife’; Wc šíka ‘cut with knife or scissors, v’. [SUA: Tep, TrC, CrC]

445 Egyptian(H) **tbs** ‘stechen [prick, stab, pierce]’:
UACV-629a ***tapusa** ‘pierce’: Sh(Cr) na-ta-pusa ‘attach by piercing through s.th.'; Sh(M) pusa ‘pierce through and connect with (e.g., nail, bolt, needle)’; perhaps part of Wc kïrapúši-(ma) 'nail, n.(v.); perhaps Tr natabu ‘perforar, traspasar, agujerar de lado a lado’ [perforate, pierce through].
UACV-629b ***tupusi** ‘pierce’: Mn tupusudugi 'be punctured'; Ch topósi-gi ‘stab, v’; Ch topósi-ki-nkï ‘stab, pierce, v’. [NUA: Num; SUA: TrC, CrC]

446 Egyptian(H) **qm’tyw** ‘Feinde (pl) [enemies]’; Egyptian(H) qm’ ‘kämpfen [fight]’:
UACV-658 ***kïmmaN / *kïma’a** ‘different, enemy’: Mn kïma’ani-tu 'different'; Mn kïma’adugúsu ‘(in) a different way’; NP nanakïmma’a 'different colors'; Sh kïmmai ‘different (one)’; Kw kïmi-gi ‘be different, be other than’; Ch kïmán ‘different’; Ch kümanči ‘different one’; Ch(L) kïmá ‘other than self, different’;
SP qümma ‘other, stranger’; SP qümma-ŋa-šu ‘another one, stranger’; SP qümma-mmu-šu ‘strangers, anim pl’; WMU kumac / kumač ‘different’; CU kümáč’ay ‘be different’; CU kümáči ‘enemy, foreignor, Comanche’. The tribal name Comanche is from Numic, meaning ‘enemy, different one(s).’ Note the 3rd consonant glottal stop in the Western Numic forms. [NUA: WNum, CNum, SNum]

447 Egyptian(H) wtw ‘Welpe (Fuchs, Hund) [pup (fox, dog)]’:
UACV-694 ***woci** 'dog': B.Tep *gogosi 'dog'; Fowler83; M88-wo12 'dog'; KH.NUA; KH/M06-wo12: Gb wosí’, pl: wowósi’am (vowel unexpected, o < *o usually only after k, says Miller); TO gogs, gogogs pl; LP gogiš/gogš; NT gogóši, góógoši pl; ST gagooš / gagoš. The Tep sg forms seem to be built on a plural reduplication, and the pl forms on a doubled pl or double reduplication, which does happen in UA, especially in Tep. Ken Hill notes also Gb wosí 'dog' and other forms for 'bark, v’. [NUA: Tak; SUA: Tep]

448 Egyptian(H) sq’ɦ ‘tünchen [to whitewash], weissen (Gebäude) [whitewash (building)], schlämmen [to mud (s.th.)], verputzen [to plaster], mit Stuck verzieren [decorate with stucco]
UACV-761 ***sokoC / *coka** ‘earth, mud, plaster’: Sapir; M67-297 *so/*sok/*cok 'mud'; I.Num *soko 'ground, earth, dirt, land'; M88-so6 'ground, earth’; KH/M06-so6: NP soko 'ground, dirt; TSh sokopi 'ground'; Sh soko-ppïh 'earth'; Cm sokoopï 'earth'; SP soġo 'moist earth'; Hp cöqa 'mud, clay, plaster (cognate? Miller queries)'; CN soki-tl 'clay, mud'; Cr hásu’u ‘lodo, pared, pretil’. Add Wc hášu ‘mud’ (since CrC u < *o) to Cr. And Tr sugúri ‘greasy dirt’; Yq tečóa; and My tečóa 'mud' might be considered also, if the Cah terms lost intervocalic *k. [c/s;-k-] [NUA: Num, Hp; SUA: TrC, CrC, Azt]

449 Egyptian(H) qq / q’q’ ‘essen [eat]’
UACV-779 ***koki** 'graze, v’: M88-ko38; KH/M06-ko38: Cp qíxin 'graze, pull out (hair)'; Ls qéexi 'graze (of animals)’. The q- in both languages points to *ko for initial syllable. [NUA: Tak]

450 Egyptian(H) rkɦ ‘anfachen [fan into flames], brennen [burn, vi, be on fire]’:
UACV-879a ***taha / *taka** ‘burn’: Sapir; VVH150 *tahi ‘fire’; B.Tep215 tai ‘fire’; M67-423d *tai ‘fire (burn)’; L.Son268 *taha/*tah-i arder; CL.Azt20 *tlatia ‘burn’; *tlatla ‘burn, be hot’; CL.Azt60 *tlai(h)- ‘fire’; M88-ta1 ‘burn, v’; M88-ta2; KH/M06-ta1; KH/M06-ta2: the differences between M88-ta1 and ta2 (perhaps *taha ‘burn’ vs. *tahi ‘fire’) overlap unclearly enough that their common stem might best be taken as a whole, whatever later derivations afflicted an earlier clarity; so let’s combine them under the same number, but grant separate letters: ‘burn, vi’: Hp taq-ti; Eu tahá; Wr taha / tahi; Tr ŕahá/ŕahí; My táhha ‘quemarse, vi’; My táyya ‘quemar, vt’; Tbr taha; Wc ta’á; CN tlatla ‘burn, vi’; CN tlatiaa ‘burn’; Pl tata ‘burn, vi’; Pl tatia ‘burn, vt’.
UACV-879b ***tahi** ‘fire’ (AMR): CN tle-tl ‘fire’; Wc tái ‘fire’; Cr táih ‘fire, flame’; TO tai ‘fire, match(es)’; NT taí; ST tai; Eu te; My táhi; Tbr tahamét; Wr taihénani ‘prender la lumbre’. Add Nv tai ‘encender lumbre’. [NUA: Hp; SUA: Tep, TrC, CrC, Azt]

451 Egyptian(H) **rkɦ** ‘anfachen [fan into flames], brennen [burn, vi, be on fire]’:
UACV-880 ***takwa / *taxkwa** ‘ceremonial official, fire tender’: Gb táxkwa ‘kind of religious officer’; Ca tákwa ‘ceremonial official’; Ls tááxku ‘ceremonial official’; Cp təkwəva’aš ‘fire tender (type of ceremonial official)’. This may be a compound involving *taha / *taka above, though most of those show *-h-, except for Hp and these suggest *-k-. [h/’/k/y] [NUA: Tak]

452 Egyptian(H) **xt** ‘Feuer [fire], Flamme [flame], Hitze (klima) [heat (climate)], feminine noun’;
UACV-881 ***kut** ‘fire’ (AMR); ***kut-tu / *kut-ta** ‘make fire’ (AMR): M67-170e *kut ‘make fire’; I.Num61 *kohtoo / *kuhtuu ‘make fire’; I.Num64 *kuh- ‘fire, heat (instr. prefix)’; BH.Cup *kut ‘fire’; Munro.Cup44 *kú-t ‘fire’; M88-ku4; AMR *kut; KH/M06-ip10 ‘by means of heat/fire’; KH/M06-ku4 *kut: NP kutuuna ‘put wood in fire’; Kw kuttunuhi ‘make fire w/ drill’; Kw kukkoppi / kikkwappi ‘piece of wood, stick’; CU kukkwappï ‘firewood, wood’; Sh ku- ‘by means of heat’ (instrumental prefix); SP kuC ‘with fire’; Tb kut ‘fire’; Tb kutugat ‘gather firewood’; Hp kotqa ‘wood pile’; Hp koho/ kòo- ‘wood, stick, firewood’; Sr kut ‘fire’; Sr kucaai ‘gather firewood’; Sr kuçaaït ‘firewood’; Ktn kut ‘fire’; Ktn kučat ‘stick, firewood’; Ca ku-t ‘fire’; Cp ku-t; Ls ku-t; Gb kotá ‘palo, leña’; My kútta ‘(fire)wood’; Eu kut ‘palo’. NP, Kw, CU, Hp, Sr, Ktn, Cp, Ca, and Ls all show *kut, and in Munro.Cup44 *kú-t ‘fire’, note final -t, not -l, suggesting a final consonant, like t itself as AMR reconstructed for us. Miller also includes the Takic forms *kelawa gather firewood, CN kwawi- tree, wood, and others, but see them at ‘tree/wood’. Add the *ku- in Tep *ku-saypa (UACV-890 *(ku)-say(pa) ‘burn’: TO kohaɗk ‘something dried and burned’; Nv kusada ‘quemarse’ ; Wr saipá-ni ‘quemarse’). [NUA: Num, Tb, Tak, Hp; SUA: TrC, Tep]

453 Egyptian(F) xt ‘fire’:
UACV-882 ***kuCti (< *kut-ti’i** ?) ‘burn, fire-cause’: Ch kucíki ‘burn, v’; SP quččü’a ‘burn, vi’; WMU k*uh*čči-kki ‘burn, vt’; CU k*u*čí’i ‘be hot’; CU k*u*čí-tií ‘heat up, vt’. This may or may not involve the SNum causative suffix *-ti’i suffixed to ‘fire’ but it is plausible enough to be worth listing. [NUA: SNum]

454 Egyptian(F) **xt** ‘fire’
UACV-883 ***kotto (< *kut-tu/ta)** ‘make fire’: M88-ko1; KH/M06-ko1: TSh kottoo ‘set fire’; Sh kottoo ‘make fire’; Cm kohtoo; Hp qööha / qööyi ‘get burned, scorched on the body’. [NUA: Num, Hp]

455 Egyptian(H) **swr** ‘e. Fisch [fish, sp.]’ > CN šowil-in 'catfish’. ['/w] [TrC, Azt]

456 Egyptian(H) **swẖty** / sẖty ‘e. Fisch [a type of fish]’; Egyptian(F) sẖty ‘fish, sp.’
UACV-897 ***so’** ‘kind of fish’: Wr **so’cí** ‘fish’; the Wr term so’cí is a good match for swẖty with rounding and gottal stop for the pharyngeal and final -ty > -ci. Add Ktn coh ‘fish sp., perhaps salmon’. [SUA: TrC, Azt; NUA: Tak]

457 Egyptian(F) **ẖrrt** ‘flower’; Egyptian(H) ẖrrt ‘Blume [flower]’:
UACV-909 ***huya** ‘bud, branch’: M88-hu5 ‘brotar’; KH/M06-hu5: Wr uyá-; uyáwi ‘rama’; My húyya ‘tree, branch, forest’. [iddddua] [SUA: TrC]

458 Egyptian(H) **kfi** ‘entblössen [denude], enthüllen [reveal, unveil], ausziehen [take off], abnehmen [take off, remove]’: **UA**CV-1000 ***kappiwa** ‘degrain grain from ear’: TO kaipig ‘harvest grain, scrape grain from ears, v’ (Saxton and Saxton 1969); ST kaipga ‘desgranarlo (planta)’. [SUA: Tep]

459 Egyptian(F) **(s)x’x** ‘hasten, vt’; Egyptian(H) sxsx ‘laufen [run], eilen [hurry]’;
Egyptian(H) sxti ‘laufe! [run] eile! [hurry!]’:
UACV-1028 ***soko-miya** ‘walk’: NP sogomia ‘walking’; Cm soko-mi’a-rï ‘come walking’. [NUA: Num]

460 Egyptian(H) **’t̲p** ‘Kasten [box, case]’: **UA**CV-1084 ***otapa** ‘bedrock mortar’: BH.Cup ***’élapal** ‘mortar, bedrock’; M88-’o10; KH/M06-’o10: Cp íl^{y}apa-l; Ls ’élapa-l. [iddddua] [NUA: Tak]

461 Egyptian(F) **im** ‘there’; Egyptian written *i* is often pronounced *a*:
UACV-1175 ***ama(ni)** ‘there’: AYq ama/aman(i) ‘there (near speaker)’; PYp am(a) ‘there’; Nv ami ‘allí’; Nv imï ‘allí’; Wc mána ‘there’; Sr ama’ (acc. amai; pl. a:m) ‘that one, he, she, it’; CN -m ‘locative’. Several Num forms resembling *ma- may belong with loss of the first vowel, as in Wc. [SUA: Tep, Azt; NUA: Tak, Num]

462 Egyptian(H) **t̲ẖn** ‘glänzend sein [be shining]’, funkeln [sparkle, glitter], leuchten [shine, gleam], strahlen [radiate, beam], scheinen [shine]’; Egyptian(F) t̲ẖn ‘gleam’:
UACV-1207 ***toŋa** ‘hot, heat (of) sun/day, shine’: VVH155 *toŋa-la ‘to shine, sun’; B.Tep224 *toni ‘hot’; B.Tep226 *tonori ‘sunshine’; M67-238a; L.Son312 *tono/*ton-i ‘hervirse’; CL.Azt163 *toonal ‘sun’, 272 **tona ‘shine (sun)’; KH.NUA; M88-to6 ‘sun, shine, boil’; M88-to21 ‘hot’; KH/M06-to6 (Ken Hill aptly combines M88-to6 and M88-to21): Cp tíŋe ‘be hot’ (Cp and Ca i < UA *o); Ca tíŋma ‘warm’; Sr töönava’ ‘(in the) summer’; TO toni ‘be hot’; TO tonod ‘shine, twinkle’; TO tonoliđ ‘shine onto, give light to’; NT tonóli ‘sunshine; ST tanooly; ST tanoolyiop ‘in the sun’; Wr tono/toni ‘hervir’; Tr ronó ‘hervir, fermentarse’; Eu tonó ‘be hot, boil’; Tbr tonó ‘be hot’; CN toonal-li ‘warmth of the sun, summertime, day’; Pl tuunal ‘sun’; HN toonal ‘day’. Ken Hill adds Hp töönj ‘heat, hot weather, heat of the day’; Ls itéŋvu ‘hot spring’. Let’s also add Ktn toŋava’ ‘August, summer’ and/or Ktn tuŋava’ ‘June, July’; Nv tonorho ‘for sun to shine’; PYp toni ‘hot’; PYp tono ‘hot’; NT tóñi ‘hot’; ST tyoiñ ‘hot’; Pl tutuuni-k ‘hot, heat (of sun)’; HN toona’ ‘to shine (of sun)’. Note vowel opposition between ST tanoly ‘day’ and CN toonal-li. [Ls –vu] [NUA: Tak, Hp; SUA: Tep, TrC, Azt]

463 Egyptian(H) **xnm** ‘inhale, smell, eat, enjoy’:
UACV-1757 ***kaNmu** / ***kanmï** (Kaufman) ‘jackrabbit’: I.Num51 *kahmï ‘jackrabbit’; Kaufman1981 *kanmï; Fowler83 *kammï; M88-ka16 ‘jackrabbit’; KH/M06-ka16: Mn qámo ‘jackrabbit’; NP kami; TSh kammu-cci; Sh kammu; Kw kami; Ch(L) kami; SP kammï-; WMU kammu-či; CU kamu-ci. This is a good example of *u > ï, and is found in all of Num, but no where else in UA, except in the compound *tosa-kammu ‘white hare, cottontail’. Note Kaufman’s reconstruction *kanmï—brilliant!—though I know not how he arrived at it. This likely ties to SUA *kaNma ‘put in mouth, taste’ and means ‘the nibbler’. [u > ï in Num] [e1,e2,e3] [NUA: Num]

464 Egyptian(F) **ʕq** ‘to enter’; Egyptian ʕq-w ‘pl’:
UACV-1247 ***waki/uC** ‘enter, pl’: TSh weekiC ‘enter, go in, down or under’; Sh wekuC ‘to go in, to enter’; Cm wekwiitï ‘enter’; CU waqxáy-k ‘enter, come in’; SP waġi ‘enter, pl’. [NUA: Num]

465 Egyptian(H) **bi’** ‘Erz [ore], Metall, Eisen [iron]’; also Egyptian(H) bi’ ‘Firmament, Himmel [sky], Eherner (woher das Eisen stammt) [where iron comes from]’; Egyptian(H) bi’t ‘Quarzit [quartzite]’; Egyptian bi’ ‘Bergwerk [mine], Bergwerkgebiet [mining area/place]; Egyptian bi’-w ‘Bergwerkprodukte [mine products]’; Egyptian bi’t ‘Steinbruch [rock breakage]’; Egyptian bi’-n-pt ‘Eisen, Meteoreisen, Siderit’ > Coptic benipe; Egyptian(F) bi’t ‘quarry’:
UACV-1268a ***payu / *papayuC** (redupl) ‘ceremonial staff’: M88-pa64; KH/M06-pa64 ‘ceremonial staff’: Cp pávyu-t ‘flint-tipped, shell-inlaid ceremonial staff’; Ls pávyu-t ‘ceremonial wand’.

UACV-1268b *__ka-payu > *kapo__ ‘knife’: formerly from M88-ku13; KH/M06-ku13, we here use Ktn and Sr, and add Hp, all of which likely tie to pa64 above: Ktn kavoč; Sr kavööţ, kävi / kävayu (acc.) ‘knife’. Add Hp poyo ‘knife’. Hp poyo and the latter part of Sr kavöö/kavayu (acc.) match well. If *-payu is original, then Hp assimilated the first vowel to the second: *…payu > *puyu > Hp poyo. Sr leveled both to ö, s.th. midway between a-u, but in the accusative Sr kävayu may have preserved the original voweling *-ayu. After uniting the forms in a (‘ceremonial staff’) and b (‘knife’), I read in Pauketat (2009, 139-42) that some plains tribes, the Aztecs, and other Mesoamericans chipped, from flint, large elaborate ceremonial knives, which were relatively large and meaningful. The Tepiman forms below may also relate to all the above as well. Flint, obsidian, and sharp rocks used for knives are usually found on rocky hills and cliffs, and though the semantics are not identical, the reduplicated *papayu above may well explain the dichotomy in the Tepiman forms of *papa vs. *papo.

UACV-1268c *__papayu > *papa / *papo__ ‘rock, cliff’: B.Tep264 *vavoi 'cliff'; M88-pa54; KH/M06-pa54: TO waw ‘cliff, bedrock, a rock’; NT vávoi; ST vaapai; PYp vava ‘hill, mountain, cliff’; PYp vaves ‘rocky terrain’; and Nv baba ‘roca, peña, peñasco’. The Cahitan forms—My baabu ‘barro [clay]’ and AYq vaavu ‘clay’—vary semantically from Tepiman, but the phonological identity with Tepiman and a slight semantic shift to ‘clay’ deposit/place (quarry) from flint/ore/rock deposit/place (quarry) make it probable. See *pa(pa)yu ‘ceremonial staff’ (M88-pa64) above.

The -pela of Hopi tùupela ‘wall, cliff wall, wall face, precipice’ also means ‘cliff’ as do the Tepiman forms, and as ‘flint’ comes from rocky deposits, the semantic change from ‘flint area’ to ‘rocky desposit, cliff’ is viable and may be from a different voweling of Egyptian bi’t ‘quarry’ (< *bi’at (with ’ > Hopi l) vs. *baia’ > UA *payu. [iddddua] [NUA: Tak, Hp; SUA: Tep, TrC]

466 Egyptian(H) nm ‘Messer [knife]’; therefore, Egyptian p’-nm ‘the knife’:

UACV-1270 *__panomi__ ‘knife, iron, tool’: B.Tep257 *vainomi ‘iron, tool’; M88-pa51; KH/M06-pa51: remember *p > v/w in these Tep languages: TO wainomi ‘metal, knife’; LP vaiñum v; PYp vainomi ‘knife, metal’; NT vaiñomi ‘iron, tool’; ST vaiñum ‘iron’; Nv wainomi, pl: vap’ainomi ‘hierro’ and Tr wenomí ‘metal, money’ though Tep *vainomi is likely the source of Tr wenomi ‘metal, money’ as a Tr cognate should show p. [*a > ai/_n] [SUA: Tep; NUA: Num]

467 Egyptian(H) d̲b’-w ‘Blätter (der Bäume), pl [blades/leaves (of a tree)], Laub [foliage]’ > UA *sawa ‘leaf’:

UACV-1294 *__sawa__ ‘leaf’: VVH64 *sawa ‘leaf’; M67-255 *sawa ‘leaf’; B.Tep54 *haahaga ‘leaves’; L.Son233 *sawa ‘hoja’; CL.Azt97 *šVwV ‘leaf’; M88-sa1 ‘leaf’; Stubbs2003-45; KH/M06-sa1 *sawa: NP sawapi ‘sage’; Eu sáwa; Tbr samoa-r / samwa-t; Yq sáwa; My sawa; Wr sawá; Tr sawá; Cr samwá; Wc sáaváaríi ‘tener hojas [have leaves]’; CN iswa-tl. For Tep, remember *s > h and *w > g: TO haahag; Nv haahag; PYp haagar; NT áága; ST haaha’. As one can see, a form of *sawa appears in every SUA language. Note Cr’s similarity to Tbr in *w > mw. Given bilabials’ tendency to disappear as first consonant in a cluster, d̲b’ > sawa is feasible if the 2nd and 3rd consonants were clustered, since d̲ > s and ’ > w. [Tbr/Cr *w > mw] [SUA: Tep, TrC, CrC, Azt]

468 Egyptian(H) **’wt** ‘Länge [Length], Spanne [space], Dauer [duration, length]’; Egyptian ’wi ‘lang, weit sein [be long, wide]’; less likely Egyptian(H) wti ‘alt [tall], gross sein [be big], wachsen [grow]’:

UACV-1389 *__otï / *utu / *uta__ ‘long, tall’: I.Num25 *ïtï ‘long, tall’; M88-ï10 ‘long, tall’; KH/M06- ï10: Mn ïdï-tu ‘long, tall, lanky’; Mn ïdï-wïnï ‘be tall’; NP otï’yu ‘long, tall’. Also NP o’odï’yusu’ma ‘tallest’. Jane Hill (p.c.) provides a brilliant addition in Ls ’éé̌-i ‘high, up, above’ whose vowel fits NP and whose -č- must be from *-t- or t clustered. Add Tb ’utudu ‘tall’ and perhaps Wc ’ata ‘long and thin’? In light of *u > ï in Num, Tb likely has the original vowel. Wc is a different voweling. [NUA: WNum, Tb; SUA: CrC]

469 Egyptian(F) **whi** ‘escape, miss, fail’; Egyptian(H) whi ‘1 entgehen [go out], entgleiten [slip out], ausströmen [pour out, stream out], entrinnin [run/trickle out]’; 2 verfehlen [miss], fehlshlagen [fail], fehlshläge erleiden [suffer loss]’; Egyptian whi ‘Durchfall [diarrhea]’:

Hopi **wahi-** ‘throw out (pl objs); Hopi wahi-vï ‘discarded, thrown-out’; Hopi often levels vowels which may mean a tie between Hopi wahi and wehe: Hopi wehe-(k-) ‘for liquid to get spilled out, overflow’; and the Hopi should be combined with the Taracahitan terms below:

UACV-1395 *__wï’ka__ ‘lose’: Wr we’ka-ní ‘get lost, vi’; Wr we’kapú-na ‘lose s.th., vt’; Wr we’katé-na ‘lose a bet or s.th., vt’; Tr we’ká- ‘perderse, extraviarse, vi’; Tr (w)e’kawa ‘perder, extraviar, vt’; Tr we’ka-bú- ‘perder [lose], olvidar [forget], vt’; Tr we’kaba ‘olvidarse, equivocarse’. Only wï’-, -ka likely being another morpheme. Hopi aligns with definition 1, and Tr and Wr align with definition 2. [NUA: Hopi; SUA: TrC]

470 Egyptian t’-imnti ‘the west’; Egyptian(H) imntiw ‘die Westvölker [the west-people]’

UACV-1544 *__tïmïnïmïn__ ‘north, west’: BH.Cup *təmám ‘north’; HH.Cup *təmáám ‘north’; KH.NUA; M88-tï37 ‘north’; KH/M06-tï37: Sr tïmïnïm ‘west’; Cp temám ‘north’; Cp temám-ka ‘to the north’; Ca témam-ka ‘north-ward’; Ca temámkawičam ‘Serranos’; Ls tumáá-m-ik ‘northward’. Sr tïmïnïm ‘west’ and especially Sr tïmïnïmnu’ţ

‘one(s) from the west’ suggest a reduplicated -mïnï- portion, which in turn suggests that reduced clusters of nasals -mn- > -m- better explain two m’s in the Cupan forms rather than Sr creating new consonants out of thin air. [Ls u; Ca/Cp e] [NUA: Tak]

471 Egyptian **rwt** / rwty ‘das Aussen [outside], Aussenseite [outside]’:
UACV-1584 ***tïta** (< *tuta) ‘outside’: Ch tïïrava-nt ‘outside, outdoors’; CU tïïra-va-(ci) ‘outside of, out of’; CU tïïra-ruxwa ‘out of’; WMU tűűra-vaa-t / tűűravan / tüütavat ‘out, outside, adv’. [NUA: SNum]

472 Egyptian(F) **ḫpt** ‘oar’; Egyptian ḫpt ‘Steuerruder [steering oar/rudder]’:
UACV-1596 ***ipa** ‘wooden paddle’: Munro.Cup88 *’íval ‘wooden paddle’; KH/M06-’i14: Cp ívə-l; Ls ííva-l. If *hupa > *hopa > Cp iva and then borrowed into Ls. [NUA: Tak]

473 Egyptian(F) p’y ‘that of, possessive article’; p’y-i- ‘my s.th. (masculine); p’y-k- ‘your …’; p’y-f- ‘his…’; a common Late Egyptian possessive structure is p’y-i rd ‘my foot’ (that-my of foot’ or ‘my-possession of foot’), so UA *pa’i ‘have’ is similar; also Egyptian p’-n- ‘that of, what belongs to’:
UACV-1702b ***pa’i** ‘have’: Haugen (2006c) *pV lists the above and Cm -pai ‘have’; Sh -pai ‘have’; TSh pa’in / pa’en ‘have (inalienable)’; SP -piN ‘possessed noun absolutive’ and instrumentals. [SUA: TrC; NUA: Tak, Num]

474 Egyptian(F) **rdi** ‘give, put, place’:
UACV-1743b ***tali / *tari** ‘put’: CN tlaalia; Pl taaliya; Po tali; T tlolla; Z taaliya. [NUA: Tak, Hp; SUA: TrC, Azt]

475 Egyptian(H) **p’ʕt** ‘Wachtel [quail]’; Egyptian sw ‘he, she, it, pronoun’ has counterparts in UA:
UACV-1752 ***supa’awi** ‘quail’: Yq subá’i ‘codorniz [quail]’; AYq suva’u / suva’i ‘quail’; My suubau ‘codorniz’, pl: su**ba’awi**m; the vai- of NT vaivóli corresponds with *pa’i (PUA *p > v; *’ > ø in Tep) as in Yq and AYq *supa’i minus initial **su*. UA *-pa’awi could hardly be a better match of Egyptian p’ʕt. [SUA: TrC, Tep]

476 Egyptian sw ‘3rd person sg obj/reflex’; Egyptian swt ‘3rd person sg’ subj in noun clauses, etc
UA *su ‘3rd person sg’ + Egyptian p’ʕt ‘Wachtel [quail]’; bring the other examples
UACV-1752 ***supa’awi** ‘quail’: Yq subá’i ‘codorniz’; AYq suva’u / suva’i ‘quail’; My suubau ‘codorniz’, pl: suba’awim; the vai- of NT vaivóli corresponds with *pa’i (PUA *p > v; *’ > ø in Tep) as in Yq and AYq *supa’i minus initial **su*, but here, Yq and My show differences after *(su)pa..., while Yq and NT agree in *pa’i. [’ = ’] [SUA: TrC, Tep]

477 Egyptian(H) **ḫn** ‘ordnen [order], befehlen [command], abordnen [delegate]’; Egyptian(F) **ḫn** ‘equip, command, charge s.o. with a task’:
UACV-1854 SUA ***hula / *hura** ‘send’ would be PUA *huna: L.Son69 *hura ‘enviar [send]’; M88-hu13; KH/M06-hu13: Op ura; Eu húra; Wr uhúla-ni; Tr húra. [SUA: TrC]

478 Egyptian **ḫn** ‘order, command’: **UA**CV-1857 ***win** ‘send’: KH.NUA: Sr wiaan ‘send, vt’; Cp wíwine ‘send on an errand, vt’; Ls wíwi ‘send s.o., as on an errand’; as *n > SUA r, this NUA set may belong [NUA: Tak]

479 Egyptian(H) **d’rt** ‘Skorpion’:
UACV-1886 ***suyi** 'scorpion, sting': M88-su19 'sting, v’; BH.Cup *súyi 'sting'; Munro.Cup116 *ṣúúyi-la 'scorpion'; KH/M06-su19: Cp súye 'sting, v’; Cp suyve 'stinger'; Cp súyi-l^{y} 'gnat, biting insect'; Ca súyi-l^{y} ‘scorpion’; Ls súy-la 'scorpion'; Ls súyi ‘itch, v’; Hp soya(k) ‘get bewitched’; Ls suypi-š 'stinger’. [NUA: Tak, Hp]

480 Egyptian(F) m’’ / m’ ‘see, look on’; Egyptian(F) m / m’ ‘look, behold!’:
UACV-1914a ***mï’** ‘look!’**:** Hp me ‘you see, listen, behold, hark, look’; Tr me’ne ‘see, look, observe’.
UACV-1914b ***mahay / *ma’ay** ‘see, find’: Kw mehe ‘find, see, notice’; Ch mahí ‘find’; SP maiC ‘find, discover’; WMU ma’ái-y / maái- / maáy ‘see, find’; CU maáy ‘see, have found, find’; Ktn mayk / mayhk ‘look forth or peep, as through a crack’; perhaps first part of NP muhabïpïnui ‘peek at’. [NUA: Hp, Num, Tak; SUA: TrC]

481 Egyptian(H) ʕʕ ‘schütteln [shake]’:
UACV-1928a ***wiwi-puku** ‘tremble’: Sapir; B.Tep40 *gigivukui ‘to tremble’; M88-wi12; KH/M06-wi12: TO gigiwuk; Nv gigibuku; PYp gigvia ‘tremble, shake, shiver, vi’; NT gigívukui; ST gi’ivuk; Sapir ties CN wiwio-ka ‘shake from cold’ and Tep. CN wiwiyoka / wiwiyokowa ‘tremble, shake, shiver’ corresponds to *wiwi-puku well enough, since Tep *gigivukui roughly equates to UA *wiwipuku, and if CN lost p intervocalically, as it often does, or if this is a compound of an element that lost initial p in CN, then Tep *gigivuku and CN *wiwi-ok(ow)a correspond well, CN -y- likely excrescent following i. In fact, NT gigíívukui ‘temblar, vi’ and NT gigíígidyi ‘sacudir, vt’ would suggest such a morpheme break. With that morpheme break, consider:

UACV-1928b ***wiwila** ‘shake, swing’: Hp wiiwila ‘shake, swing, wave around’ and Tbr wimwirá ‘temblar’ are also likely, both showing a 3rd consonant liquid, not unlike the one NT form. Note that *pukur ‘pierce’ fits the second morpheme, and shaking and piercing come together in Num, as creatures shake when pierced. [CN saayoolin ‘fly, n’ < *saipoli similarly lost medial -p-] [NUA: Hp; SUA: Tep, TrC, Azt]

482 Egyptian(H) wx’ti ‘paar Sandalen [pair of sandals]’:
UACV-1955 ***wakaC** ‘shoe’: BH.Cup *wá...at ‘shoe’; M88-wa22; KH.NUA; KH/M06-wa22: Cp -waq’a ‘shoe (poss’d)’; Ca wáqa-t ‘shoes’; Sr waqaa-t. [NUA: Tak]
UACV-1956 ***wok** ‘shoe’: My wok ‘put on shoes, v’; Tb woŋgo-l ‘shoe’. Might this tie to *wok ‘foot, footprint’ at ‘track’? [NUA: Tb; SUA: TrC]
Possibly with UACV-1955, Ls wáčxa-t ‘shoe’ has an extra C which may align with Tb wacat~’awac ‘walk’; Tb waacišt ‘walking aid (cane, shoe, etc)’; Tb wahcipïï-l ‘moccasin’; Tb(M) wacibiš-t ‘big shoe’; Tb(M) wacibïï-l ‘good walker’ but such may be another set.

483 Egyptian(H) w’g ‘jauchzen [rejoice, shout with joy], rufen [call, cry]’:
UACV-1975a ***wa’aNki** ‘shout’: NP wa’agi ‘shout’; Ch wa’áŋi ‘shout’; SP wa’áŋi ‘shout’;
UACV-1975b ***wa’a(N)ti-ki** ‘whoop’: SP wa’a-ci-ki ‘whoop’ with which CU wïcígay ‘holler, shout, whoop’ and WMU wa’áčigí / wa’áčüġű-y / wa’áčiyí / wa’á-čiyé ‘shout, yell, vi’ are cognate. [NUA: Num]

484 Egyptian **m’st** ‘knee’:
UACV-942 ***ta-mo’** ‘knee’: KH.NUA; M88-ta53; KH/M06-ta53: UA *ta- is often a prefix from ‘leg, foot’; thus, UA *-mo’ is the focus here: Hp tamö(’at) ‘knee’, tamöc- (combining form); Sr tamööç ‘knee’, -tamöö’ (poss’d form); Ca támi-l ‘knee’; Cp támi ‘knee’. Because Ca and Cp i < *o and Hp and Sr ö < *o, all four of these agree in the first four segments as *tamo. Hopi and the Sr possessed form both show ’ as a 2nd consonant. Add Ktn tamoc ‘knee’. Is -c in the Hp combining form a fossilized absolutive suffix, as it would be in Sr and Ktn? If not, the cluster -’s- (stop + fricative) becoming the affricate -c- (ts: stop + fricative) is a possible source and natural enough, since the stop-plus-fricative feature is maintained. For the NUA c cannot be from PUA *c, since PUA medial *-c- > NUA –y- (Manaster Ramer, 1992b); so NUA c must be from other sources—< *-C-ta if from a UA absolutive suffix. [NUA: Hp, Tak]

485 Egyptian(H) psђ ‘beissen [bite], stechen (Mücke, Skorpion, Fliege) [sting (gnat, scorpion, fly)]’:
UACV-2185 ***upcu** (> *(p)upcu > Tep uwsu > usu) ‘stinger’: LP usu-di ‘a stinger’; ST upsuga’n ‘su aguijón [its stinger]’; TO uuš ‘stinger of an insect, arrowhead’; Nv usu ‘el aguijón’. For Tep *(p)upsu, loss of v/p adjacent to u and in a cluster would be so natural that its survival in ST upsu is surprising. [SUA: Tep]

486 Egyptian(H) **xfty(w)** ‘Feind [enemy(ies)], Gegner [opponent(s)]’; Egyptian(F) **xft** ‘in front of [facing]’; UA ***kaytu** ‘enemy, opponent’: KH.NUA; M88-ka36 ‘enemy’; keep in mind the bilabial as first segment of the cluster -ft- is lost, yet intervocalic -t- > -l- in Takic, so the fact that it remains t does suggest the cluster, with -y- anticipating the i after the t; and the Egyptian pl suffix -w is apparent in Takic: Cp -qáytu 'enemy'; Ca káytu 'rival, competitor in a game, enemy’; Ls káytu-š 'enemy, opponent in a game'; Sr -qaiš 'opponent, enemy’; Ktn kayšu-c ‘opponent’. So from Egyptian xaftyw > *katyw > UA kaytw. [e1,e2,e3] [NUA: Tak]

487 Egyptian(H) t̲m ‘denken [think]’:
UACV-2288 ***tama** ‘remember’ or Num ***na-suN-tama** 'remember': TSh nasuntamah ‘remember’; Sh na-suntama ‘remember, v’; Cm nasutamïkatï tamai ‘think about s.th., remember’; Sr camaqaan ‘think’; Sr -caamqana' 'thought’. [*t > c] [NUA: Num, Tak]

488 Egyptian(H) **šʕt** ‘eine Brot/Kuchen [kind of bread/cake]’; Egyptian **šʕyt** ‘Schot-Gebäck (in verschiedenen Forman und Arten) [Schot biscuits or baked goods of various forms and kinds]:
UACV-266c *sawa ‘make tortillas or bread’ and ***sawiC-ta** ‘bread’: BH.Cup *ṣáw 'make bread'; M88-sa20; KH/M06-sa20: Ca sáw 'make tortillas'; Ca sáwi-š 'tortilla'; Cp ṣáwi-š 'bread, acorn bread'; Sr ṣaawt 'bread, acorn bread'; Ls ṣáwa/i 'singe, get singed'; Ls ṣááwa-kaa 'cook tortillas’. [e1s1,2’2,3t] [NUA: Num, Tak; SUA: Tep]

489 Egyptian(H) **xt** ‘Holz [wood], Stock [stick], Stab [rod], Baum [tree], Wald [woods, forest], Pfosten [post], m’:
UACV-2408 ***kut** (AMR) / ***kut-(ta)** ‘tree, wood, firewood’: Sapir; M67-170d *kuta 'stick of wood'; L.Son101 *ku ‘palo, madera’; B.Tep129 ku’agi 'firewood' and B.Tep120 *kua’agï ‘to get firewood’; CL.Azt280 **ku(’)a ‘tree, wood’ (besides CL.Azt177 kwawï tree, wood); M88-ku4,6 ‘tree, (fire)wood’; AMR 1993a *kut; KH/M06-ku4 *kut (AMR): Gb kotá ‘palo, leña’; Sr ku|t ‘fire’; Sr kuṭaa|i ‘gather firewood’; Sr kuṭaa|t ‘firewood, wood, stick’; Ktn kut ‘fire’; Ktn kučat ‘stick, pole, firewood’; Hp koho ‘(fire)wood, stick’; Hp kotqa ‘wood pile’; Eu kut ‘palo [pole]’; Tbr utá ‘árbol [tree], palo [pole], viga, madera [wood], leña [firewood]’; CrC *kïye (<*kuyï) ‘tree, etc.’; My kútta ‘madera [wood], leña [firewood]’; AYq kuta ‘stick, pole’; Wr kuú ‘palo, leña’; Tb ku-t ‘fire’; Tb kutuugat ~ ukutuk ‘gather

firewood'. Egyptian xt 'wood' (masc) is in contrast to Egyptian xt 'fire' a feminine noun wherein the final -t is the feminine noun suffix; for xt 'wood' the t is part of the noun stem. Other Uto-Aztecanists list Ca, Cp, Ls, Ktn *kut 'fire' and while the UAnists' usual tie of wood with fire is possible, it may be otherwise. [NUA: Tak, Hp, Tb, Num; SUA: TrC, CrC]

490 Egyptian(H) wẖm 'wiederholen [repeat], wieder tun [do again]':

UACV-2623 ***omV** 'two': CL.Azt180 *oomə 'two': CN oome; Pl uume; Po omem; T ume; Z oome. Some combine this with *wokay; however, due to a differing 2nd C, these are likely a different stem, because *wokay is consistent in 4 of 5 segments with *wakay also, but omV has only initial o in common. [SUA: Azt]

491 Egyptian(H) phrw 'Wasser [water]':

UACV-2095 ***parawa** 'juice, soup, stew': M88-pa11 soup/caldo; KH/M06-pa11: Hp paala 'juice, soup'; Eu varáwa 'caldo [broth]'; Wr pa'wíla 'caldo'; Tr ba'wi-rá 'hacer caldo'; My bá'wa 'caldo'. Ken Hill adds TSh paawa 'juice'. Add My bá'awa 'jugo [juice], caldo, sopa [soup]'; AYq va'awa 'juice, soup, etc'; Yq bá'awa 'caldo' (*r > ' in Cah); TO wadag '(be) wet'; TO wadagi 'juice'; NT varáágadï 'soup'; ST vaar ga'n 'caldo, jugo'; PYp vargar 'soup, liquid, juice'; PYp varag 'wet'; Nv barhakaddi 'caldo' (devoicing g > k); Cr há'ara'a 'caldo, suero de queso [whey of cheese], lágrima [tear]'. Much evidence for 3 syllables: *parawa > Tep waraga. Tbr wa/va/ba-ta-rá-n 'sopa' (Tbr wa/va/ba-ta 'agua'). [iddddua] [NUA: Tak, Num; SUA: TrC, Tep, CrC]

492 Egyptian(H) **iʕi** 'waschen [to wash], reinigen [to clean], sich waschen [wash self], baden [bathe]'; or Egyptian iwy 'bewässern [to water, irrigate], ausgiessen [to pour out]'; less likely Egyptian(H) **iw'** 'fortnehmen [carry away, take forth]':

UACV-2500 / 382 ***pa'-iwi / iwï** 'carry/fetch water': B.Tep266 *va'igïi 'fetch water'; M88-pa12 'carry water'; KH/M06-pa12: Cp pái / páwi; Ca páw; Wr pa'i; TO wa'ig(ï) 'get liquid (usually water)'; Nv vaigi 'traer agua [bring water]'; PYp va'igim 'get water'; LP va'ig; NT váíguii 'fetch water'; ST vaigia 'get water'; ST vaigiñ 'get water for s.o.' Note similarity between the latter parts of Tep *va'igï... 'fetch water' and Tep *ku'agï... (< *ku'awï '(get) firewood'; both show Tep *-'Vgï 'fetch' (< *-'Vwï). Because a cluster or other things could yield a glottal stop besides the traditional h (> ' in Tep), ' is as viable as h. [iddddua] [NUA: Tak; SUA: Tep, TrC]

493 Egyptian phr p'y would mean s.th. like 'medicine/power is his' or 'power possessor':

UACV-1797 ***pahapi(C)** 'supernaturally powerful being': KH.NUA: Sr päähavit 'supernaturally powerful being'; Gb páhavet. [iddddua] [NUA: Tak]

494 Egyptian(H) ẖd 'weiss sein [be white], hell warden [become bright]'; Egyptian ẖdt 'Weisse [white, whiteness], n.f.; Egyptian t'-ẖdt 'the-white' a phrase for 'white'; I had noted UA *tosa aligning with Egyptian t'-ẖdt 'the-white' and then later found a similar diffusion in Bartholomew's (1965, 334) dissertation *The Reconstruction of Otopamean*, in which we see under 105 'blanco-white': Otomi t'áši; Matlatzinco t'oši; Mazahua t'ošï; and note the glottal stops in the variants of Wr(MM) to'sá / tó'osá / tohsá / tosá 'white':

UACV-2543a ***tosaC** 'white': Sapir; VVH31 *to$_u$sa 'white'; B.Tep222 *toha 'white'; B.Tep 223 tohari/tohadi 'to whitewash'; I.Num220 *tosa 'white'; L.Son315 *tosa 'blanco'; CL.Azt138 *ïsta 'salt, white'; 288 **tosa 'salt, white'; M88-to3 'be white'; KH/M06-to3: NP toha-ggwiddadï; TSh tosapi(tïn); Sh tosaC; Cm tosa(pi); Kw see-(gi-); Ch tosá-ga; SP toša(C);WMU sá-ġa-rï; CU sá-ġa-rï; Yq tósa'i; AYq tasali/tosari; My tósali/tósari; Tbr tosá-r; Wr tohsána-ni; Wr mo'tosá 'white hair'; Tr ŕosá-kame; pl: o'tosá-kame; TO toha; Nv stoa; PYp toha; NT tóha; ST t^{y}ua/čua; Wc tušaa; CN tiisa-tl 'whitewash, white earth'; CN ista-tl 'salt'; CN istak s.th. white; Pl ista-t 'salt'; ista-k 'white'. We see *s > h in WNum again. Note the glottal stops in the variants of Wr(MM) to'sá / tó'osá / tohsá / tosá 'white'.

UACV-2543b *tusa 'white': While Wc and most forms suggest *tosa, CN tiisa-tl 'whitewash, white earth' and ST *tua < *tusa.

UACV-2543c *sa-ka (< *tosa-ka)'white': CU sá-ġa-rï 'white'; Kw see-(gi-) 'be white'; Ca séken 'pale'. These simply lost the first syllable of *tosa, and the stress patterns suggest it in SNum. [*s > h in WNum] [NUA: Num, Tak; SUA: Tep, TrC, CrC, Azt]

495 Egyptian(F) ʕ' 'here, there':

Wr i'wá 'here'. Wr's frequent glottal stop anticipation makes this a match.

496 Egyptian(H) **sm'** 'vereinigen [to unite], zusammensetzen [put together]':

UACV-2618 ***sïma' / *sïmï'** 'one': Mn sïmï'; NP sïmï'yu; TSh sïmï; Sh sïmmïC; Cm sïmï; Kw suu- / suuyu; Ch suu; Cr saï´; SP sïï / šuu; WMU süwíis / suwis; CU súu-yi-s; Wc ṣeevíi- / ṣewí, ṣevítï 'sbj'; ṣeime 'obj'; TO hïmako; PB(B.Tep) hïmad; Nv mako; maddo; NT ïmóko; NT(B.Tep) ïmádo; ST ma'n; ST(B.Tep) maad; Eu sei; Op se ; Tbr hemé; hemetó-r ; Sr haukp Hp sïïkya / sïïkya'; CN see. Gb ṣoṣóvram 'otras'. Tak and some SNum show *u instead of *ï, perhaps due to bilabial m. Miller lists forms in all branches except Tb. Tak *supul may be from *sïm-pVL, thus, p instead of v because of a cluster. A final glottal stop or some consonant is apparent in Num and in the gemination of Tbr -to (vs. -ro). Comparable to the Egyptian meanings 'unite' and 'put together', note TO hema 'one' and TO hemapad / hemapai 'gather, collect'. [cluster] [NUA: Num, Hp, Tak: SUA: Tep, TrC, CrC, Azt]

497 An Egyptian demonstrative plural pronoun system (these/those) is built on ip-:

	these/those	vocatives (O nouns!)		
Masculine plural	ipn	ipw	(these/those)	
Feminine plural	iptn	iptw	(these/those)	(Allen 2000, 53)

In UACV-2667 are listed a sample of 'this/that, these/those' terms, though many more could be assembled; nevertheless, note that all the listed UA forms begin with i- (like all the Egyptian forms) and many show *-p- (-v-) after the vowel, as in Egyptian, *-ip (ivi/iva), and others show *itV, and in light of -p- > -ø- (p disappearing) as first consonant in a cluster *iptV > *itV, as we see elsewhere, then *ipV and *itV (with some -n-) exhibit impressive parallels to the Egyptian non-vocative (left column) demonstrative pronouns:
UACV-2667a ***i-*** 'this': VVH 116 *'i 'this'; B.Tep306 *'idá/*'idí'i 'this (one)'; BH.Cup *'i(ví) 'this'; HH.Cup *'iví- 'this (obj. case)'; KH/M06-dm1: Mn ihu/ekahuna; NP isu; WSh itïn (acc. ikka, pl. itïïn) 'this right here'; Cm isï; Kw ina; Ch ic(ï) (pl. im(ï)) (P); CU in, ič 'this, these'; Hp i' (acc. it, pl. ima); Sr ivi' (acc. ivi(ï-), pl. iim); iip 'here'; Ca í'i (acc. ív'i); Cp í'i (acc. iví-, ivíŋx); Ls iví; ivá' 'here'; Tb ih 'here'; TO iia'a 'here'; NT íd^{y}i; ST d^{y}ii'; My i'i; Wc óóva 'aqui (limitado)'; CN iin (proximal particle) 'this, these'; Pl ini.
UACV-2667b ***ya*** 'this, here': NP yaa 'here'; Hp yàa 'this, here'. [NUA:Num,Tak,Hp,Tb; SUA: Tep, TrC, CrC, Azt]

498 Egyptian(H) ṯmi 'vereinigen [to unite], verbinden [to connect, join]' or
Egyptian ṯmṯ 'verbinden [to connect, join], vermischen [mix]':
UACV-2335 *__tama__ 'tie': TSh tamah 'secure, tie tight, vi'; Sh tama 'tie, vt'; Cm tïïhtama' 'string, yarn, ties'. [iddddua] [NUA: CNum]

499 Egyptian -i 'present';
UACV-2698 *__-i / *-y(V)__ 'present': Ch -yï (Press 1979, 64, 71); WMU -y / -i 'present tense verb suffix'; SP -i; CU -i; Wr -i (Miller 1996, 140); Hopi -i 'imperfective' (for some verbs). [NUA: Num, Hp; SUA: TrC]

500 Egyptian -w 'plural suffix':
Cp -wə 'present plural suffix on verbs'; Tb šuunaawa-l 'middle sibling, neither oldest nor youngest'; Tb is from šuna 'heart' + wa.

501 Egyptian(F) imi 'give! place! cause!' (imperative)'
UACV-969 *__himi__ 'give (perhaps pl. obj's)': NP himmi 'give, pl obj's vt'; Cm himiitï/himi-ka-tï 'give pl. obj's'; Tr nihimi-ma 'dar [give], entregar [hand over to]'. [e1,e2,e3] [NUA: Num; SUA: TrC]

502 Egyptian(F) yw 'is/are': Kw -yu 'same-subject contemporaneous'. [iddddua]

503 Egyptian(F) ḫ'ti 'cloak'; Egyptian(F) ḫ'tyw 'fine linen';
Egyptian ḫ'ti 'Hülle [cover(ing)], Umhang [wrap, cape]'; Egyptian ḫ'tiw 'feines Leinen [fine linen]':
The -ho'ori portion of AYq taho'o(ri) 'clothes, clothing'; Yq tahi'ori 'ropa [clothing]'.

504 Egyptian(F) wsx 'broad, wide': Sr wiiṣa' 'be wide'.

505 Egyptian(H) ḫm / ḫmt 'Majestät (Königin, Göttin) [majesty (kingly, godly)]':
Ktn wot 'chief, male or female, or chief's wife'.

506 Egyptian(H) nhp 'toben [romp about]'; Egyptian nhp/nh' 'bespringen [cover, mount, jump on, beget]'; Egyptian nhp 'entkommen [escape], sich entziehen [withdraw]'; Egyptian nhp 'früh aufstehen [get up early]':
Mn(Lamb) nohi '(of animals) to scramble with (another animal, in playing), jump on'.

507 Egyptian(H) tp 'Kopf [head] , Haupt [head, chief, main], Spitze [point, tip, peak]':
Mn(Lamb) topo 'peaked, pointed, sticking up or out'.

508 Egyptian(H) rmn 'Ruderreihe [oar-row, row of rowers]' (The consonants of Egyptian rmn also mean 'shoulder, side, half' and as one side of rowers is half of the two rows of rowers, a dead animal's jaw on the ground with two rows of teeth very much resembles two rows of rowers—not an exact match, but more probable than not; the Wr reflex Wr(MM) táme 'quijada [jawbone]' supports such; similar words are Egyptian rmn 'Rang [rank], Reihe [row]' and Egyptian rmn 'abgeschleift (Mauer) [ground down/eroded (wall)]' as a row of teeth wear down like a row of adobes constituting a wall wear down also); and Tr shows ŕ (as usual with Eg/Sem r > UA *t) and Numic and Tb actually show the final -n of *raman:

Mn	táwa	Hp	tama; piŋyanpi (adj)	Eu	tamít / támit; zarátamit 'muela'
NP	tamaC	Tb	taman-t	Tbr	tamó-r; tamáN-r
TSh	taman	Sr	tamač	Yq	támi

Sh	taman	Ktn	tama-c	My	tammi;
Cm	taama	Ls	tamá-t		tampa'arim 'muelas'
		Ca	táma-l	Wr	tamé
Kw	tawa-bi	Cp	tam'a '&mouth, lips'	Tr	ŕamé; matá
Ch	tawá-mp(i)	TO	ki'i; taatami; tam; tamš	Cr	tame; sï'ïtame 'muele'
SP	taŋwaN	Nv	tatami; mamturi 'muelas'	Wc	tamé (vs. táme 'nosotros')
WMU	ta<u>wa</u>-pp*i*	PYp	tama		
CU	tawá-pï	NT	taatámu 'teeth'	CN	tlan-tli
		ST	taatam; tatmutda 'cure t'.		

UACV-2366 ***raman / *taman** (AMR) 'tooth'; Manaster-Ramer deserves the credit for discovering/adding the final -n of the reconstruction (see Tb): Sapir; VVH29 *ta$_s$ma 'tooth'; BH.Cup *tama mouth, tooth; HH.Cup *tama; B.Tep214 *taatamu/i 'teeth'; M67-442 *tam; I.Num207 *tamaN; L.Son272 *tami diente'; Munro.Cup133 *tamá-t; M88-ta14; KH.NUA; KH/M06-ta14 *taman (AMR): A pan-UA stem showing reflexes in all languages; but a few particular patterns are apparent, such as a final nasalization in Num, Tb, and Tbr, some distant branches; and a high front 2nd vowel in TrC rather than the *a* of the other branches. Note the rounded 2nd vowels in Tbr, NT, and ST. As Sapir (1913) notes , spirantization of the nasal (*m > ŋw > w) occurred in SNum, as well as Mn. Preceding the absolutive suffix in both 'tongue' and 'tooth', note nasalization in Ch and SP and stops in Kw and CU. Bascom lists *taatamu-i 'teeth' and *taatamudï / *taatamidï 'his teeth'. Of great interest is the -mm- in My tammi 'diente [tooth]' because the alternative forms of My yomnia / yommia 'answer' < *yawamin also show *-mn- > -mm-, which validates AMR's reconstruction of *raman for 'tooth' in SUA. What's more, Wr(MM) táme 'quijada [jaw, jawbone]' is near the meaning of a jawbone's row of teeth. [iddddua] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

509 Egyptian(H) h'i 'kommen [come], abgehen [go away], zurückgehen [go back]';
Egyptian(F) h'i come down, go down, ascend and descend, come and go':
Wr(MM) ho'í 'andar [walk]'.

510 Egyptian (F) h'i 'mourn, wail'; Egyptian(F) h'yt 'mourning'; Egyptian(F) h'w 'mourners':
Wr(MM) ho'kéwa 'lágrimas [tears]'.

511 Egyptian(H) ḫ' 'Hinterkopf [back of head], Rückseite [back side]'; Egyptian(F) h' 'occiput';
Egyptian ḫ' 'back of the head' (Allen 2010, 87):
Mayo hoo'o 'espalda [back]'; Yq hóo'o 'espalda'; Hopi hòota 'back'. SNum: Kw howaa-vi; Ch ho(a) 'back'; SP oaa-vi; WMU öaa-vi / öáa-vi 'back, n'; WMU öáá-n / öáa-n / öǽ-n 'my back'; CU öǽæ-vi; Wr(MM) ho'pá / ho'opá 'hombro [shoulder], espalda [back]'. Cf. 370 Egyptian ḫ' 'behind, around'. [NUA: SNum, Hp; SUA: TrC]

512 Egyptian(H) ini 'holen, herbeibringen, wegholen, wegtragen, wegbringen, kaufen, mieten, an sich bringen'; Egyptian(F) ini 'bring, fetch, carry off, reach, buy':
Hp ini 'contents of an open shallow container'; Hp in-ta 'go along carrying obj in a shallow, open container'; Hp in-to 'go to bring in a shallow, open container'. [iddddua]

513 Egyptian(H) **<u>d</u>ḫʕwt** 'bitterkeit [bitterness]'
UACV-237b ***sïhïw(kV)** 'sour': PYp he'egi 'sour'; PYp he'egker 'vinegar'; TO he'ek(a) '(be) sour, v';
TO s-hï'ïk 'be sour'; TO he'ekču 's.th. sour, n'; NT ïko 'agrio, acedo'; ST hkum 'que es agrio (mezclado con dulce)'; Hp sïhï '(be) salty' fits well since *s > Tep h and *h > Tep ' (glottal stop). Add Cp sáwit 'sour'.
PUA *sïhïwa-tu > Tep *hï'ïg-tu > *(h)ïktu > *(h)ïko. [NUA: Hp, Tak; SUA: Tep]

514 Egyptian(F) w't 'road, way':
Hopi waala 'gap, pass, saddle in ridge' (in the gap/pass/saddle is where the 'way' or 'path' is). And note that the w- does not become l-, while the laryngeal -'- > UA *-w- > -l- does. [iddddua]

515 Egyptian(H) **'xi** / i'xi 'zusammenfegen [sweep together]':
UACV-2256a ***wak** 'sweep, comb': BH.Cup *wáq- ? 'sweep'; M88-wa24; KH.NUA; KH/M06-wa24: Ls wáqi 'sweep, brush, comb'; Cp wák 'comb, sweep'; Ca wáka'an 'sweep, clean, comb, rake'; Hp laq-ta 'sweep snow clear'; Sr wööq 'sweep, brush, comb' (vowel is wrong Miller notes, so we put it and Ktn in b; however, the rounding of w probably influenced the vowel, like it did in 'two' of NUA); Miller includes Washo wéege 'sweep'. As in many other terms, Egyptian initial i is usually dropped.
UACV-2256b ***wok** 'brush, sweep': Sr wööq 'sweep, brush, comb'; Ktn wok- 'brush, sweep, v'. [NUA: Tak, Hp]

516 Egyptian(H) **wdn** 'lasten [to load], belastet sein [be loaded]'; Egyptian wdn 'weihen [consecrate], darbringen [bring], opfern [offer]'; Egyptian wdn 'Korb [basket]':
Hopi **warani** 's.th. reserved, saved for future use'. [iddddua]

517 Egyptian(H) wi' 'abweisen [turn away], abwehren [ward off, protect]'; Hannig ties Egyptian wi' and win: Hopi wayoŋ- 'protection'; Hopi wayoŋ-ni 'individual windbreak'; Hopi wayòŋ-ta 'place a windbreak around a young plant'. For ' > ŋ in Hopi, see (1409) Hopi kookyaŋw 'spider' < Aramaic kuukyaa' 'spider' and (1357) Hopi koyoŋo 'turkey' < Semitic qr' 'cry, call' and (406) Hp paŋwï 'bighorn sheep' < Egyptian b' 'ram'. Also note the structural similarity of this medial -y- with the same in (465) Egyptian bi' > UA *payu'.

518 Egyptian(H) nw 'schwächlich sein (durch Alter) [be weak (due to age)]':
Hopi naawa-ta 'groan, moan' (the example given is an old person groaning in death). [iddddua]

519 Egyptian(F) wpi 'open, part, separate, divide (goods)':
Tb(H) woopaanat 'divide in two, cut in half'; Tb(H) woopayu 'on each side, on both sides'.

520 Egyptian(F) sin 'clay'; Egyptian sint 'clay seal, n.f.' (this fem noun would prefix t'/tV- for definite):
Ca tésnat 'clay for pottery or painting, pot, olla' (< Egyptian *t'-sinat).

521 Egyptian(F) k'pt 'linen cover': Eu kapát 'ropa [clothing]'. Eu p suggests gemination since Eu -v- < *-p- is usual, and the feminine ending is apparent as well.

522 Egyptian(F) ip 'count, reckon':
Cora -hihibe 'read' (Cora ne-ra'a-hihibe 'lo leo [I-it-read]'. [iddddua]

523 Egyptian(H) **mni'** 'Arm (mit-hand) [arm and hand]': **UA terms for 'HAND':**

Mn	máya/maC	Hp	ma; maqtö	Eu	mamát
	ma- 'with the hand'		mapqölö 'hollow of hand'		
NP	mai	Tb	maa-l	Tbr	sutú-r
TSh	maC; mo'o	Sr	ma	Yq	mám(am) (pl)
Sh	mo'o; maC-	Ca	ma-l	My	mammam;
Cm	mo'e	Ls	má-t, -máá (poss'd)	Wr	seká
Kw	mo'o-vi; ma-	Cp	ma	Tr	ma; seká
Ch	mo'ó-vï; ma-	TO	māwua; nowi; đag	Cr	mwáhka'a
SP	mo'o	PB	nov	Wc	maamá
	maC-/man-	PYp	novi		
		NT	nóvi	CN	maa(i)-tl
CU	mö'ö´-vi	ST	nov 'hand, arm'; ST saakum 'handful/fistful (of grain)'		

UACV-1119 ***man > *ma** 'hand': Sapir; VVH128; M67-215 *ma/*mo' 'hand'; I.Num90 ma(h), *mo'o 'hand'; BH.Cup *ma; L.Son126 *ma; CL.Azt76 *maa(y); Munro.Cup60 *ma-t; M88-ma13 'hand'; KH.NUA; KH/M06-ip11 'with the hand'; KH/M06-ma13 *maX (AMR): Mn, NP, TSh, Sh, Kw, Ch, SP, CU, Hp, Tb, Sr, Ca, Ls, Cp, TO, Eu, Tbr, Yq, My, Wr, Tr, Cr, Wc, CN. CNum and SNum show maC-/man- as an instrumental prefix, but *mo'o 'hand' as the main word, which is prevalent in Num but no where else in UA. I reconstruct a probable 2nd consonant *n for these reasons: (1) some languages show *n, such as Eu man-vura- 'tie the hands' (vura 'tie'); SP man- 'with the hand'; SP mančuqqwi-n'na- 'crush with the hand' (< čuqqwi); Gb man 'hand'; and possibly Yq mankabam 'muscles of the arm'; (2) final gemination in Num languages suggests an underlying 2nd consonant, as well as the -t (vs. -l) in Ls má-t; (3) if Kiowa-Tanoan is eventually shown to partially relate to UA, then Kiowa-Tanoan *man 'hand' is noteworthy; (4) some forms hint at a 2nd consonant reducing / affecting clusters when compounded, e.g., Hp map-, the combining form of maa-; the *y in Mn, NP, CN; note NP mayu'i 'to warm hands up'; NP taddu'i 'warm foot up'; NP tu'i ddu'i 'try to warm up'; if *ma- were the stem, we would expect NP ma-tu'i or ma-du'i, not mayu'i 'warm hands up'; but for an underlying cluster (*-nt-), two alveolars, an alveolar proximate (y) as a reduction of the intensified alveolar cluster is plausible; (5) In Cahitan, Yq mam 'hand', mamam 'hands' and My mamma(m) 'hand(s)' may have an underlying nasal harmonized to the 1st and 3rd (plural) bilabial nasals: *mana-m > mama-m; (6) also note the number of UA words under *mani 'five' that show *n more clearly, if derived from 'hand', which seems probable; (7) note forms suggesting *-n-: *man-cu 'squeeze' and *man-cuka 'hold' at 'carry'; (8) AMR (*maX) also sees a 2nd C; (9) at 'crawl' *maN-wapa 'hand-crawl' suggests a nasal. Consider also the *y in Mn, NP, CN, relative to the 3rd consonant in Egyptian mni' (i is essentially equivalent to y in UA pronunciation). Note Eu mamát 'mano [hand], dedo [finger], brazo [arm]' means not only hand, but also arm, like the Egyptian term.
[NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

As first consonant in a cluster, sibilants such as s/š are lost: -sC- > -C-.

We see how Hebrew ’iišaa ‘woman, wife’, when possessed (’eešet- / ’išt- ‘wife’), often puts -št- in a cluster, and š as first element in a cluster is lost in UA: Hebrew ’eešɛt- ‘woman, wife (of)’ / ’išt-o ‘wife-his’, but usually remains when not clustered, as in Hebrew ’iiš > Tr wesi, so Hebrew ’išt-/’ɛšt- > Hp wīīti ‘married woman, wife’ is a good match. Below are examples in Egyptian of s similarly lost in a cluster.

524 Egyptian(F) **msnḫ** ‘rotate, turn backwards,turn, turn away’;
Egyptian(H) ‘drehen [turn, rotate], umwenden [turn around]’:
UACV-442c ***manu** 'turn, change': M88-ma39: KH.NUA; KH/M06-ma39: Sr manum’(k) 'turn (on axis), turn over/around/into, change, change into'; Sr naminkin 'change’; Ktn manu’mk ‘turn, turn s.th. wrong side out, vt’; Ktn manu’m-manu’m-k ‘roll, vt’; NP mananui 'rolling'; Tb(V) mïnïnïï’at 'to roll'; Tb(V) mïnïna 'it rolls’; Ca méni 'to turn over/around/ into'; Cp méne 'dress up, change clothes'.
UACV-442b ***mïntïsa/i** ‘return, turn over/back’ (may contain a separate morpheme *mïn-tïsV):
SP mïn’iššiC / mïniššiC ‘turn over, several turn back, vi pl’; SP mïnišša ‘turn over, vt’; SP mïntïši ‘turn over to a side’; Ch mïnïsi ‘return, pl’; Kw mïniši 'turn around'; Kw mïïši 'return, pl’. For evidence of possible cluster reductions in different directions, note the two Kw forms and the two SP forms, found in the same language, no less: SP mïn’iššiC and mïntïši.
UACV-442a ***mïna** 'to turn': Mn mïnaa 'to turn, turn back, return, change direction'; NP -mïna 'to turn' (suffix in compound verbs meaning to turn some thing or turn in some way'). Note the difference between Tb(V) mulu’uŋa 'become round' and Tb(V) mïnïnïï’at 'to roll’.

525 Egyptian(F) **isq** ‘linger, wait for, vi; hinder, vt’ (the s is lost as first element in a cluster, perhaps intermediate *isqV > *ïska > * ïka):
UACV-2177 ***ïka** / ***ïkï** ‘remain, be in a place, let lie’: M88-ï17; KH.NUA; KH/M06-ï17: Sr ’ïkï|i ‘be in a place, lie’; Ls ’óka/i 'leave, let remain, vt; be left, vi'; Gb ’okó 'lie down'; Cp ékeme 'give'; Ca ’ékamax 'give s.o. (food/drink)’; Ktn ’ïk ‘lie’. Cp and Ca may be reduced compounds of *’ïkV-maka ‘let lie-give, give/grant/set in place’. [e1,e2,e3] [NUA: Tak]

526 Egyptian(H) dr ‘auslegen [lay out], ausbreiten [spread out, stretch out]’
UACV-2210 ***ta’la** (< *ta’ta) ‘spread, stretch out’: M88-ta13 'to extend, stretch, spread out'; KH/M06-ta13: TO tadan, tadannik 'to spread out flat'; Wr ta’lá 'tender, extender'; Tr ra’rá 'extenderse, esparcirse’. The TO, Wr, and Tr forms are a nice set, since TO d does correspond to liquids. [SUA: Tep, TrC]

5 The Semitic-p Contribution in Uto-Aztecan

5.1 The Semitic-kw Correspondences vs. the Semitic-p Correspondences

Egyptian and Proto-Semitic, both from Afro-Asiatic, share many of the same sounds. For example, Semitic ṣ and Egyptian d̲ are the same sound, though transcribed differently. In the table below, those sounds followed by (> Phn) mean that that Proto-Semitic consonant changed to something else in Phoenician and later in Hebrew as well, but not in ancient Israel's earlier Semitic, which is better depicted by Semitic-p. The next three columns show the correspondences of the terms from the Semitic-kw items, the Semitic-p vocabulary, and the Egyptian terms, whose correspondences are the same as terms from Semitic-p. Differences between initial position and intervocalic correspondences are listed as C- and -C-, respectively. A few apparent exceptions occur, such as a few Semitic-p ' > ' instead of the usual ' > w, but the percentage of apparent exceptions is no more than existed in comparative UA before these proposed ties. Those and some instances of consonants' behaviors as 1st and 2nd consonant in a cluster are treated at 7.2 and some details remain to be clarified, but the following correspondences hold 95% of the time.

Semitic, Egyptian	UA terms from Semitic-kw in UA	UA terms from Semitic-p in UA	UA terms from Egyptian
b	kw	b/p	b/p
p	p	p	p
'	ø/'	w/'	w/'
ḫ	hu/w	hu	hu
x (> ḫ Phn)	hu/w	k/h	k
ʕ	w/o/'	w/o/u	w/o/u
ġ (> ʕ Phn)	w/o/'	k	-- (not in Egyptian)
ṣ/d̲	c	s	s
ṭ	c/s	t/c	-- (not in Egyptian)
t	t-, medially -r-/-l-	t-, -r-/-l-	t-, -r-/-l-
d	t-, medially -r-/-l-	t-, -r-/-l-	t-, -r-/-l-
k	ø-, -k-	k	k
g	ø-, -k-, but Tak ŋ	k	k
q	ø-, -k-, but Tak ŋ	k	k
h	h/ø	'/ø	'/ø
m	m	m	m
n	n	n	n
l	l	l	-- (not in Middle Egyptian)
r	t-, medially -y-	t-, -r-	t-, -r-/-y-
ḏ (> z Phn)	s/c	t	-- (not in Egyptian)
z	s/c	c	-- (not in Egyptian)
θ (> š Phn)	s	s	s
s_1 (> š)	s	s	s
s_2 (> ś)	s	s	s
s_3 (> s)	s/c	s	s
y/i	y/i	y/i	y/i
w	w	w	w

5.2 Hebrew or Semitic b > p in the Semitic-p Corpus within Uto-Aztecan

Besides the 24 matches showing Hebrew b > UA *kw (4-27), 33 other sets show Hebrew b > UA *p. The linguistic laws of sound change would have all occurrences of a particular phoneme consistently change to or correspond to one phoneme unless other factors, such as specific phonological environments applicable to a subset, can explain a different change for that particular subset of words. Besides data in which Hebrew dageshed b became *kw and another set of data in which Hebrew b > UA *p, other consistencies occur for

two separate descendants of Northwest Semitic that later merged, each bringing its own set of correspondences to a later mix. I named these dialects by what Hebrew b changed to: in Semitic-kw, b changed to kw; in Semitic-p, b changed to p; and Egyptian b > p in the Egyptian lexical items also. In fact, Semitic-p sound correspondences in UA parallel the Egyptian correspondences in UA: for example, Semitic ṣ > UA *s, ’ > UA *w, devoicing of voiced stops (b, d, g > p, t, k), etc. Consider the following instances of Semitic-p’s correspondence of Hebrew b > UA *p:

527 Hebrew **baaraaq** ‘lightning’; Arabic **baraq** ‘lightning’; Arabic baraqa ‘to shine, flash, to lightning’:
UACV-1327 ***pïrok** ‘lightning’: M67-262 *pe ‘lightning’; M88-pï14 ‘lightning’: KH/M06- pï14:
My berok-; Yq be’ok-; AYq yuku ve’okte, ve’ove’okte ‘vi’ (*-r- > -’-); NT vïpïdoxudami; ST vpgia/vïpgï.
To these can be added Tbr virikí-t ‘relámpago [lightning]’; TO wïpgii; PYp vepda. Besides the initial *pï in all forms, the Yq, My, and NT forms show a clear second syllable in *-rok- and Tbr also shows this full word, though the 2nd vowel has assimilated. Thus, four languages (Yq, My, NT, Tbr) point to *pïrok. The NUA forms are less secure, unless *-r- > -n- is secured, but let’s list them for contemplation: Sr vönäq-q ‘flash (of lightning)’ and Ch(L) panapï (< *palaC-pï) ‘lightning flash, light’ (with liquids nasalized in NUA). Other SNum forms show the underlying 3rd C: CU panáy ‘shine, be bright’; WMU paná-y ‘shine, be bright’; WMU paná’t*öh*qqőmp*i*-kye ‘shine, be bright, vi’. With loss of the 2nd syllable and voicing of the velar stop, the Tepiman forms *pïpgi (lacking 2nd C) show reduced forms of *pïrok / *palak. The *-palu portion of Ca táwvalu ‘to thunder’ as well as the -paix of Sh(C) to’ompaix ‘thunder’ and Sh(M) toompai-piccï ‘thunder’ likely belong. Note also Eu ne váuhme-n ‘for lightning to strike, v.’ [liquid] [p1b,p2r,p3q] [SUA: Tep, TrC; NUA: Tak, Num]

528 Hebrew **bayit / beet** ‘house’; Aramaic bwt ‘spend the night’; Arabic **byt / biit** ‘pass/spend the night’:
Hebrew byt ‘to spend the night’; Syriac bayt-aa ‘house-the’; Syriac bwt, perf: baat ‘to lodge, pass the night’; UA meanings are ‘house, lie down, spend the night’ and ‘return home’ (to spend the night):
UACV-1322a ***pïCtï / *pïtu** ‘lie down, be situated at, spend the night, v pl; house, n’: PYp veetu ‘lie, be situated, inan. pl’ (note PYp has the expected final vowel -u for pl); NT vïïtï ‘be lying down, pl’; Wr pe’ti-pá-ni ‘acostarse, pl’; Wr pe’ti / pe’ti-pó ‘estar acostados, pl’; Wr pe’a ‘jacal, hut’; Tr pere/peri ‘set/lay stretched out’; Tr bete-ba-ma ‘spend the night’; Tr bete-či / biti-či ‘at home’; Tr bete-ra ‘house’; Tr beté-re- ‘live, inhabit, dwell’; Tr peréame ‘inhabitants, residents’; Tr bití ‘estar [various objects being in horizontal positions], vi pl’; WTr behte ‘live, v’ (Burgess 1984, 19); WTr bete-ba-ma ‘spend the night’; WTr bete-ra ‘house, n’; WTr bití ‘estar acostados, vi pl’; WTr bite ‘dwell’; Ca péti ‘lie down stretching (of long large obj); Cr hé’e ‘be lying down’ (if *-t- > -l/r- > -’-).
UACV-1322b ***payïC > *pïC**- ‘return home’: In SP the stem is isolated: SP pa(i)yü ‘return’; SP payü-i ‘comes back’; SP pa(i)yü-rü ‘one who goes home’; SP pappa(i)yü ‘all return each to his home’. In SP and the rest of SNum, that stem takes one suffix -ki ‘come toward speaker or come home’ and -kwa’a ‘go home or go away from speaker’, but pee/pay is this stem in WMU, for example: WMU peekki / peekki’ / paí-kki ‘come home, come to me, come here’; WMU peekki*rh* ‘one who comes home’; WMU peekkwa’ ‘go home (the home being elsewhere)’; WMU peé’kwa’*a* ‘go home!’; WMU peekkwa-*rh* ‘one who goes home’; Kw pay-kwee (< *payC-kkwee) ‘return, go back, go home’; Kw pay-ki- (< *payC-kki) ‘return, come back, come home’; Ch payï ‘return, v sg’; Ch payűkii (< *payűkkii) ‘come back’; SP payü-kki ‘come back’; SP payü-qqw’ai ‘go back/home’; CU páei-ki ‘return, come back to, come here!’); CU payu-kwa’áy ‘come home, come back, return’; CU páei-kwa’áy ‘return, come back’; the latter CU term appears not to retain the semantic distinction that WMU and all languages to the west retain: -kki ‘return coming (home)’ vs. -kwa’ay ‘return going (home/away)’. However, all languages show a final consonant by geminating the next -kk-, though in most it is -k- < *-kk- vs. -g- < *-k-. Other considerations since UACV was published include: My aabe ‘house’ could well be Hebrew haC- ‘the’ prefixed to beyt ‘house’: habbeyt > aabe. Also note Ca páay ‘sit up all night’ and Tb(H) pay’kït ‘turn around, vi’. Note also WMU peeC- (< beet) in the following sentences: WMU maasiga’ küáo uupas peekkiu-(kwat) ‘He returned (came home) yesterday’. WMU wíičuk maas uupas peekkiu-paat ‘He will return tomorrow’. [p1b,p2y,p3t] [SUA: Tep, TrC, CrC, Azt; NUA: Tak, Num]

529 Hebrew **béged / baaged** ‘garment, covering, clothing’; Arabic biğaad ‘striped garment’:
UACV-490 ***paki < *pakati** 'shirt': M67-371 *pak ‘shirt'; M88-pa33; KH/M06-pa33: Sr pakïït ‘shirt’; TO váaki 'put on a shirt’. To these, we must add Eu vakaci ‘clothing’; Eu vakace ‘get dressed, vi’; Tb(H) pikiiniššït ‘wear or put on a shirt’. This ties to *paki 'enter' since entering a piece of clothing equates to putting it on to wear, as shown by Hp paki 'enter' and Hp aŋ paki 'put article of clothing on’. [p1b,p2g,p3d] [NUA: Tak, Tb; SUA: Tep, TrC]

530 The UA forms below relate to Semitic bgd also, probably as a denominalized verb from the above: from ‘shirt, clothing’ to ‘clothe, enter clothing, enter’; or the Semitic verb may have had that dimension, though the semantics of Hebrew baagad ‘act / deal treacherously’ and Arabic dialect bağada ‘outwit’ are too

oblique, except that the sense of ‘deceiving’ is ‘covering/hiding’ one’s intents as clothing covers/hides; Arabic bağda(t) ‘root, source, heart’ suggests a “hidden center/essence” covered or not obvious:
UACV-1242a ***pakiC** (AMR) ‘enter’: VVH2 *paşki ‘to enter’; M67-159 *paki ‘enter’; L.Son186 *paki ‘entrar’; B.Tep261 *vakai ‘he enters’, *vaki ‘to enter’, and *vaa ‘he entered’; I.Num136 *paki ‘stick, go’; KH.NUA; M88-pa5 ‘enter’; KH/M06-pa5 *pakiC (AMR): Cp paxí-š ‘party, group of lineages who join together for ceremonial purposes’; Ca páx ‘enter’; Gb pakó ‘entrar’; Sr pakïïnin ‘invite’; Hopi paki ‘enter, initiated, set (sun)’; TO waak / waaki ‘enter, sink in’; LP vaki; NT vakí; ST vaki; Nv pakï ‘enter, sg’; Eu vaké/baké; Wr pahki; Tr baki-mea; My kibake; AYq kivake; Wc haa; CN aki ‘enter, fit in’. Miller also includes the following Num forms, which often involve other prefixes, but most are plausible by a semantic tie between ‘enter, sink into’ and ‘stick (in), be stuck’.
UACV-1242b ***pakiC** ‘stick, go’: M88-pa5; I.Num136 *paki ‘stick, go’; KH/M06-pa5: Mn cappa’ni ‘stick, get stuck’; Sh cappaki ‘be stuck’; NP wïppakitta ‘to beat’; Kw čaki ‘be stuck’. [*p > CN ø] [p1b,p2g,p3d] [NUA: Num, Hp, Tak; SUA: Tep, TrC, CrC, Azt]

531 Hebrew **bw’** ‘come, v’ (consisting of the three consonants b, w, and glottal stop) has as its infinitive **boo’** ‘coming’, which aligns well with UA *pow/*po’ ‘road, path, way’ (UACV-1821). Most of the Hebrew words for ‘way, path’ derive from verbs of going, walking, etc.: Hebrew ’rħ ‘wander, journey, go, v’ and Hebrew ’oorağ ‘way, path’; Hebrew drk ‘tread, march’ and Hebrew derek ‘way, road.’ It is the infinitive or verbal noun of Hebrew bw’—that is, boo’—which UA *pow/*po’ corresponds to phonologically and semantically. Because the ‘coming’ to a place is the ‘way’ to a place, the infinitive is often used as if to mean ‘way, route, line’ in Biblical Hebrew phrases like ‘as thou comest/one comes from someplace to(ward) another place’ in which the ‘coming’ nearly means ‘way, route, line’ (Genesis 10:19 and 13:10, Numbers 13:21; II Samuel 5:25). In fact, the infinitive Hebrew boo’ is sometimes actually translated as ‘way’ in the King James Version (e.g., Genesis 24: 62). The following UA reflexes for ‘road, path, way’ not only correspond to Hebrew boo’, but they also exemplify the correspondences for PUA *p and PUA *o within UA and sometimes the final glottal stop as well. In light of Hebrew **bw’/boo’** ‘come, coming, the coming/way,’ compare UA ***powV/*po’V** ‘road, way, path’:

Mn	póyo	Hp	pöhï	Eu	bowé-t
NP	po	Tb	poh-t/poo-t	Tbr	wo-ta
TSh	po’e/po’i	Sr	pööq-t	Yq	bóo’o
Sh	po’ai	Ca	pí-t	AYq	voo’o
Cm	pu’e	Ls	pé-t	My	boo’o
Kw	too-vï	Cp	pí-t	Wr	poé
Ch	po’(o)	TO	voog	Tr	bowé/boyé
SP	poo-	PB	voi	Cr	huyé
CU	pö´ö	PYp	voi	Wc	huuyée
		NT	voí, voogadï (poss'd)	CN	o’-tli, o’wi (poss'd)
		ST	voi		

UACV-1821 ***poC / *po’ï / *powï** ‘road, path, way’: Sapir; VVH4 *po ‘road, path’; B.Tep274 *voi; M67-350 *po ‘road’; I.Num154 *poyo/*po’e/*po’i; BH.Cup *pet ‘road’; L.Son217 *powï ‘camino’; CL.Azt134 *oh; M88-po4; Munro.Cup112 *pé-t; KH.NUA; KH/M06-po4. A cognate for *poC ‘road’ is found in every UA language. However, the variety of second consonants is intriguing—*’, *w, *y—besides absolutive -t in Tak, which shows there is a latter C, whatever it may be. Note q in Sr pöö˞q-t and Ktn pok-t, as also the g in TO and NT, the latter assumedly matching *w of TrC, as most of TrC has either -’- or -w-. Kw has a *tV- prefix. [medial *w/’/y; *w > g > ø in some Tep, as at *siwa ‘sand’, *pïwi ‘red’] [p1b,p2w,p3’] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]
UACV-1016a ***po’o / *po’o-ta** ‘run, road-do’: Sapir; B.Tep279 *voopoi ‘run, pl.’; M88-po1; KH/M06-po1: NP popoyuha’hu ‘run, pl’; TO woppo’i / woopo’i ‘run, pl’; NT vopóóyi ‘run, pl’; NT vopóódami ‘runners’; NT voí, voogadï (poss’d) ‘road’; NT voogïtai ‘hacer camino’; Eu vóome / bo’o-me ‘run, pl’; Wr -po ‘future pl suffix’; Tr pó/-bó ‘ir varios’; My boohowa ‘is walking’. Sapir ties Tep and SP pooya ‘run’; SP y does agree with Tep d (< *y), which may tie these to the forms below, though the medial consonant becomes even more problematic: *’, *t, or *y? Add PYp voopo ‘run, pl’ and Eu vovedaa ‘walk’. which derives from Eu vovét / bowét ‘road’. This likely relates to *pow / *poC ‘road’, as in *po’-ta ‘road-do’, as all in this set might. Similarly, NT shows no g when contracted, but does when suffixed.

532 Arabic **bṣr** ‘look, see’; Arabic baṣṣara ‘open the eyes’ (Lane 210); Arabic **baṣiir** ‘seeing one, endowed with eyesight’; Arabic **baṣar** ‘eyesight, vision, eye, glance, look, sight’; Arabic **baaṣir**at ‘eye’; the long vowel aa of either Arabic or Proto-Semitic becomes long oo in Hebrew; thus, Arabic baaṣir(at) would correspond to Hebrew ***booṣer**(et) ‘eye’ and such Hebrew participial forms (*CooCeC) consistently raise the vowels to correspond to UA vowelings of *-u-i, as in **UA *pusi** ‘eye’ and UA *puni < Hebrew poone, etc; UA *pusi ‘eye’ is found in all but two UA languages, also meaning ‘face’ and ‘seed’ in some UA languages:

Mn	púsi’	Hp	poosi	Eu	vusít/busít
NP	bui	Tb	pundzi-l / punci-l	Tbr	telú-r/tilú-r
TSh	pui	Sr	hovaaʈ/hovaač	Yq	púusi
Sh	pui	Ca	púč-ily ‘eye, face, seed’	My	puúsi
Cm	pui	Ls	púš-la 'eye, seed'	Wr	pusí
Kw	pu’i-vi	Cp	púči-ly/-puš	Tr	busí
Ch	pu’i-vi	TO	wuhi	Cr	hï’ïsí
SP	pu’i-vi 'eye'	PB	vuhi/vui	Wc	hïší
	pu’i-vï 'seed'	PYp	vuhi/vui	CN	iiš-tli 'face, surface, eye'
WM	pwi’/pu’í-vi	NT	vúhi/vúi	Pl	iiš 'eye, face'
CU	pï’í-vï	ST	vui		

UACV-824 ***pusi** 'eye': in all eight branches: Num, Hp, Tb, Tak, Tep, TrC, CrC, Azt. Sr is one language with a different word for eye, but the parallel sounds do have to do with seeing: Sr vuhiitq ‘to clear, vi’ (examples of what clears include rain, sky/weather). Note *-ṣ- > -’- in Numic. WSh puih ‘eye’ shows final -r > -h, which is a synchronic rule in Cr: r > h/_C (Casad 1984, 161). Also of interest in light of Arabic **bṣr** ‘look, see, open eyes’ is UA ***pusa** ‘wake up, open eyes’ (in Eu, Yq, My, Wr, Tr).

533 Arabic **baṣṣara ‘open** one’s own **eyes**’ (Lane 210) or ‘make s.o. see’; UA *pusaC could be a denominalized active verb on the -a/-i pattern, or it could be a passive of Arabic II or an unattested Hebrew quttal; regardless, we have Semitic bṣr ‘eye’ and ‘open eyes’ with UA *pusi ‘eye’ and *pusa ‘open eyes’:
UACV-2459 ***pusaC (AMR)** 'wake up, open eyes': VVH74 *pusa 'waken'; L.Son223 *pusu, pus-a 'abrir ojos'; M88-pu3; KH/M06-pu3 *pusaC (AMR): TO wuhan, vt; Eu busá ‘awaken, vt’; Eu busú ‘wake up, vi’; Wr pusa; Tr busá-ma ‘despertar a otro [wake s.o. up], vt’; Tr busi-mea ‘despertarse [wake up], vi’; Tr busire ‘be aware, conscious, awake’; My bussa; CN i’sa. The glottal stop in CN i’sa appears in other initial *p-loss forms (cf. *piso ‘vomit’). Add Cr hïsti ‘despierto [awake]’, which hïs- fits *pus perfectly. Likewise, Wc hïï.tïa ‘despertar’, with the loss of -s- in a cluster, belongs as well. Add Yq busa ‘despertarse’; Nv vui-ta-nu/ku ‘despertar entre sueños [awake between dreams], sg/pl’. This set is tied to *pusi 'eye'. I am impressed with AMR discerning a final -C. [glottal in CN, s > ø in cluster] [p1b,p2s4,p3r] [SUA: Tep, TrC, CrC, Azt]

534 Hebrew **batt** (< Semitic *bant/bint) ‘daughter’; Arabic *bint ‘daughter’:
UACV-2576 ***paNtï’ > *pattï** > **paci** ‘daughter’: I.Num147 *petï 'daughter'; M88-pa22; Stubbs2000a-4; KH/M06-pa22: Mn pédï’; NP bbatï; TSh petïC; Sh petïC; Cm petï’; Kw pedï; SP pačï; CU páci; patï-ci-ci; WMU pačü-n ‘my daughter’. Cr pa’arï’ï ‘girl’ may also belong. Ch, SP, and CU also show *-tt- > c/_high vowel. Parallel examples and a detailed discussion (in Stubbs 2000a) explain how these derive from PUA *pattï and that UA *paci* results from a frequent change of *-tt- > -c-. Kw -d- may suggest the medial cluster involves *-Nt-, as ordinary gemination *-tt- > -t- in Kw, but *-Nt- > -d- in Kw. Note that Kw -d- is the usual reflex of -Nt- or a nasal as first element of a cluster vs. -r- < *-t- or -t- < *-tt-; and note that CU -t- signifies *-tt- vs. -r- < *-t-. [*-Ct- > -c-] [p1b,p2n,p3t] [NUA: Num; SUA: CrC]

535 Hebrew **baaqaar** ‘cattle, herd, ox, livestock’; Syriac bəqar / baqr-aa ‘domesticated animals’; Aramaic **bqwrh** / bqwrt’ (bəquurə-t-aa) ‘herd of cattle’; CPAramaic pl: buqr-iin, buqraataa: UA ***pukuN** ‘domestic animal’ resembles Aramaic bVquur- and appears in 13 UA languages. The 1st short unaccented vowel simply assimilated to the long strong 2nd vowel uu: *bəquur > puku; also Semitic-p shows the uvular being strong to round the vowels, and the final -r does not raise and front them as in Semitic-kw; Compare, from Semitic-kw, UA *tïki ‘cut’ < Hebrew daqar ‘pierce’ (827) in contrast to Semitic-p, UA *taku ‘palm tree’ < Hebrew dɛqɛl / Arabic daqal ‘palm tree’ (961):
UACV-37 ***puNku / *pukku(C)** ‘domestic animal’: VVH46 *puNku ‘dog, pet’; M67-135 *puku ‘dog’; I.Num160 *puŋku ‘dog, horse, pet’; L.Son220 *puku ‘animal domestico’; Fowler83; M88-pu13; KH/M06-pu13 *punku: Mn puku (< *pukku) ‘pet’; NP pukku ‘horse’; TSh puŋku ‘pet’; Sh punku ‘horse, pet’; Cm puuku ‘horse’; Ch punkú ‘pet’; Ch punkuu-ci ‘dog, pet’; Kw pugu-zi (< *puku-ci) 'pet, dog'; SP puŋku 'horse, domestic animal'; CU púku (< *pukku) 'horse’ (< domestic animal); CU pukú-n ‘my horse’; Tb(M) puŋgu-l / puŋgu-t 'pet'; Tb(H) pukkupišt (< *pukuC-piy-ta) ‘dog’; Tb(H) puŋku-l ‘horse’; Hopi pooko ‘dog, domestic animal’; Wr puhkú 'animal poseído, ganado’; Tr bukú 'animal poseído’; Tr bukurú ‘apropriarlo’; Eu bukút ‘esclavo [slave]’; My bukke ‘criar [raise (as children or animals)]’; Yq búke ‘tener animals [have animals]’; Yq buki ‘esclavo [slave]’; Tbr woku-r ‘animal domesticado’. Note WMU puqqú-či ‘favorite horse’ with SP puŋqu-ci ‘dear horse, diminuitive’; also WMU puqqúuŋ(g)wa ‘have a bunch of horses’ shows a final nasalization, possibly anticipated in others (*pukuN > *puNku), and Semitic liquids often do become nasals in Num. Though with

differing semantics, add Eu amo vuk ‘tuyo’ as a possessive morpheme. Tb and WMU may show a final -C. [Tb -ŋg-: CNum -Nk-: WNum -kk-; SNum has all 3: k, kk, Nk] [p1b,p2q,p3r] [NUA: Num, Tb, Hp; SUA: TrC]

536 Arabic bqr ‘split open’; Aramaic(J) bqr ‘enter into, search’; the basic meaning of the Semitic root is to cleave open, plow, search into’; Syriac bqr ‘penetrate, investigate’:
UACV-617 ***pukul** 'pin on': M88-pu20; KH.NUA; KH/M06-pu20 *pukul: Cp púkulva’a ‘brooch’; Sr pukulq ‘to become pinned’. Let us consider also CU capúukway 'pin on'; Mn (na)cipohínu 'anything pinned on.' Add Sh poko ‘thistle’ which penetrates or pierces like a pin does. [p1,p2,p3] [NUA: Tak, Num]

537 Hebrew **bls** ‘gather figs’; Arabic balas ‘kind of fig’;
UACV-193 ***palasi** '(wild) grapes': Yq páa’asim ‘uvas [grapes]’; My párasim ‘uvas’. Jane Hill (p.c.) adds Gb pah-váhs-keet ‘wild grapevine’. [liquids] [p1b,p2l,p3s3] [SUA: TrC; NUA: Tak]

538 Hebrew baadaad ‘solitude’; Arabic badda ‘separate’; Arabic budd ‘part of a thing’;
Hebrew **bad** ‘part, portion, separation, solitude’and is used to mean ‘alone, by itself/oneself’ commonly found in the phrase lə-bad-ó ‘by himself/itself’; Hebrew lə-bad-i ‘by myself, alone’ etc.:
Hebrew **bad** ‘part, portion, member, alone’ and in phrases ‘except, apart from, beside(s)’:
The two Hebrew meanings (part/individual and except) > UA meanings (one, negative) is striking:
UACV-2620a ***pirï / *parï / *pura** 'one, negative': Tr biré and Wr piré/pié. NT parï is worth noting in the fact that Tr biré and NT parï both mean 'one/some' and both also act as a negative particle. Or Wc seevíi-; şevítï (sbj) minus the first syllable, that is, -vitï, also matches Tr/Wr *pitï. The latter part of Tb čii-bilo 'by oneself, alone' may possibly belong. Other prefixes appear involved (*su-purV and *wï-purV).
UACV-2620b ***suC-pula / *sum-pula** ‘one, first, other, different’: HH.Cup *su / *supul; KH.NUA; Munro.Cup85 *supú-l 'one': Ca supul(em) 'other(s)'; Ca supul-a’an 'different'; Cp súpul 'different, one'; Sr hovaa’i’ 'different, changed'; Sr hova(ţ) '(an)other'; Sr hovaţ '(an)other, different one’.
UACV-2620c *wa-pul 'different, separate': TO gawul 'different, separate'; PYp gavil 'different’; Yq wépul; My wépu’ulai.
Hebrew plural **bad**-iim ‘members’ (KB); ‘parts, **extended from something**, members, limbs’ (BDB);
CN pil-li ‘**appendage**, a morpheme compounded in words for ‘tail, tongue, finger, toe’; CN -pil ‘offspring’; CN kwitla-pil-li ‘tail’; CN ma’-pil-li ‘finger’; CN ikšo-pil-li ‘toe.’ [p1b,p2d,p3d] [NUA: Tak, Tb; SUA: TrC]

539 Hebrew baadal ‘withdraw’; MHebrew baadal ‘divide’; Arabic badda ‘substitute, II change, exchange’:
UACV-664 ***pata** ‘(ex)change: Dakin 1982-70: CN patla ‘change, exchange s.th.’; Cr raa-pwáta’ataka’a ‘lo cambió (dinero)’. [p > Cr pw] [p1b,p2d,p3l] [SUA: Azt, CrC]

540 Hebrew **bţḫ** ‘trust, v’(< Sem bţḫ); Hebrew **biţḫa**(t) ‘trusting’; Hebrew béţaḫ ‘security’; besides the two preceding nouns showing high front vowels, other unattested forms are probable in ancient spoken Hebrew, such as ***baţiiḫ** ‘trusted’, which would encourage assimilations toward high front vowels as we find in the UA forms; semantically, of course, when you trust persons or facts, you believe them; thus UA
UACV-173a ***pitiwa** 'believe, be true/real, trustable': Eu vícwaci 'creer (believe)’; Eu vicwaterá 'creer';
Tbr wicimwá 'creer’ (*p > Tbr w; and *w > mw in Tbr); Wr piciké-na 'believe s.o.'; Wr piciwá-ni 'tell the truth'; Wr piciwári 'the truth'; Tr biči/wičí 'creer [believe], tener fe [have faith]’. A third syllable (wa) is clear in Eu, Wr, Tbr, and Hp. The Tep forms—Nv ibiga/ibigida ‘confiarse de alguno [trust in s.th.]’; PYp hivig 'believe'—are also related, with a prefix: *pittiwa > *piciwa > Tep *hi-pis(i)ga > *ipisga > *ipiga, as *s* in a cluster readily fades in UA; thus, -viga aligns well. The -c- in both NUA and SUA suggests medial *-tt-, not PUA *-c-. Add Ktn pucuk ‘very, hard’. Note both here and at *pow ‘road’, Ktn has k < *w.
UACV-173b ***tï-pitti** 'very, really': I.Num248 *tïpici 'very, really'; M88-tï34; KH/M06-tï34: NUA shows a *tï- prefixed to *pitiwa: Hp tïpciwa 'believe'; CU tïvïci-gyay 'believe, vt'; CU tïvïci 'very, truly, adv'; CU tïvïci-tï 'truth'; TSh tïpici ‘very’; Sh tïpi-ci 'really, true'; Cm tïbici ‘really, surely, very’; TSh tïpici 'very, really, truly, adv & adj’; Mn tïbizi-túsu ‘it’s true, for sure’; Mn tïbizi-tu 'great, important'; NP tïpicci 'very much, really, authentic'; Sh tïpicaan ‘real good’; Kw tïvi-ži 'real, really, genuine'; Kw tïvi-ži-ga 'believe in'; Kw tïvi-šï(m)bi 'really? Is that so? It is so. It is true’; SP tïvi-ci ‘very, really'; SP tïviciġa ‘obey, v’; SP tïvi-šu ‘sure enough’; CU tïvïci 'very, truly’; Ch(L) tïvici ‘real, genuine’; My tépa ‘muy [very]’. The perceived morpheme break in Kw and Sh may be exactly that—perceived—not actual. [*-p-] [NUA: Num, Hp, Tak; SUA: Tep, TrC]

541 Hebrew **baaţuuḫ** ‘trusting’; ‘trustful, confident’ (Klein); this is a different word from the same root bţḫ, and another instance of *t/c > Tepiman s then > h, and ‘trusting’ is ‘believing’, as in the UA term:
UACV-174 ***paso (> *papso)** ‘true, consider true, believe, truly, indeed!’: UA *paso (> *papso) in Tepiman is *vaho/*waho (> *vavho / *wawho): TO wohoh/wehoh ‘truly, indeed, in fact’; TO wehohcuđ ‘believe in’;

PYp vohovi 'correct, true'; PYp vohovig elid ‘believe, vt’; PYp vohgelia 'obey, vt'; PYp vo'gelca 'believe, vt'; NT váávoitïudai 'make or consider true'; NT váávoi 'true, certain'; NT vááviava 'be true, certain'; perhaps Tep *vaho (<*paso) since NT and TO wehoh may suggest an original *a* that assimilated toward the following *o* in the other forms: *a-o > o-o/e-o, and reduplication is apparent in NT. [V assim] [SUA: Tep]

542 Hebrew **bṭḫ** ‘trust, v’(< Sem bṭḫ), impfv: -bṭaḫ; this is the same root as the above, but the imperfect stem -bṭaḫ, to which we would expect UA *cawV:
UA ***cawa*** ‘believe’; the impfv stem of Hebrew baṭaḫ is CV-**bṭaḫ** (CV- pron prefix), from which we would expect exactly UA *cawa, because (1) the cluster -bṭ- would lose the initial bilabial (as in špḫ, ib’, etc), and (2) the vowel *a*, found in UA, is exactly the stem vowel of the Hebrew imperfect of that verb, a relative rarity among the more common stem vowel of o in most Hebrew impfv verb forms. UA ***cawa*** 'true, consider true/believe’: Mn cáú-tu 'true'; Cr -caawa- of Cr rá'a-caawa-te ‘obey him, believe him.' [NUA: Num; SUA: CrC]

543 Hebrew **baaṭuuḫ** ‘trusting’; ‘trustful, confident’ (Klein); this is
UACV-1276 ***puttuwa (> *puttucukwa)*** ‘know’: TSh pusikwa ‘know how to’; Kw pucugu ‘know how to’; Ch putúcuga ‘understand, know, learn’; SP puhcúcukwaN ‘know, understand’; WMU pučúčugway ‘know’; CU pučúčugway ‘know, be familiar with’. These SNumic forms reflect the same Hebrew word as Tepiman *paso above (541), and they tie with *pitiwa ‘believe’ (540: CU tïvïci; Sh tïpi-ci ‘really, true’; Hp tïpciwa; Eu vícwace-m; Eu vícwace-m; vicvaterá-; Tbr wicimwá, Wr piciké; Tr biči); as believing s.th. and knowing s.th. are an easy semantic shift, whether a good idea or not. From *pucuwa and velarization of the labiovelar *w (>kw), then loss of postvelar rounding in Ch. Note Ch -t- < *-tt- and NUA -c- < *-tt-. [w/kw/k] [p1b,p2t2,p3h2] [NUA: Num]

544 Syriac bd’ ‘to invent, make up’; Mehri Soq bd’ ‘to lie’; OSArabic bd’an ‘loose talk’; Hebrew bada’ ‘to invent, devise’, pl: bad’uu; Hebrew bad ‘loose talk, boasting’; MHebrew bd’ ‘to fabricate, lie’; of a similar root and meaning is Syriac bdl ‘speak foolishly, invent folly’; Syriac baaduul-aa ‘babbling, foolish’:
UACV-105 ***paru*** 'bad, say bad about': B.Tep183 *paru 'to speak evil of'; KH/M06-pa68 ‘bad’: In B.Tep183 are NT parúnai and Upper Piman padï. In addition, *par appears in some Tep languages meaning 'bad’ though not necessarily having to do with speaking: TO pad ‘bad, evil, spoiled, deteriorated’; PYp par ‘bad’; ST parvan ‘defective’. [*l: UA liquids] [p1b,p2d,p3’] [SUA: Tep]

545 Arabic bd’ ‘begin, start’; **Arabic bad’a**(t) ‘beginning, start, n’; start(ed), v (fem subj)’ (less likely Hebrew bətḫillaa; Arabic bdʕ ‘start, do for the first time’ (badʕ); Arabic bidʕat ‘innovation’):
UACV-170 *pïwa(t) 'first, begin': B.Tep292 *vïïpïga 'first'; CL.Azt13 *peewa ‘begin, v’; M88-pï4 'first'; KH/M06- pï4: UP wïïpïga; LP vïïpïg; NT ïïpïga; ST vïïpi'; TO weepeg 'first, adj/adv’; TO weepegat ‘become the first, vi’; Nv bupuga (probably < *vïpïga) ‘antes, primero’; PYp veepegi 'first'; NT ïïbïgidïïrï ‘behind, before’; ST vïïpï’ ‘first’; CN peewa 'to begin'; Pl peewa 'begin'; HN peewa' 'begin’. Add Eu viwát ‘primera vez [first time]’ and Tb(H) peewelaŋ ‘first’. One sees frequent intervocalic voicing of *p in Tep languages. The verbal noun or other processes would cluster the 2nd and 3rd consonants, to lose the 2nd. I moved the Aztecan forms from M88-pï3 'new' to be here with the forms of M88-pï4, as the two overlap. Compare also *pïtu 'new' whereat is M88-pï3 'new' and B.Tep289 *vïtudï ‘new’ which shows all 3 consonants well enough. Note the frequency of final -t or glottal stop in the reflexes. [*p > Azt p; Tep g < *w] [SUA: Tep, TrC, Azt]

546 Arabic bd’ ‘begin, start’; Arabic bada’a ‘start(ed), began’; Arabic bad’-V ‘beginning, start, n’; or Arabic bdʕ ‘introduce, start, do for the first time’; Arabic bidʕ-V ‘new, original, unprecedented’:
UACV-1523 *pïtïC / *pïtuC / *pïtuwa ‘new’: M67-305 *pe ‘new’; I.Num173 *pïtï(h) ‘new, recently’; L.Son203 *pimï ‘nuevo’; B.Tep289 *vïtudï ‘new’; CL.Azt13 *peewa ‘begin’, 259 **pï’i new; M88-pï3 ‘new’; KH/M06-pï3: Mn pïdï (< *pïtï) ‘just, early’; Mn pïdïtïp(ï) (< *pïtïttïpï) ‘new, young’; NP pïdï ‘start’; NP pïdï taggwï’i ‘just start to walk (as baby)’; NP pïdï madabïina ‘begin making’; NP pïdï taca ‘early summer’; Hp pïïhï ‘new’; TO wečij; LP vïtdï; LP vïtuta/vïtïta ‘new thing’; PYp vet-daga ‘new, adj’; PYp vetuda ‘new, adj’; NT utúdï/utúúdai; Cr héhkwa / háhkwa. Jane Hill (p.c.) also notes Tb mappitta-l ‘new, new one’. Both the Num and Tep forms show t as a 2nd consonant, followed by -u- (*u > Num ï often enough). The Azt branch shows no -t-, but Azt -w- and -u of the other branches may relate, with t lost in the resulting cluster: *pïtwa > *pïwa/*pïtu. [Azt p-] [p1b,p2d,p3’] [NUA: Num, Hp, Tb; SUA: Tep, TrC, CrC]

547 Arabic bd’ ‘begin, start’; Arabic bada’a ‘start(ed), began’ > Ktn puycu’ ‘begin’.

548 Syriac bd’ ‘invent, make up’; Mehri Soq bd’ ‘to lie’; OSArabic bd’an ‘loose talk’; Hebrew bada’ ‘to invent, devise’:
AYq veewa ‘non-sense, gibberish’; AYq veewa-tia hia ‘brag, boast, complain, whine’. These show that both meanings ‘new’ and ‘bad-talk’ show the pattern *pïwa / *bïwa < bad’a. And AYq v < Hebrew b, not p.

549 Arabic blg / balaga ‘to shine, dawn’ (impfv ya-blugu, v.n. buluug); Arabic blg / **baliga** ‘be happy, glad’; Hebrew hi-bliig ‘cause to flash, become cheerful, brighten up’:
Yq bále ‘gozar [enjoy, rejoice]’; Yq balí-ria ‘el gozo [joy,gladness]’; My bélohko ‘brilla, brillante [shining]’; AYq vélohko ‘bright, shining’; AYq valepo ‘desire, will’. [p1b,p2l,p3g]

5.3 Comparable Forms of Semitic-p b > p vs. Semitic-kw b > kw

550 Biblical Aramaic **bəśár** ‘flesh’, biśr-aa ‘flesh-the’; Hebrew bááśaar ‘flesh, penis’:
UACV-1618 ***pisa** ‘penis’: Sapir; VVH73 *pisa ‘penis’; L.Son201; M88-pi2 ‘penis’; *pisa ‘pene’; KHM/06-pi2: Hp pis- ‘glans penis (comb. form)’; TO wiha; LP via; PYp viaha; Wr pisá; Tr bisa / wisá; Tbr wisá-t. Add *-pisa- of Ls péévisa-š ‘body hair’ with Ls pé’ ‘feathers, fur, body hair’ likely a compound from ‘hair of penis’ or ‘pubic hair’. This set also shows that Semitic-p does not show r encouraging its preceding vowels toward high-front vowels like Sem-kw does, which suggests that words like UA *taka ‘man, person’ (< Aramaic dakar ‘male, man’) are from Sem-p. Furthermore, the voweling of this Sem-p item is close to Aramaic’s voweling. [p1b,p2s2,p3r] [NUA: Hp, Tak; SUA: Tep, TrC]

5 The above contrasts with Sem-kw of Hebrew bááśaar ‘flesh, penis’ > UA ***kwasi** ‘tail, penis’ at 5.

551 Aramaic(J) bśr ‘be sweet, pleasant, be glad’; Aramaic(J) baaśaar ‘ripe, warm, sweet, well-looking’ as noun ‘body, flesh, meat’; Hebrew biśśer ‘bring news, usually good news’ (i.e. cause to be glad);
Arabic bašara, impfv: ya-bširu, and Arabic bašira, impfv: ya-bšaru ‘rejoice, be delighted, be happy’;
Arabic II baššara ‘bring good news’ (that is, make happy):
UACV-2471 ***pisa** ‘like’: Kw pišaawe ‘like, love’ (Kw pišaa ‘be pretty, brave, good’); Sr piiha’n ‘like, love, be fond of’ (Sr h < *s); NP bisa’yu ‘good, gentle, kind’; NP bisa subbida ‘love between man and wife, v’; NP bisa tabïadï ‘beautiful’. These are in contrast to NP pihapi 'sugar'; Kw piha-vi 'sugar'; and Sr pişaa’i’ ‘sweet, adj’ though Sr is in opposite direction from Kw and NP. So do we have recycled loaning/meshing movements? [c/s] [NUA: Num, Tak]

552 Arabic baṭuna (u) ‘be paunchy, be pregnant, carry young’; Arabic baṭn ‘belly, stomach, womb’; Hebrew qittel inf: baṭṭen ‘pregnancy’; Syriac bəṭin ‘to conceive, be with child, bear’; Hebrew bɛṭɛn ‘belly (of man, of pregnant woman)’; Aramaic(J) bəṭan ‘be pregnant’; the UA forms resemble an unattested quttal form *buṭṭan ‘be made pregnant’, a passive of causative, while the causative infinitive is attested :
UACV-1722 ***putta (> *pocca)** ‘pregnant’: some from M67-429 *posa/*poca 'swell'; L.Son214 *posa 'hartarse'; M88-po14 'swell'; KH/M06-po14 (see others at *posa ‘swell’): Tr bocá ‘be pregnant’; CN ooctli ‘someone pregnant’;
CN ooc-tiaa ‘to become pregnant’; HN ‘oc-tli’ ‘pregnant animal’; Pl ucti-tuk ‘pregnant’; SP pucca ‘be filled’; Ch póoca ‘inflate’; Sr pöö^{r}č-k ‘swell, bloat’; Eu púcika ‘rebosar de lleno’; CN poca ‘throw up earth, burrow’. SP pucca and SUA *poca suggest *-tt-, because *-c- > -y- in NUA. Note also the pharyngealized vowel in Sr pöö^{r}č- by the pharyngealized ṭ. The NUA forms with -c- do not fit *posa ‘swell’ (< Hebrew bśq) and are separate stems (553). Ls haváča- ‘to swell up, vi’ has consonants worth noting. ‘Be full’ with big tummy below may belong. [p > ø in Azt] [p1b,2t2,3n] [SUA: TrC, Azt; NUA: Num, Tak]
UACV-983b ***putca / *put...** ‘full’: The Sr forms actually show -t- or *put…: Sr puutk ‘become full (of contents), vi’; Sr puutkin ‘fill (container) with, vt’; Sr puutu’(q) ‘fill (of contents), rise (of water)’; likewise, Ktn putïk ‘get full’; Ktn putk ‘full, adj’. Note also Wr poci ‘estar lleno, satisfecho’ (vs. Wr posa- ‘estar lleno, satisfecho’); Tr(L) póča/búča ‘ser lleno, hincharse, enturbiarse un color’; Tr(L) bočíwi ‘llenarse’ (vs. Tr posá/bosá, bosawí (irreg pres) ‘full from eating’). [SUA: TrC, Azt, CrC; NUA: Num, Tak]

553 Hebrew bṣq ‘to swell’; Hebrew baaṣeq ‘flour-dough’ [what swells/rises]; Arabic basqat ‘raised spot’:
UACV-2263 ***posa** ‘swell’: Sapir; M67-429 *posa/*poca 'swell'; L.Son214 *posa 'hartarse'; CL.Azt129 *ooc 'pregnant’, 277 **poca 'swell’; M88-po14 'swell'; KH/M06-po14: Hp pöösaŋw’a ‘swelling’; Hp pös’iwta 'be swollen';
Hp pös-ti ‘become swollen’; Wr posa- ‘estar lleno, satisfecho [be full, satisfied]’; Tr(B) posá / bosá, bosawí (irreg pres) 'full from eating’; Cr husa 'gesättigt sein, sich sättigen'; Cr watáhusai 'full from eating’. Let’s add Mn puusi ‘bloat, vi’ and Eu vosve ‘llenarse de comida [get full of food]’. Sapir ties CN posaawa 'inflate, vt'; CN posaawi 'swell'; Cr huša 'be satisfied’. Add Eu vosáhtude- ‘llenar a otro de comida’ and Ls havúṣa/i- ‘to be swollen, puffed up, vi’. Cr, Hp, CN, and TrC forms with -s- fit; however, the *poc forms better fit *puc(c)a above (at 552). Some forms may suggest *pus rather than *pos: CN išwi 'satisfy one's appetite for food'; Pl iišwi 'full (of food)'; Cr tyí-hïs-tya-ka’a 'it got filled up’. CN išwi fits the expected Azt phonology, so Azt *posaawa (note Tr posawa) and Azt posati (note Hp pös-ti) may be borrowed from UA languages to the north. I think we UAnists have been mixing *potV > *poca ‘pregnant’ at pregnant and *posa ‘swell, be full’ which are two different stems, as exemplified by the two CN forms: *ooc- and išwi (and posaawa/i from the north),

and the UA speakers themselves may have mixed/meshed the forms semantically and phonologically over time also. Jane Hill (p.c.) adds possible Kw poho 'swell, vi'. [*p > p/ø in CN; Hp-Azt; c/s; s > h] [p1b,p2s4,p3q] [NUA: Num, Hp, Tak; SUA: TrC, CrC, Azt]

554 Aramaic(S) bəzar 'seed'; Aramaic(S) biizr-aa / bazr-aa 'seed-the'; Arabic baḍara 'sow'; Arabic baḍr- 'seed, seeds'; Arabic baḍra(t) 'a seed, pit':
UACV-1916 ***paCci / *pa'ci** 'seed': M67- 103 *paci 'corn'; L.Son181 *paci 'semilla'; CL.Azt141 *aač 'seed (corn)', 313 *paci 'seed (corn)'; M88-pa3 'seed'; KH/M06-pa3; Jane Hill 2001, 2007 *pa'ci: Eu suváci (acc: subáta) 'seed'; Op baci; Tbr waci-rá-n; My báči-a; Yq bací-a; AYq vačia 'seed, pit, stone'; Wr pahcí; Tr bací-ra 'semilla de calabaza' (Tr bací- 'calabaza'); Tr pačí 'elote, siembra'; Wc hasí; Cr hací; CN ač-tli 'seed'; CN ayo'wač-tli 'squash seed'. Found in TrC, Corachol, and CN; ie, SUA except Tep. Note CN ač-tli 'seed' has the expected sound correspondence ø < *p, while wač-tli 'seed' resembles Tbr's similar form. CN piic-tli 'pit, stone of a fruit' agrees with *puc (see below), yet shows p. Lionnet lists two sets—L.Son 181 *paci 'semilla' and L.Son182 *paci 'elote'—perhaps connected, but with different forms in some langauges: L.Son182 *paci 'elote'; Yq báci; My bátci; Wr ihpací; Tr pací. Jane Hill (2007) adds Hp paacama 'hominy' and if an underlying cluster like *-Cc- or *-'c-, NUA -c- may align. [*p > p vs. ø in CN; Tbr-CN similarities][p1b,p2z,p3r] [SUA: TrC, CrC, Azt; NUA: Hp, Tb]

555 Aramaic(J) bizr-aa 'seed-the, n.m.'; Arabic baḍr- 'seed, seeds', pl: buḍuur 'seeds, pit, stone (of fruit)'; because CN i < UA *u, all match *puci, yet nouns with varying first vowel (a/i/u) are common in Semitic, especially Arabic; so CN piic-tli 'pit, stone of a fruit' < * puci as also the others below:
UACV-1917 ***puCci** 'seed, pit': M88-pu23; KH/M06-pu23: UA *pusi 'eye' and UA *puci 'seed' are often put together, as some languages have the same for both (such as Ls puš-la); yet several other languages have separate words. I agree with Miller and Hill in differentiating them as they do: pu4 'eye' and pu23 'seed', though several forms are cross-listed in previous works. Those with different forms than for 'eye' include: CN piic-tli 'pit, stone of a fruit' (vs. CN iiš-tli 'face, surface, eye'); Ca púči-ly 'seed' (vs. puš 'eye, face'); Cp púči-ly 'seed'; Sr a-puuč; Gb púcen fruit, seed'; Ktn -puc. [p1,p2,p3] [NUA: Tak; SUA: Azt]

556 Hebrew **bayṣa(t) / beeṣa(t)** 'egg'; Arabic **byḍ / baaḍa** 'lay eggs, be white': Arabic **bayḍat-** 'egg, testicle': though not attested in the Masoretic Text, the plural would be Hebrew **beeṣoot**:
UACV-809 ***pïyso** 'testicle': Yq bíčo 'testicle'; Tr bičó/wičí 'testicle'; Eu vicó-puva- 'castrar [castrate]'; and the -pedho portion of TO wiipedho 'testicle' (< *piipïyso) fits nicely since TO d < *y and a previous C in a cluster often causes *-Cs- > -c-, and the vowel change *pïy- > pi in Tr, Eu, and Yq is expectable. Without TO, a reconstruction of *pico would work, but *pïyso with TO explains all forms. [p1b,p2y,p3s4] [SUA: TrC, Tep]

557 Ugaritic ḫrb 'sword, knife'; Aramaic ḫarb- (*xarb-) 'sword' < Akkadian xarbu 'plough'; Hebrew ḫɛrɛb 'knife, sword'; Syriac ḫarb-aa 'sword, blade, dagger':
UA ***hayp** 'edge, shore, end': M88-ha17; KH.NUA; Cp háyve 'end, edge, shore'; Cp háye 'finish, tire of'; Ca háyva 'edge, end'; Ls háylu/háyla 'edge, end'; Gb háykom 'quedar'; Sr hïïvia 'side, edge, shore, by, beside'; Sr 'ayïït 'end' (cognate? Miller queries; probably so, as the edge is often the end). In relation to Cp háye 'finish, tire of' etc., PYp had 'finish, v.t.' is interesting, since Tep d < *y, and both with h. [p1x,2r,3b] [NUA:Tak, Hp]

From Semitic bwṣ / byṣ 'be white' (pfv: baaṣa) is Sem-kw > UA *kwaca (> NUA *kwaya), and Sem-p *pos. Also Sem-kw ṣ > c and Sem-p ṣ > s respectively, thus, matching the expected labials kw and p as well. Also keep in mind that non-initial UA *-c- > -y- in NUA, except when clustered *-cc-/-Cc- > -c-:
Semitic bwṣ / byṣ, pfv: **baaṣa** 'be white' > *kwaca > ***kwaya** of Sem-kw (listed earlier at 48)
Semitic **bwṣ** 'be white' or Syriac/Aramaic buuṣ-aa 'byssus, white linen' > Tb poos of Semitic-p (558) .

48 Semitic bwṣ / byṣ, pfv: **baaṣa** 'be/became white' [Sem-kw]:
UACV-2545 ***kwaya** 'white' (< *kwaca): Ls xwáya 'be white'; Cp xwáye 'be white'; Hp qöya 'a bound form meaning white, pure, used especially in ceremonial contexts'; perhaps Cr kwaina. *kwV reduction in Hp, between the original two consonants (*kw-c/y-) in Ls and Cp. [kw1b,kw2w,kws4] [NUA: Tak, Hp; SUA: CrC]

558 Semitic **bwṣ** / byḍ 'be white'; Hebrew buuṣ 'byssus (< Greek bussos < Semitic) white linen'; Syriac / Aramaic buuṣ-aa 'byssus, white linen-the' [Semitic-p]:
UA ***pos** 'white': Tb poosït~'opoos 'be white' (Tb(H) poošït); Tb poosat 'white'. [p1b,p2w,p3s4] [NUA: Tb]

The next four items reflect the same root (bky 'cry'): Semitic-p's perfective, Sem-kw's pfv, the 3rd person masculine imperfective, and the 3rd person feminine impfv.

559 Hebrew **bky/ baka** 'cry, weep' (perf stem); yV-bkV (imperf stem); Syriac bakaa / baka':

UACV-612 ***paka'** 'cry, v': Hp pak- 'cry'; Tb(M) pahaa'at / 'apahaa' 'cry, bawl, howl' (Tb h < *k); Ktn paka' 'ceremonial yeller, clown who shouts all day to announce a fiesta'. Of interest is that the Syriac form actually shows the aleph or glottal stop, often only used as a long vowel place holder; yet the glottal stop in Tb and Ktn show the glottal stop pronounced, aligning with Syriac more than with the Hebrew and Arabic terms lacking that glottal stop. [p1b,p2k,p3'] [NUA: Hp, Tb, Tak]

24 Hebrew **bky/ bakaa^{y}** 'cry, weep' [Sem-kw has Semitic bakaa > UA ***kwïkï/*o'kï** 'cry']:
UA *kw > Tr w and Wr w, so Tr weke/oke 'weep, shed tears' < UA *kwïkï:
UACV-604 ***kwïkï / *o'kï** '(shed) tears': M88-'o6 'tears': AMR1993; Stubbs1995-28; KH/M06-'o6: Tr weke/oke 'to shed tears'; Wr o'kéwa 'lágrimas'; Tr oke-wá 'lágrimas'; Wc úkai 'lágrimas' corresponds to Tr/Wr oke.

Because bilabials as first segment in a cluster consistently disappear (-bk- > -k-), the impfv 3rd m. sg Hebrew *yVbkV 'weep' with impfv prefix originally *ya- (later yi-) also matches UA *yaka / *yakka 'cry' well:

560 Semitic *ya-bka^{y} 'he/it weeps, cries' > Hebrew yi-bke$^{(y)}$ 'he/it cries'; Hebrew ti-bke$^{(y)}$ 'she/it cries'; Hebrew 'e-bke$^{(y)}$ 'I cry'; Arabic ya-bkiy:
UACV-610 ***yaCkaC** 'to cry, sg': I.Num290 *yake/*yaka 'cry'; M88-ya11 'cry'; KH/M06-ya7, 11: Mn yaġa 'cry, vi'; NP yaka 'cry, sg' (< *yakka); TSh yakaiC / yake; Sh yakaiC 'cry, sg'; Cm yake 'cry, sg'; Kw yagi 'cry, sing (of bird), crow (of rooster)'; SP yaġa 'cry, neigh (horse), hoot (owl)'; CU yagá-. Add Ch(L) yaga- 'cry' and Ktn yik 'scream'. Both NP(B) and NP(Y) have yaka 'cry, vi' (< *yakka), suggesting gemination, though the others have lost the gemination.
UACV-1883 ***ya**... 'say': M67-363 *ya 'say'; BH.Cup *ya 'say' (Cp ya-; Ca yá-; Ls ya-); M88-ya7 'say'; KH/M06-ya7: Cp yax; Ca yáx 'to be so, to say'; Ls yá(x) 'say, tell'; Hp yaw 'quotative particle'; Cr yee 'it is said (quotative)'; Miller queries whether Wc hai is cognate. I like AMR's (1993c) union of Num *yaka 'cry' at cry with the Cupan forms. [p1i,p2b,p3k,p4i] [NUA: Num, Tak, Hp; SUA: CrC]

561 Semitic *ta-bka^{y} 'she/it weeps, cries' > Hebrew ti-bke$^{(y)}$, 'she/it cries'; Arabic ta-bkiy:
NP taka (< *takka) 'cry, vi'. NP has both m and f 3rd sg of *ya-bka > yakka and *ta-bka > UA *takka 'cry' and consistently geminates/doubles the middle consonant in both as well. [1t,2b,3k,4y]

562 From the Semitic root nbṭ is a verb 'look (at)' attested mostly in the hiqtiil form, which causes the -nb- cluster to become a doubled (dageshed) -bb-. The 3rd person pfv stem—Hebrew hi-**bbiiṭ**—with stem -**bbiiṭ**; and the impfv stem is similar with different prefixes: Hebrew ya-**bbiiṭ** 'he looks'; ta-**bbiiṭ** 'you/she looks'; etc. We see these affixless stems often in UA. The UA stem—UA ***pici / *pica** 'look, see'—matches well, and would belong to Semitic-p, since a doubled/dageshed -bb- from Sem-kw would be -kw- rather than -p-. Hebrew mabbaaṭ 'expectation, object hoped for'.
UACV-1907 ***pica** (< *pita) 'see': L.Son193 *pica 'ver'; M88-pi21; KH/M06-pi21: Op vica; Eu vicá-; Yq bíca; AYq viča; My bícca; Hp pipca 'perceive, notice'; Tr beči / peči 'ver [see]'. Kw naviži (< *na-pici) 'appear, be showing' i.e. 'be seen' with passive *na- prefix. [NUA: Hp, Num; SUA: TrC]
UACV-2457a ***popica** 'wait for': M88-po6 'esperar'; KH/M06-po6: TO wo'išïg; My boobícca; AYq vovič̌a 'wait for, vt'. Eu oiswe/oisiu-ce 'aguardar por mucho tiempo' may be a loan from a Tep form like TO above, and the TO item may be a dissimilation: *popica > *po'ica. The Cahitan forms (AYq, My *popica) likely contain *pica 'look', with initial *po 'in/at' (an object), thus 'looking for him' like Latin ex-pect 'out-look' and Spanish esperar. Note also a 'look/see' morpheme in Kw pïni-kee 'watch, wait for'. These match Hebrew -bbiiṭ bo 'look at/for him/it' and note the Hebrew noun 'expectation' above. [p1n,p2b,p3t2]

563 Hebrew **śaapaa(t)**, pl: sapoot 'lip, speech, edge, shore (of sea), bank (of river)';
Egyptian(H) spt 'Lippe [lip]', pl: spwt 'lip'; Coptic spotu < *spotwey, dual);
UA ***sapa-** 'lip'and UA *puti 'lip(s)'; the pl first lost the vowel in the unaccented syllable, which cluster later lost the s: *sapoti / *səpoti > spoti > poti, treated in the next item.
UACV-1355 ***sapala (< *sapata)** 'lip': Wr asapéla 'lip'; CN šiipal-li 'lip'. Many UA forms are also compounded with UA *tï'n- 'mouth' (< Hebrew ḏiqn- 'chin'), which *tï'n often loses the glottal stop and assimilates to tem- before bilabials: CN teen-šiipal-li 'lip'; Eu tén-pira 'lip'; Tbr tini-purí-t; Yq tem-beria, My tem-beria; Cr biirúh. The vowels are difficult, but the three consonants are s-p-l/t-. The TrC forms have lost the sibilant in the cluster as a result of compounding with *tïn- 'mouth', which is typical sibilant behavior in UA: *tïn-sVpVla > tïn-spïla > tïnpïla > tïmpïl. The Numic forms result from a similar compound—*ten-pai > *tïmpai—such that the final -pai could be related, missing l: TSh tïmpetïŋkampi 'lip'; Sh tïmpai/tïmpe; CU tïpa-wəsí-vi. CN and NUA show 2nd vowel to be *a*—*(sa)pal(a)—which could be, as the following liquid tends to raise vowels and could have done so for the TrC forms. Add Sh sapai-pin 'side'?

Perhaps Sr şïţ ‘mouth, lips’ with loss of p in a cluster? What of Ktn hïvï ‘coast’? Intervocalic liquids usually become glottal stop in Yq, so the fact we have -r- in Yq and Cr means they are from original *-t-. [p1s2,p2p,p3t] [NUA: Num; SUA: TrC, CrC, Azt]

564 Hebrew śaapaa(t) ‘lip’, pl: **śapoot** ‘lips’, **sʾpootee**^{y} ‘lips of’:
UA ***puti** ‘lip’ in Tbr tini-purí-t ‘lip’ is from the Hebrew plural: Tbr first lost the vowel in the unaccented syllable, which cluster later lost the s: *sapote > sputi > puti, and rising of o > u and e > i is usual in UA.

565 Hebrew **mkr / maakar** ‘sell, give (Judges 2:14, 3:8, 4:2)’ selling is giving to the buyer, and **mkr** means ‘give’ as well; furthermore, UA *na-maka ‘sell’ means ‘sell’, the reciprocal being ‘give to each other, trade, give (goods for s.th.)’, and AMR sees a final -C in *makaC:
UACV-1003 ***makaC** (AMR) ‘give’: Sapir; VVH83 *maka ‘give’; B.Tep139 *maakai ‘he gives’; M67-196a *maka ‘give’; I.Num91 *ma(h)ka ‘feed, give’; BH.Cup *max ‘give’; KH.NUA; M88-ma12; AMR 1993c *makaC; KH/M06-ma12 *makaC (AMR) ‘give (food), feed’: a common etymon in all branches of UA. Mn maqa; NP makka ‘give, feed’; TSh maka(n); Sh makaC ‘feed’; Cm maka ‘feed, give to eat’; Kw maga ‘give, feed’; Ch magá; SP maġa ‘give’; WMU maġá-y ‘feed, give food’; CU maġá-y ‘feed’; Hp maqa ‘give to s.o.’; Tb maha; Sr maqai; Ca máx ‘give (money, clothes), sell’; Cp maxa; TO maak, maki; PYp maaka; NT maákai; ST maak; makia; Eu maká-; Tbr maka; mika; Yq máka; míka ‘regalar’; My makka; miika; Wc mikwa ‘give to eat’; CN maka ‘take medicine, give s.th. to s.o.’; CN na-maka ‘sell’. Add Ktn mak ‘give’ and Ktn namakat ‘generous person’ also. I like AMR’s reconstruction, as a final -C exists in CNum. A few geminate the 2nd C, perhaps for intensification rather than proto-structure. [*k > h in Tb] [NUA: Num, Tak, Hp, Tb; SUA: Tep, TrC, CrC, Azt]
UACV-2395a ***namïki** (< *na-maka) 'pay, sell': B.Tep167 *namïki 'pay': M88-na33 'pay'; KH/M06-na33: TO namkið(a) 'pay'; NT ááta namïïkidïi 'pay'; ST namki 'pay, vi': ST namkia 'cost'; ST namkidya 'pay him’. Cf. CN tiaamiki 'buy, sell’. Add Mn no’mahi/no’mihi 'buy, vt’ (k > h in Mn).
UACV-2395b ***na-maka** 'distribute, sell, give out': KH.NUA; Sr naamq ‘distribute, give out, give to several people’; Cp námxalayka ‘to the store’; Cp né-mexe 'sell, give as gift'; Ls námxa 'give to several people, distribute’. In regard to both of the above, consider also: Ca máx ‘give (money, clothes), sell’; Eu nemáka 'sell'; Yq nénka 'sell'; My nenka 'sell' (Cah *nïnka < *nïmaka); CN namaka 'sell’; and Ktn no’mk ‘buy, vt’. Perhaps all from < *na-maka, with reciprocal na- prefixed to *maka ‘give’ as buying/selling requires reciprocal giving, i.e., giving s.th. in exchange for the goods. Zigmond et al (1991) have Kw na-waga 'buy' from *na-maka. [k > h; mk > nk in Cah] [p1m,p2k,p3r] [NUA: Num, Tak; SUA: Tep, TrC, Azt]

5.4 Semitic ’aleph (Glottal Stop: ’) > w/o/o’

In Semitic-p, the Semitic ’aleph or **glottal stop** (**’**) is also prone to rounding, reflecting **w, o,** or **u,** sometimes in conjunction with a glottal stop as well: o’o, u’. This rounding phenomenon for ’ is apparent in Semitic itself. Arabic s’l (sa’ala) in the Arabic II form, which doubles the medial consonant, yields sawwala (< *sa’’ala). Other examples are Arabic wabbara ‘be covered with feathers’ from the root ’br (Koehler and Baumgartner, 9) and Arabic II rawwas ‘to point, sharpen, taper’ from the root r’s, the source of ra’s ‘head, tip, top, vertex’. Also see Syriac under UA *wakay ‘two’ (570). As occasionally in Semitic itself, likewise in UA the Semitic-p ’aleph or **glottal stop (’) yields** rounding (**w, o,** or **u)**, exemplified in 566-583, etc:

566 Hebrew **’ariy / ’arii** ‘lion’:
UACV-1352 ***wari** ‘mountain lion, predatory animal’: M67-110b *wa coyote; L.Son346 *wo’i ‘coyote’; M88-wa7; Stubbs 2000b-32,35; KH/M03-wa7; KH/M03-wo11: Wr worí ‘mountain lion’; Wr(MM) worí ‘mountain lion’; Tbr wawi / wowi / vavo ‘mountain lion’; Cr waábe’e ‘coyote’ (pl: waábe’e-te ‘coyotes’); Op gori ‘coyote’; Eu voi/boi/woi ‘coyote’; Wr wo’í ‘coyote’; Yq wó’i / go’i ‘coyote’ (-r- > -‘-); My wó’i ‘coyote’; Tbr wawi-nal, vavo-nal ‘wolf’; Tbr woi / goi ‘coyote’; PYp kolisi ‘mountain lion’ (note Op gori, thus devoicing of g > k in PYp). Cr may be a loan from Tbr wawi ‘lion’ or underwent the same kind of consonant harmony, with the 2nd w > v / b). I consider TrC *wo’i ‘coyote’ to be related to Wr *wori ‘lion’, in that often r > ’ in Cahitan especially. Wr wo’í is likely a loan from Cah, so of Wr wo’í ‘coyote’ and Wr worí ‘cougar’, the first is a loan. I also consider Miller’s initial vowel *a* to be correct (as in Tbr and Cr), and that o is due to the rounding influence of adjacent w; note vestiges of the Tep sound change *wo’i > go’i in Op and Tbr words for ‘coyote’; and Wr and Op -r- and Yq and My -’- (< *-r-) all point to reconstructing *-r-. Could Sr wanaţ ‘wolf or cougar’ be a nasalization of the liquid (or is it with *kwana ‘coyote’). Or what of Sr wahi’ ‘coyote’? [C harmony; original V in Cr, Tbr, Sr; *L > ’; Cr-Tbr contact? like leaf] [p1’,p2r,p3i] [SUA: Tep, TrC, CrC]

567 Hebrew ’mn ‘believe’ appears only in hiqtiil forms: Hebrew **ya’amiin** ‘he believes/trusts/stands firm, 3rd m. sg’; Hebrew **ya’amiin-o** ‘he believes him/it’:
UACV-172 ***yawamin-(o)** ‘believe (him/it)’: KH.NUA; M88-ya27; KH/M06-ya27: Sr yawamin ‘believe’ again shows the glottal stop as -w-, and aligns through 7 segments. Gb yawáyno ‘believe it’; Gb lost -m- (elsewhere also), which is otherwise identical to Sr, but shows the suffix for a 3rd person masc sg object -o. Thus, Hebrew ya’amiin-o ‘believe him/it’ > Gb yawayno ‘believe him/it’ is a lengthy match, missing only -m- of 8 segments. Ktn yaŋam ‘believe’ and Ktn yaŋamineana ‘they believe all of it’ belong as well, as some *w > ŋ (see *tĭpiwa / *tĭpiŋa ‘ask’, *siwa / *suŋa ‘girl’, as also in Munro 1973). Ktn, with *-w- > -ŋ-, also matches through 7 segments. Marcus Smith (p.c.), a linguist knowledgeable in Sr, second only to Ken Hill, suggested only as much as Sr yawa is the stem, and indeed yawa’ often appears in *Wayta’ Yawa’: Always Believe* (Ramon and Elliot 2000); however, it seems to be a truncated form, because Kenneth Hill has Sr yawamin in his dictionary, and both Gb and Ktn show the same stem of the same length. In addition, Tb yahn~’aayanh ‘believe him, vt’ also belongs though truncated in the middle, but is consistent with final -n. Likewise, after *-awa- > -o- in My yomnia ‘contesta [answer], responde [respond]’ (yawamin > yomin > yomni), My also shows both -m- and -n-. The basic meaning of the Semitic root is ‘confirm, be firm’ and thus the hiqtiil is ‘cause / consider to be firm, reaffirm’ which is what one does in ‘answering’ or ‘believing’. So besides Sr, we also have Gb, Ktn, Tb, and My—five languages from three branches, representing both NUA and SUA, which show forms originating form yawamin. To impfv: ya’amiin, we add the pfv: hɛ’ᵋman, from which Ca hee’an is missing only -m- also. [p1’,p2m,p3n] [NUA: Tak, Tb; SUA: TrC]

568 Hebrew perfective: hɛ’ɛman ‘he believed’:
Ca hée’an ‘believe s.o., agree on s.th.’ is much reduced, but shows the vowels and the intial h- of the Hebrew 3rd sg masculine perfective: hɛ’ᵋman. [NUA: Tak]

569 Hebrew **’egooz** ‘nut tree’; Aramaic(J) ’eguuz- / ’amguuz-aa ‘nut, nut tree-the’; Ugaritic ʕrgz; the Semitic forms are considered loanwords from Armenian engoiz; notice that some UA languages show nasalization just before the 2nd C -Ng-, just as occurs in Aramaic, Ugaritic, and their loan source:
UACV-1626a ***wokoN / *wo(N)koC** ‘pine’: Sapir; VVH142 *wo$_s$ko ‘pine’; M67-320a *woko/*hoko ‘pine tree’; I.Num275 *woŋko(N) ‘pine tree, fir, spruce’; BH.Cup *wexét ‘pine’; HH.Cup *wəxé- ‘pine’; L.Son349 *woko ‘pino’; CL.Azt126 *oko < 265 **woko ‘pine’; Fowler83; M88-wo4 ‘pine tree’; AMR 1993c *wokon; KH/M06-wo4 *wokon: Mn woqobï; Mn wohwopïï (Fowler83); NP woggopi; TSh woŋkopi; Sh wonko-pin; TSh woŋwobe (Fowler83); Kw woho-dï-bï ‘bull pine’; SP oġoN-/aġoN-, oġo-mpï ‘fir tree’; CU ’aġó-pï ‘ponderosa pine’; Tb wooŋhal ‘pine sp’;
Tb wohombit ‘little pine tree’; Tb wohomboo-l ‘bull pine’; Hp löqö(coki); Cp wexít’i-t; Ca wéxet;
Ls wixé’tu-t ‘pine sp., Pinus coulteri’; Eu vokó-t/wokó-t; Eu gokót ‘pine’ (Pennington1981); Tbr nyokó-t;
Yq oko; Yq(J) wóko; My wokko; Wr wohkó/ohkó; Tr okó ‘pino, clase de pino’; Cr hukú;
Wc huku; CN oko-tl ‘pine tree, torch made of pine’. Also add Ktn wokoh-t ‘pine sp’. AMR astutely notes also Ls pa-wxi-t, wixé-t ‘canoe’. Note also Ls wixé’tu-t ‘a kind of pine, Pinus coulteri’. This set is curious: the expected reflex of *woko in Tep (*goko) does not appear, but is as Bascom notes *hukui. However, Op gok ‘pino’ (Shaul) and Eu gokót do show g < *w; but Eu also has Eu vokót ‘pino’. Miller queries whether Tep *hukui ties to UA *woko, as we all must, yet two round vowels and medial -k- make it more probable than not, yet the Tep forms’ looking like CrC hukú make CrC the likely loan source which may suggest more northerly orgins for CrC. Note that Tb(H) wohhont ‘pine nuts from gray pine/bull pine’ is the ‘nut’ and the shorter form, like the Semitic word, whereas Tb(H) wohhompoo-l / wohhoono-l ‘gray pine, bull pine’ have additional morphemes for the tree, the pine-nut possessor/tree. Usual Tak correspondences are *o > Ls e, Ca i, Cp i, but here Ls i, Ca e, Cp e.
UACV-1626b B.Tep77 ***hukui** ‘pine tree’; Fowler83; TO huk; LP huk; PYp huko ‘fir’; NT úkui; ST huk. There was likely borrowing from CrC *huku to Tep *hukui, because the Tep reflexes have both the h and the vowel u of CrC, while they should show Tep *goko like Eu does. [Wr wo, Tr o; Tak vowels] [p1’,p2ng,p3z] [NUA: Num, Tb, Hp, Tak; SUA: TrC, CrC, Azt, Tep]

570 Hebrew *’xr > ’ħr ‘be behind, tarry, linger’; Hebrew *’axar ‘behind, adv, after, prep’;
Hebrew *’axare^y ‘back, rear end, n, behind, prep’; Hebrew ’aħer (< *’axer) ‘other, later, following’;
Aramaic(J) *’axer ‘another, the other, stranger’; Hebrew ’aaħoor (< *’aaxoor) ‘back, rear, behind, west, later, n and adv’; Arabic ’aaxar ‘another, one more’; Arabic ’axiir ‘last, the **second** of two’;
Syriac (aqtel) ’awħar ‘tarry’; Syriac ’aħrinaa ‘the other, the next’;

Hebrew **’aħar / ’aħer** (< Proto-Sem ***’axar)** ‘another, after’ from the Semitic verb ’xr ‘be behind, i.e., follow’ surfaces in several forms in UA, but most pervasively in the number ‘two’: 28 of 30 UA languages show a reflex of PUA ***wakay/waxay** ‘two’: Numic *wahay; Hp löö-yö-m (Hp l < *w);
Takic *woh; Ktn woh; Tep *goka; Wr woka; My wooyi; Yq woi; Tbr nyohor; Eu wok, wodï(m). Just as Spanish segundo ‘second’ and seguir ‘follow’ both derive from Latin sequ/sekw ‘follow’ (English sequel), so

did Semitic ’axar come to mean ‘2nd/two’ as a vestige of ‘follow’ in Yq and My: Yq and My busani ‘six’; but Yq wo-busani ‘seven’; My woi-busani ‘seven’; the Cahitic forms (Yq, My) do not make sense as ‘two-six’ for ‘seven’, since ‘two-six’ would be either 8 or 12, but they only make sense as ‘after-six,’ ie, ‘seven’. Tr okua ‘two’ (Hilton 1993, 141) shows the solid k as we see in Tep and Eu and partially in Num and Tbr h, but many lost the *k and others the *y (< r). Sr waha’ ‘also, too, either’ also belongs and semantically aligns with ‘another, one more’. Ktn waha parallels Sr waha’ and Ktn waha ‘start back again’ semantically aligns with Arabic II ’axxar ‘put back, set back’. Details follow:

UACV-2622a ***wakay** ‘two, after’: I.Num267 *waha(h) 'two'; M88-wa10; KH/M03-wa10: NP waha(’yu); Mn wahá-i/tu; Mn(L) wahahtu / wahai ‘two’; TSh; Sh wahattïwïh; WSh wahattïn; Cm; Kw wahayu; Ch waha; SP waa; WMU wáyIni; CU wáyini; Sr waah- / wah- ‘twice’; Gb wahá ‘other, companion’. Ken Hill adds Ktn wah- / weh- ‘twice’. The wá’a- of Cr wá’apua likely also belongs (see note at *wo-pusani ‘seven’). While others divide them (wa10, wo1), Num *wahay and *wokay are related. Note Kw wahayu ‘two’ and Tb(H) wahaayu / wahaay ‘after that, from there’. There are other sets showing Num -h- corresponding to SUA -k-, and *a > o/w_ adjacent to w. [-h- > ø (in Hopi), > ’ (in Cora)]

UACV-2622b ***wokay**: Sapir; VVH103 *wo 'two'; B.Tep46 *gooka; BH.Cup *wéh; M67-509 *wo / *woka / *woy; L.Son344 *wo; M88-wo1; KH.NUA; KH/M03-wo1: Sr wöh; Ls wéh; Ca wíh; Cp wíh; Gb wehé’; Hp lööyö’ (divided by Hill as löö-yö-’); Tb woh/woo; Eu wodí(m)/wok (Lionnet 1986); Eu godum, gen: goké; acc: gok (Pennington 1981); Tbr nyohór; Yq wói; My wooyi; Wr woká; Tr okwá. Note also Yq and My wo’olim 'twins’. [For medial k/h, cf. three, pine, deer: *k > k in Tep, Wr, Tr; *k > h in most of Num, Tak, Tbr; *k > ø in Hp, Tb, Cah, SP, CU, and one Eu form; Tbr ny < *w; o/a] [p1’,p2x,p3r] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC]

UACV-2635 ***wo-pusani** ‘seven’: Eu seniovusáni; Op se-ni bassani; Tbr nyo-vosaní-r; My woibúsani; Yq wobúsani / wovusani. *pusani means 'six' and 'wo' is related to 'two'; yet 'two-six' should be 8 or 12, but not 7. However, 'after' as an underlying meaning for both this etymon and ‘two’ fits all semantic dimensions; that is, seven is *after* six. Compare Latin sekw- in Spanish seguir 'follow (after)' and segundo 'second’. Because liquids become glottal stop in Cr, then *pula ‘one’ > -pua in Cr wá’apua ‘two’ and wa’a may mean ‘after’ there as well: *wa’a-pua ‘after-one’. [SUA: TrC]

Very relevant to ’ > w is the UA pair of Ls yawáywa ‘be pretty, good-looking’ and Sr yï’aayï’a’n ‘be pretty, beautiful’, showing even in UA a tie between ’ and w, plus matching Semitic ya’ya’ ‘beautiful’:

571 Arabic **ya’ya’** ‘be beautiful’; Aramaic(J) **yaa’yaa’** ‘beautiful’; Syriac yaa’ayaa’ ‘beautiful’; Punic y’; Hebrew yaa’aa ‘be proper, fitting’:

UACV-154 ***yawa / *yï’a** ‘beautiful’: KH.NUA; M88-yï19; KH/M06-yï19: Ls yawáywa ‘be pretty, good-looking’; Sr yï’aayï’a’n ‘be pretty, beautiful’. Another correlation between *’ and *w in UA, and this set (aligning w and ’) is proposed by both Miller and Hill. [Tak]

UACV-155 ***uCyoli** 'beautiful’: Yq 'uhyói 'bonito [pretty]’; My uhyóoli/uhyóori 'bonito, pintoresco’; AYq uhyooli / uhyoi ‘beautiful (inanimate)’. This set is less clear, but is not improbably a reduction of the same reduplication we see in both Semitic and Tak, for the Cahitan languages can be severe reducers (cf. ‘bat’). [’ > w] [p1y,p2’,p3y,p4’] [SUA: TrC]

572 Hebrew **’iiš** ‘man, person’ (with negatives ‘no one’) [Semitic-p, due to rounding for ’]:
UA ***wïsi** ‘person’: Tr wesi ‘someone’, with negatives ‘no one.’ This Semitic-p form contrasts with the Sem-kw form below. [p1’,p2y,p3s1] [Tr]

573 Hebrew **’iiš** ‘man, person’ [Sem-kw]:
Ca -iš ‘person who does (the verb)’
Ca tawas- ‘to get lost’ Ca tawas-iš ‘one who is lost’
Ca te’e- ‘to borrow’ Ca te’e-iš ‘borrower’
Tb(H) woo’iš ‘co-spouse, second husband or wife, lover, mistress’ (Tb woo ‘two’).[Sem-kw,’] [NUA:Tak, Tb]

574 Hebrew ’išaa / ’ešɛt / **’išt-** ‘woman, wife of’ (the genitive form of ’išaa(t) ‘woman’) [Semitic-p, due to rounding for ’]: Hp **wïïti / wïhti** ‘woman, wife’; s as first consonant in a cluster is usually lost, yet the h or devoiced vowel in one Hopi dialect is right where a cluster of voiceless -št- would put it. [p1’,p2s1,p3t] [Hp]

575 Arabic **kam’-** ‘truffle(s)’ (edible fleshy appendage to a root system, as are potatoes): Ugaritic **kam’-u / kam’-atu** ‘truffle’ and Mari **kama’aatum** ‘truffles’ (Huehnergard 1987, 137); Ugaritic and Mari, both more ancient than Hebrew, and Arabic, all show the 3 consonants k, m, ’, and all 3 are clear in UA:

UACV-1718 ***kamo’-ta** ‘sweet potato’: M67-428 ‘sweet potato’; M88-ka33 ‘sweet potato’; KH/M06-ka33: CN kamo’-tli; Cr kámwah; Pl kamuh ‘sweet manioc’. Add ST kamav ‘camote’, though TO kamooði is a loan from Spanish and ultimately CN, as Eu kamoti may be also. [p1k,p2m,p3’] [SUA: CrC, Azt, Tep]

576 Hebrew **'aataa^{y} / 'atii-** 'come'; Arabic **'ty / 'ataa^{y}** 'come'; Aramaic **'ty** 'come'; Syriac 'ita / 'ɛta; in Semitic, 3rd consonant -y encourages a final vowel -i; in fact, the Hebrew non-3rd person perfect stem would be 'atii-, which could palatalize the -t- > -c- and assimilate the vowel *'atii > *wici > UA *wiic 'come':
UACV-61 ***wiic** 'come': CL.Azt 32 *wiic 'come'; M88-wi13; KH/M06-wi13: CN wiic (defective verb); Pl wiic (pret: waala(a)h); T -bic; Po wic; Z wiica. [p1',p2t,p3i] [SUA: Azt]

577 Aramaic(J) 'aas-aa' 'myrtle willow-the'; Syriac 'aas-aa 'myrtle-the';
Aramaic(S) 'aas-aa' 'myrtle bush-the'; Akkadian asu:
UACV-2555 ***wasV** 'willow': Cr waséh 'sauce [willow]'; CN wešoo-tl 'willow tree'. [p1',p2s3] [SUA: CrC, Azt]

578 Arabic *pa'r- > fa'r- 'mouse' would correspond to Hebrew ***pa'r** or ***pa'ar** 'mouse':
UACV-1462 ***pa'i** 'mouse': M88-pa57 '(field) mouse'; KH.NUA; KH/M06-pa57: Ca pá'iwet; Gb pa'ít; Sr pa'i-š (a Ca loan from unattested *pá'i-š suggests Hill). Add Kw pa'yï-ci 'kangaroo rat'. [p1p,p2',p3r] [NUA: Tak, Num]

579 Arabic *pa'r- > fa'r- 'mouse' would correspond to Hebrew ***pa'r** or ***pa'ar** 'mouse':
UACV-1463 ***pu'wiN (< *pa'wiN)** 'mouse': B.Tep261 *vosïki 'mouse'; I.Num148 *po/*pu; L.Son210 *poc 'raton'; Fowler83; M88-po16 'mouse'; KH/M06-po16: Mn puweec(i); NP punkacci; Sh poneh; Sh(C) ponaih; Sh(W) po'naih; Kw pu'-miča-gi-ži; SP pu'iča; CU pu'úyca-ci; Ch(L) pu'^{w}inčaci 'mouse'; WMU pa'wi-či (nasalized vowels); and SP puŋ'wi 'make peeping sound (as mouse, rat)' shows the nasalization in WMU pa'wi. The WMU form, along with other sporadic initial *pa... forms in Num, suggest that these relate to Tak *pa'i (or < *pa'wi) above: that the w caused rounding of *a > o/u in most forms, while the *pa'i forms lost *w and so did not acquire any round vowels. The po/pu dichotomy, instead of one consistent round vowel, also speaks for them being the result of assimilation rather than original. SP and CU show -ca- after *pu'i; if that syllable exists in the Hp, Tbr, and Tep forms below, though in contracted form (*po'i-ca > po'ca > poca), then the below may relate as well:
UACV-1463c ***poca (< *pa'wiN-ca ?)** 'mouse': Fowler83: Hp pöösa; Tbr he-wocó-t; TO wošo 'rat'; LP vošïg; NT vosïïki / vasïïki; ST vasïïk. Is Eu voisék 'rata' a loan from Tep? Manaster-Ramer cites this set in his article "A Northern UA sound law: *-c- > -y-," where he argues for the possibility of a -nc- cluster in *ponca (AMR 1992) that prevents *-c- > -y- in NUA. Add PYp vosogi 'rat, mouse' and Wc háácu 'rat', which matches ST and NT and a vowel metathesis of *poca, since Wc h < *p and Wc u < *o. The difference between CU pu'úyca-ci and WMU pa'wi-č should remove any doubt about whether WMU is quite a different dialect from CU. Note also Yq pótta 'mole'. NP pamoto'o 'small grey fieldmouse' and TSh pomo'aicci / poŋwo'aicci are also listed at 'squirrel' with CN mooto'-tli. [w/'] [p1p,p2',p3r] [NUA: Num, Hp; SUA: Tep, TrC, CrC]

580 Hebrew/Arabic/Aramaic **qr' / qara'** 'call, cry out':
UACV-570 ***koyowa** 'yell, shout'; ***kayoC** 'coyote, fox': CL.Azt 39 *koyoo 'coyote'; Fowler83; M88-ko26; KH/M06-ko26: CN koyowa 'dar grandes gritos [emit great shouts], aullar [howl]' (Simeón); CN i'koyoka 'roar, whir, crackle'; CN koyoo-tl 'coyote'; HN kayoč-ih 'fox'; Pl kuyuut; T koyutl; Z koyoot 'white man'; Tr keyóči 'fox'; Wr keóci 'fox'. The first vowel is difficult, since it could have been anything, assimilating to the following o in CN or being raised and fronted by the following y, as in Tr and Wr; thus, the vowel *a* may be the best reconstruction, especially since HN actually has the *a*. As is well known, CN koyoo-tl is the source of Spanish coyote, also borrowed into English. [p1q,p2r,p3'] [SUA: TrC, Azt]

581 Hebrew **'arṣ-aa** 'earth-ward, to the earth' (usually with a 'fall' verb, but like other denominalizations in the change from Semitic to UA, the adverbial itself became verbalized in UA:
UACV-833a ***wïcï > Num *wï'i** 'fall, be born, v': Sapir; VVH101 *wï$_{ʂ}$cï 'fall'; M67-163 *we 'fall'; I.Num285 *wï'i fall, drop; BH.Cup *wiíc 'throw away' (vowel wrong, Miller notes); L.Son341 *wïcï/*wïc-i caerse; B.Tep53 *gïïsïï 'he falls'; CL.Azt57 *wəcï 'fall' (< *wïcï); M88-wï3; KH/M06-wï3: Tbr wece / mwece; Yq weče; My weče; Wr wihcí; Tr wičí; Cr a-k-áh-ve 'he fell down'; CN weeci; Eu wecé 'fall'; Mn wï'i 'fall, be born'; NP wïi 'drop, fall'; Sh wïttai 'to empty, spill'; Kw wï'i 'be born'; Kw wï'i-ku 'fall' (*wï'i-kku); SP wï'i; CU wi'í 'drop, fall, be born'; CU wi'í-tií give birth to'; Hp wïïta 'pour it out'; TO gïïš 'fall, bow, descend'; PYp gesia; NT gïïsïï; ST higšia; Op gweca 'fall, sg'. Add Tb(H) wïy'wïy'ït 'fall off riding'. AMR has this set in "A Northern UA sound law: *-c- > -y-" as a good example of the phenomenon. Note *-c-/-s- > -'- in Num for both *wïcï and *pusi 'eye', and medial *-c- > -y- in Tak. This widespread stem is found in all branches in one form or another. [*w > gw in Opata]
UACV-833b ***wïcï > Tak *wïyV** 'fall, bend down, sway': M88-wï11, wï12; KH.NUA; KH/M06-wï11: Cp wéye 'collapse'; Ca wéyi 'incline, nod, sway back and forth'; Ls wóya 'be bent down (as branches of a tree), be felled'; Sr wïïyï'k 'be bent over, swayed over, nod'. KH/M03 agreeably combines wï12 with wï11; I would also combine both with wï3 *wïcï 'fall', a large well-known set, as the Tak forms have the expected NUA -y- < *-c-, as well as the notion of falling in 2 of the 4 languages and downward motion in all four, as a slight semantic shift of 'fall'. [medial *-c- > y and Num '] [p1',p2r,p3s4] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

582 Hebrew **'ɛrɛz** (< *'arz) 'cedar tree'; Jerome araz; Arabic **'arz** 'cedar'; Aramaic(J) **'arz-aa'** 'cedar-the'; Ugaritic 'arz: the Hebrew nouns like CɛCɛC are from CaCC, like the Arabic, Aramaic , and Ugaritic; that cluster becoming a glottal stop is similar to the behavior of the cluster in Hebrew 'arş-aa 'earth-ward' > UA *wïcï 'fall' > Num wï'ï 'fall'; the Hebrew glottal stop > w, and the cluster > glottal stop in Numic; the UA form aligns with Aramaic **'arz-aa'**:
UACV-422 ***wa'aC** / ***wa'aN** 'juniper or cedar tree': Ls wáá'a-t 'California Juniper'; Sr waa't 'juniper'; Gb wá'at 'guata' (juniper? Miller queries). To the Takic terms Ken Hill rightly adds Ch wa'apï; Hp làapï 'shreddy bark, esp. of juniper'; Ktn wa'-t; Eu woá-t, gen woaté, acc. woata) 'sauce, arbol'; Tbr amoat (< *awa-t) 'encino'; and Cah wáta 'sauce [willow]'. Add Tb and other Num forms for 'cedar tree': Mn wa'ápï; NP waapi; Sh waaC-pin; Cm waa(pi); Kw wa'ada-bï 'white cedar'; SP wa'aC- 'cedar tree'; CU wa'á-pï; Tb waa'a-t 'juniper berry'; Tb 'išwa'adu-l 'Tamerack, like juniper' and NT gááyi 'táscate, i.e., cedro blanco' whose initial syllable agrees. Absolutive -t (vs. -l) and -p (vs. -v) in Tb, Ls, Ch, SP, CU, Sh, mean a final consonant. In fact, Kw -d- may suggest a nasal, as Kw -d- < *-Nt-, Kw -r- < *-t-, Kw -t- < *-tt-.
[Hp l < *w, def art -C] [p1',p2r,p3z] [NUA: Num, Tb, Tak, Hp; SUA: TrC]

583 Hebrew **'epod** 'ephod, priestly garment, shoulder cape or mantle'; Aramaic **'epod-aa** 'ephod-the':
UACV-176 ***wipura/*wipula** 'belt': B.Tep44 *givurai 'belt'; M88-wi14 'belt'; KH/M06-wi14: For the Tep forms, keep in mind that Tep g < *w, and Tep w/v < *p; thus, UA *wipul > TO giwud 'belt, band, sash'; Upper Piman giwudï; NT givúúrai 'belt'; PYp givora 'belt'; PB givar 'belt'; and some d > l/r. The following likely belong as s.th. wrapped around one, whether belt, clothing, or blanket: CN wiipiil-li, piipiil-li 'indigenous woman's blouse' (the 2nd form is another case of consonant harmony, of the first; furthermore, UA *u > CN i, so the vowels match also); Mn wïpidoo 'wear (strapped to oneself like a belt)'; NP mabïta wïpodda 'cover with a blanket'; NP wïpodda 'to pile on'. Eu wipil 'cotón de mujer' likely a loan from CN wiipiil-. [L/liq]
[p1',p2p,p3d] [NUA: Num; SUA: Tep, Azt, TrC]

5.5 Semitic-p ' ('aleph) > w vs. Semitic-kw ' > ø or Weakened

Different forms of the same word appear in UA, one from Sem-p rounding the aleph (*' > w), and one from Semitic-kw that lost the initial glottal stop. For example, from Hebrew **'epod** 'ephod, priestly garment, shoulder cape or mantle' is Semitic-p's *wipol / *wipod 'belt' (583) and Sem-kw UA *ipud / *ipul 'shirt' (584). In fact, TO has both: TO giwud 'belt, band, sash' and TO ipud 'shirt'; the -'ipur portion of PYp da'ipur 'shirt' and latter part of Tr wasi-pura 'loincloth (lit: penis-shirt).'

584 Hebrew **'epod** 'ephod, priestly garment, shoulder cape or mantle':
UACV-480 ***ipura** 'skirt': B.Tep312 *'ipurai 'skirt'; M88-'i9 'skirt'; KH/M06-'i9: NT ipúrai; ST 'ipuur; TO 'ipudï (Bascom); TO ipud 'dress or shirt' (Saxton); LP 'ipar; Wc 'ívi/iwi 'skirt'. To Miller's list of the preceding, let's add NT ipúúrui 'vestido'; -'ipur portion of PYp da'ipur 'shirt'; PYp ga'ipur 'dress, n'; Tr wasi-pura 'loincloth (lit: penis-shirt); Tr wa'pora 'cloth head-cover'; thus, Tr wa/ma/na-'pora 'cloth head-cover' and Tr na'pora 'be covered' have *-'(V)pur in common with the Tep forms. [kw1',kw2p,kw3d] [SUA: Tep, TrC, CrC]

585 Of the same Semitic root is also the Semitic verb **'pd / 'aapad** 'to put on an ephod':
Tr opaca 'shirt' and Tr opata 'put on shirt' and mapata- / napata- 'ponerse la camisa [put on shirt]'.
As for Tr opaca, also in 'cry' (24) Tr shows o < wV. [p1',p2p,p3d]

586 Arabic 'abala 'grow green/tall/abundantly' (Lane 8); Arabic 'abal 'herbage, pasturage' (Lane 8):
UACV-547 ***apali** 'elote, new/fresh ear of corn': Yq 'ába'i 'elote'; My ábari/ábarim 'elotes, mazorca'; AYq avae 'fresh corn'. [liquids: *-L- > -'- > -ø-] [kw1',kw2b,kw3l] [SUA: TrC]

587 Hebrew **'argaamaan** 'purple, wool dyed with red purple' (KB), 'purple, red-purple' (BDB); Akkadian argamannu 'purple':
UACV-1774 ***aNkaC** 'red': I.Num9 *aŋka/eŋka 'red'; M88-'a24 'red'; KH/M06-'a24: TSh aŋka-pi; Sh enka; Cm ekapi; Kw 'aga-ki- (<*a(N)ka-kki-); SP aŋka(C);WMU aqqá-ġa-rï; CU 'aká-ga-rï (< *akka-ka-tï). Add Mn aqabanagi 'be red, v' (from *aNka 'red' + *pana 'shine'); Ch anká-ga 'be red, vi'. No sign of initial ' suggests Sem-kw. [-NC- > -CC-] [kw1',kw2r,kw3g,kw4m,kw5n] [NUA: Num]

588 Hebrew **ʼaab** ‘father’, pl: ’aaboot, poss’d: ’[a]boot- / ’[a]bootee[y] ‘fathers’:
UACV-846 ***apu / *(h)apu(ti)** ‘father, parent, mother’: I.Num2 *ahpï ‘father’; M88-’a18 ‘father’; KH/M06-’a18: TSh ’appï; Sh appï; Cm ahpï’. I concur with Miller’s inclusion of Cahitan, i.e., My hapči ‘woman’s father’ and AYq hapči ‘woman’s father’ (< *haputi) note Hebrew pl ’aaboot. Add the first syllable of TO apkii ‘father in the clans of the Coyote moiety’ and Tb(M) ’aabuu ‘mother’ / Tb(H) aapuu- ‘mother’. Regarding Tb, note that the underlying Semitic root is ’bw with 3rd consonant w, as in Arabic ’abawaan ‘parents, dual, father and mother’. [1’,2b,3w] [NUA: CNum, Tb; SUA: Tep, TrC]

589 Syriac ’isaa ‘wall, f’, ’is-taa ‘wall-the, partition or inner wall’:
UACV-2466 ***isV** ‘wall, dab, make mud wall’: Wr isígori 'waddle and wicker wall’; Wc ’išúma ‘untar, embarrar [cover with mud]’ and Wc ’išumári ‘pared embarrada [mudded wall]’. The isí- portion of Wr shares 2 of 3 segments with Wc ’išúma, and Tr/Wr tend to assimilate often to i at almost any excuse. [kw: ’ > ø] [SUA: TrC, CrC]

In contrast to Sem-p showing ’ > w, and the Sem-kw forms with loss of initial ’, sometimes the whole initial syllable, vowel included, is lost such that the UA form begins with the 2nd C and 2nd syllable:

590 Hebrew (construct/poss’d) ’[a]bootee[y] ‘fathers (of)’; the term is often used in the sense of generations or grandfathers past, which makes the UA sense ‘paternal grandfather’ (not maternal) noteworthy:
UACV-1049a ***poci / *kwoci** ‘paternal grandfather’: M88-wo2 ‘paternal grandfather’: KH/M06-wo2: TO wosk / woji; Eu boc / voc / vócwa; Eu bóci (bóci’i) ‘tener abuelo [have a grandfather], el que lo tiene [he who has such]’; Wr wocí; Tr očípari. Add PYp voska; NT vošíika ‘father’s father’; Nv boska and Nv bosidi ‘su abuelo’ (*c > s in Tep). If *wo, we should see Tep g; yet Tep and Eu point to ***poci* while Wr and Tr should show *poci* if that were the case, but their forms suggest *woci or *kwoci, and Wc kwïsi ‘grandmother, sister of a grandparent’ is not far off of that. The Eu form, written with both b and v, suggests *kw. Or Wr and Tr could be loans from Tepiman. In that a number of these may suggest *kwoci / *kwoti, let such also be listed in b below:
UACV-1049b ***kwoci / *kwoti** ‘paternal grandfather’: Eu boc; Wr wocí; Tr očípari; Yq haboi; AYq havoi ‘father’s father’, note AYq havoi (< *hapotï) ‘father’s father’. With -c- < *-t-, often attested, then CN kool-li ‘grandfather, ancestor’ (*-t- > CN -l-, also occasionally attested) is also cognate and agrees with *kw rather than *p or *w. [kw1’,kw2b,kw3t] [SUA: Tep, TrC, CrC, Azt]

591 Hebrew ’adaamaa / ’[a]daamaa ‘earth’
UACV-759 ***tïma** ‘earth’: BH.Cup *tə- 'down'; *tə-mal 'earth'; M88-tï36; KH.NUA: Ca téma-l ‘1 land, ground, 2 dirt, earth, 3 world’; Cp temá-l ‘land, earth, dirt, country’; Hp tïïma 'ground lime, kaolin' (cognate? Miller queries)—possible. Bright’s supposition of a compound seems unlikely. Loss of the first syllable is not surprising since the Masoretic voweling actually has that first vowel as ultra short while the 2nd and 3rd vowels are long: ’[a]daamaa. [kw1’,kw2d,kw3m] [NUA: Tak, Hp]

592 Hebrew **ʼabneṭ**, pl: ’abneṭ-iim ‘sash (KB), girdle (BDB)’:
UACV-178 ***natti** ‘belt’: Mn náti 'belt'; NP nati 'belt’. With weak ’aleph lost and bilabials when first in a cluster are lost, then 2nd syllable remains; e > a also in *makteš > maCta. [kw1’,2b,3n,4t2] [NUA: WNum]

593 Akkadian **qardammu** ‘enemy, opponent’ (Sem-kw):
UACV-818 ***tïmmu** ‘opponent’: Mn tïmu’ ‘enemy, opponent, member of the opposite moiety’;
TSh tïmmu ‘enemy, opponent’; Sh tïmmo 'opponent, competitor’. [kw1q,kw2r,kw3d,kw4m] [NUA: Num]

594 Hebrew **ʼaḫoot (< *ʼaxoot)** ‘sister’; Syriac ḫaat-aa ‘sister’ eliminates the first syllable also:
UACV-2000 ***ko(’)ti / *ko’ci** (AMR) ‘older sister’: M67-492a *ko, 492b *koci/*kuci ‘older sister’; BH.Cup*qe ... s ‘sister, elder’; KH.NUA; L.Son89 *koci ‘hermana mayor’; M88-ko13 ‘older sister’; KH.NUA; AMR 1993a *ko’-ci; KH/M06-ko13 *ko’ci (AMR): Tb kuudzin ‘next older sister’; Hp qööqa; Cp qísma; Ca qis-ka; Ls qee’is; Gb óxo’;
Sr -qöö[r]r (pl: -qööham); Ktn koha-č (poss: -kor, pl: koham); Eu kócwa; Wr ko’cí; Tr go’čí; My ákoro ‘hermana mayor [older sister]’; Tbr kocí; Wc kurí; Cr ne-kuu-cí’i. The glottal stop in Wr and Tr may be from a perceived stop. The final -o of My ákoro could well be a fossilization of -o ‘his’, the Hebrew possessive suffix, and first vowel a- is significant as exactly what the Hebrew has, though lost in the others. Add Ls kúúli-may ‘nephew, niece, i.e., older sister’s child’? Langacker (1970) uses this set in “The Vowels of Proto-Uto-Aztecan” to demonstrate that the change from *k > q preceded the change of *o to high front vowels in the Cupan languages. -cC- > -šC- is common in Cup. The -r-/-l- in Sr, My, and Wc may suggest original *-t- rather than -’c-. [2nd C; *o > Tb u] or kw? [p1’,p2x,p3t] [NUA: Hp, Tb, Tak; SUA: TrC, CrC]

595 The following is from Sem-p and aligns with the Aramaic, Arabic and Assyrian vowelings—Aramaic(S) **ʼaxaat**-aa ‘sister-the’ (rather than ’axoot)—all showing aa rather than oo for the 2nd vowel:
UACV-2002 ***wakati** ‘younger sister’: M67-493 *wa ‘younger sister’; M88-wa21 ‘younger sister’; KH/M06-wa21: Ca -wáxal^{y} ‘younger sister’ and Cp -wáxal^{y}i ‘younger sister’ (Tak *wakati) are close to the proto-type. Because Ca and Cp are possessed kin terms, the final l^{y}i is not an absolutive suffix, which ending actually fits well with Semitic and TrC. NP waŋŋa’a ‘younger brother’; Tr wayé / wa’í ‘younger sister (of a man)’; My waáyi; Yq wai; Cr ne-’iwaa-ra’a ‘my relative/younger sister’. In M67-493, Wc ’iwá ‘cousin’ is also included. In light of NP’s velar, and the liquids and y’s in the other languages, a reduction from a proto-type more like the Cupan forms may explain all:
*wakati > wakal^{y}i (Ca, Cp)
> *wakl^{y}i > *wa’yi/wayi (My, AYq, Tr)
> *walka > *wanka... (NP) [p1’,p2x,p3t] [NUA: Num, Tak; SUA: TrC, CrC]

596 Hebrew **ʼarnébet** ‘hare’; Arabic **ʼarnab** ‘hare, rabbit’; Arabic ’arnabat ‘female hare’; Akkadian ’arnabu (Sem-p due to w < *’):
UACV-1521 ***wa’na** ‘rabbit net’: M67-304 *wana ‘net’; M88-wa6 ‘basket, rabbit net’; I.Num269 *wana(h) ‘net, cloth’; KH/M06-wa6: Mn wa’nááqa ‘net’; NP wana ‘net’; TSh wanna ‘net’; Sh wana ‘rabbit net’; Kw wana-vï ‘web, net’; SP wanna ‘milkweed net for catching rabbits’; Tb waana-l ‘rabbit net’; Tb(H) waanaa-l ‘rabbit net’; Ca wána-l ‘ropelike thing’; Ls wáána-l ‘net for catching fish or rabbits’; Gb wánar ‘big rabbit net’. Miller also includes reflexes of TrC *wari ‘basket’ with these, but they are separate (161). NP, Mn and SP suggest a possible consonant cluster for this stem in NUA, while SUA terms do not. The 4th consonant (b) shows loss of bilabial as first consonant in the cluster. Add Tb(H) wihnipïï-l ‘rabbitskin blanket’? [*-CC-] [p1’,p2r,p3n,p4b,p5t] [NUA: Num, Tb, Tak]

597 Arabic ’arnab ‘hare, rabbit’; Arabic ’arnabat ‘female hare, doe’; Hebrew ’arnebet’; Syriac ’arnəbaa ‘hare, n.f.’ with pl ’arnəbaat which would correspond to an unattested Hebrew f. pl: *’**ª rnaboot**, which very short first vowel would nearly produce a three-consonant cluster, the first two of which (’r) would expectedly become t, as initial r- > t- (examples below); both m. and f. plurals exist, e.g. Middle Hebrew pl: ’arnabbiim:

Mn	tábo’/tábu’	Hp	taavo; pl taatavo-t	Eu	tábu; tábu’u
		Tb	taapunt/ tahpunt;		
NP	tabu’u	Gb	tóvit ‘smaller sp. of cottontail’		
TSh	tapun/tapu-cci	Sr	taavoht	Yq	táabu
Sh	tapun	Ca	távut	My	taabu
Cm	tabú’kina’	Ls	tóóvit ‘brush rabbit’	Wr	toí
Kw	tavu-ci	TO	toobi / cuuwi	Tr	ŕowí/ŕuwé
Ch	tavu-ci	Nv	tobi	Cr	táciu’u(ri) (pl)
SP	tavu-ci/tavu-mpïci	PYp	tuuva ‘cottontail’	Wc	táciu
CU	tavï-ci	NT	too’m	CN	tooč-tli
		ST	toom		

UACV-1754a ***tapuC / *taput** ‘cottontail rabbit’: M67-334a *tapu ‘cottontail rabbit’; I.Num210 *tapuN / *tapu’u ‘cottontail, rabbit’; M88-ta30 ‘cottontail rabbit’; L.Son275 *tapu ‘conejo’; Fowler 1983; KH.NUA; KH/M06-ta30: Mn; NP; TSh; Sh; Cm; Kw; SP; CU (*u > ï); Hp (*u > o); Tb; Sr (*u > o); Ca; Op tawu; Eu; Yq; My. Sixteen languages match perfectly the four segments *tapu, which is rare in UA linguistics. Yet a few others (Gb, Ls, TO, LP, Wr, Tr) agree with *topi, treated below. Note that CU displays another example of Numic changing *u > ï. Fowler (1983) lists a Piman form taapi ‘Lepus Arizonas’. PYp tuuva ‘cottontail’ does the PYp vowel metathesis (also in bat and others).
UACV-1754b ***taput(i) > *tapoc(i) > CN tooc-**, and ***tapoc(i) > *tapci > CrC *taciu** ‘rabbit’: Sapir: Wc táciu; Cr táciu’u; CN tooč-tli. For CN tooč-tli, anticipatory rounding and loss of *-p- in *tapoti > *taoci > *tooc. [PYp metathesis; *-p- > -w- in Tr, Wr, Tbr; *-p- > ø in CrC, Azt]
[Sem-kw: loss of initial ’V- syllable] [kw1’,kw2r,kw3n,kw4b,kw5t] [NUA: Num, Hp, Tb, Tak; SUA: TrC, Tep, CrC, Azt]

598 Hebrew ’arnebet ‘hare’; Hebrew f. pl: *’arnaboot:
UACV-1755 ***topi** ‘cottontail rabbit’: VVH56 *tokwi rabbit; M67-333 *to ‘rabbit’; L.Son318 *towi conejo; M88-to4 ‘cottontail rabbit’; KH/M06-to4: TO; Wr; Tr; Tbr. Add Gb; Nv; PYp; ST. Ls tóóvit has wrong V, a loan? Gb, Ls, and PYp tuuva may show *tupa > *topa > *topi. TO curiously has both TO toobi ‘rabbit’ and TO cuuwi (< *tupi) ‘jackrabbit’. [kw/p; o/u, -p->b in Tep] [NUA: Tak; SUA: Tep, TrC]

599 Hebrew ’ayil / ’eel- ‘mighty tree’; later Hebrew ’eelaa ‘**oak**, terebinth’ as a unitary noun from ’ayil; In the Aramaic dialects are a variety of nouns built on ’ayil, such as Aramaic(J) ’alloon ‘oak’; (see KB 40,51, and 54), but the basic consonants ’yl are used for tree and sometimes ‘oak’: [Sem-kw, but il > al ?]
UACV-1555 ***iyal** ‘poison oak’: M88-’i4; BH.Cup *’iyála ‘poison oak’; HH.Cup *’iyáála ‘poison oak’; Munro.Cup101 *’əyaa-la ‘poison oak’; Fowler83; KH/M06-’i4: Ca ’íya-l; Cp ’əyá-l (Hill and Hill note Cp’s unexpected V); Ls ’iyáá-la; HN ’iya-tl ‘tobacco’. Jane Hill (p.c.) adds Ktn ’ïyči-č ‘poison oak’ and Gb oaa-r. Ls -la suffix usually means a final nasal, liquid, or laryngeal, but not a vowel: *iyaal-la > iyaa-la. [kw:1’,2y,3l] [NUA: Tak; SUA: Azt]
So we see Semitic-p forms and Sem-kw forms of the same Semitic ’aleph-initial words:

Semitic	Semitic-p forms in UA	Sem-kw forms in UA
’iiš ‘man’	wïsi (572)	iš (573)
’epod ‘sash, garment’	wipud (583)	ipud (584)
’arnab(oot) ‘hare’	wa’nap (596)	tapuci (597)
’axaat / ’axoot ‘sister’	waxati (595)	kooci (594)
’iyal ‘oak, big tree’	wiyaN (1337)	iyal (599)

Hebrew r- > UA *t- in **initial position** (at the beginning of a word) except in Tr where it remained Tr ŕ. In some Spanish dialects, I hear an initial r- pronounced almost like dr-. In reduplicated Wr(MM) re’teé of Wr(MM) reé / re’é / re’teé ‘see’ (which may be borrowed from Tr), we see the change of -r- > -t- when made more of a stop by an adjacent glottal stop. Similarly, just as intervocalic -t- often becomes -r-, then the reverse is initial r- becoming t-. In fact, Proto-Mayan initial *r became t in four Mamean languages: Ixil, Awakateko, Mam, and Teco (Purse and Campbell 181).

600 Hebrew **r’y / raa’aa** ‘see, v’; Hebrew **ro’e** ‘seer’:
UACV-1904 ***tïwa** ‘find, see’: Sapir; VVH21 *tïwa ‘find’; B.Tep250 *tïïgai-i ‘to find, see’; M67-365 *te ‘see’; BH.Cup *təw ‘see, find’; L.Son301 *tïwa/*tïw-i ‘hallar’; CL.Azt140 *ïhta ‘see, find’; M88-tï2 ‘find, see’; KH.NUA; KH/M06- tï2: Hp tïwa ‘find, perceive’; Hp tïwi ‘know-how, skill’; Tb tïwat~’ïïtïw ‘look for, find, guess’; Cp tewa ‘see, vt’; Ca téew ‘find, discover’; Ls tów ‘see, look at’; Ls tóówi ‘see by second sight, be clairvoyant’; TO cïïg(iđ) ‘find, discover, learn, hear’; UP cïïgï; LP tïïg; PYp teega ‘find, see, vt’; PYp teegida ‘show, vt’; NT tïïgai; ST tïgi; Eu téwa; Wr tewa; Tr ŕewa/tewa; My téwwa ‘hallar [find]’; Yq tea; Tbr tema/temo ‘ver [see], hallar [find]’; Cr tyauu; CN itwa ‘see, vt’ from which the more common CN itta ‘see, v.t., v.refl.’ is derived (Karttunen 107). Perhaps Tbr ha-tetemo ‘hunt’ and Tbr temo ‘find’ (probably < *tïwa ‘find’?), yet how do we not list it at *tïmo ‘search for’ also. Ls tííwi ‘see, look at’ may be a different vowel assimilation than Ls tów ‘see, look at’ and Ls tóówi ‘see by second sight’. Here and at ‘name’ (Yq tea) Yq loses intervocalic *w*. [w > ø in Yq] [p1r,p2’,p3i] [NUA: Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]
601 Syriac rawwaay-aa ‘drunken one-the’; Aramaic (J) rawwee^{y} ‘drunk, drunkard’; the common Aramaic noun suffix -aan added to this stem would yield unattested *rawwaan-aa ‘drunk one-the’:
UACV-8a ***tawana** 'drunk': CN tlaawaana 'get drunk'; Pl tawaani ‘emborracharse [get drunk]’; Pl taawaana ‘emborracharse’; Cr tawá ‘está borracho [is drunk]’. [p1r,p2w,p3y] [SUA: Azt, CrC]
602 Hebrew régaʕ ‘a moment, in a moment, a short while, abruptly’:
Tr teko ‘soon, in a short time, quickly’, likely a loan from another SUA language. [1r,2g,3’2]
603 of the root rwm ‘be high’ are Hebrew raama(t) ‘hill’; Syriac raamə-taa ‘high place, hill’; and also Aramaic rymh (= **riimaa) ‘large stone**’ which with ‘-the’ suffix would be Aramaic riimə-taa ‘large stone-the, n.f.’; Syriac ryaam-taa ‘large stone-the, n.f.’:
UACV-1825 ***tïmï-ta > *tïN-(pV)** ‘rock’: Sapir; VVH169 *tï$_{u}$pa ‘mortar’; M67-354b *te ‘rock’; 354a *tem; M67-354b *te ‘rock’; M67-354a *tem; M67-287 *te-pa/*tepu ‘mortar’; I.Num243 *tïmpi-h/N ‘rock, stone’; L.Son283 *tï ‘piedra’; CL.Azt162 tə-‘rock, stone’, 269 **tï- ‘rock, stone’; M88-tï12; KH/M06-tï12: Sr tïmï-t; Ktn tïmï-t; Ls tóó-ta; Mn tïpi; NP tïbbi; Eu tet; TSh tïn-/ tïmpin; Sh tïmpin; Cm tïpi (< *tïppi); Kw tï-bi; Ch tïm-pi ‘rock, money’; SP tïN-; tïmpiN-; WMU tïpwi-či (<* tïppwi-či); CU tïpïy-či (< * tïppïy-či); Tb tïn-t; tïŋgii-l ‘rock ledge’; Tbr te-tá-t/ te-rá-t; Yq téta; My tetta-(m) (pl); Wr tehté; Wr(MM) re’té; Tr ŕeté; ŕemohá/ŕemowá; Cr teté; Wc teetée; CN te-tl. Note especially Sr and Ktn *tïmï-t, which best reflects the proto-form. With loss of the 2nd V, the nasal assimilated to the resulting adjacent C of the absolutive suffixes: to alveolar t in some languages (*tïmït > *tïmt > * tint), but in Num became fused with the Numic absolutive suffix *-pi (*tïmï-pi > tïmpi / tïppi), which then took another absolutive suffix *-ci in WMU and CU: *tïmït > *tïm-pï > *tïppïi-ci. Ken Hill adds

Gb tomónxa' 'deaf (rock-ear), cf. Eng stone-deaf'. For a Tep reflex, see *tïC-to 'three-rock fire cooking place' below. [*-NC- > -CC-] [1r,2m] [NUA: Num, Tak, Tb, Hp; SUA: TrC, CrC, Azt]

UACV-1827 ***tïN-to** '(three) rock(s) for supporting pots over fire': M88-tï14 'rock stand for cooking/fogón'; KH/M06-tï14: TO cïtto 'round rock formerly used to place pots on for cooking, cooking tripod'; Wr tehcóna 'fogón de piedras'. To Miller's entries, Ken Hill adds Wc tece- 'poner piedras para hacer un muro'. The Tep cognate—TO *cï- 'rock'—gives every branch a cognate of *tïN- (<*tïmï-) 'rock'. [SUA: Tep, TrC, CrC]

604 MHebrew rə'em 'wild ox, antelope' (see KB 1163); Arabic ri'm- 'white antelope'**;**
Aramaic(J) **rə'emaan-aa / reemaan-aa** 'antelope-the'**:**

UACV-51 ***tïmïna** 'antelope': Munro.Cup5 *təəni-la 'antelope'; KH/M06-tï24: Ls tón-la; Ca téni-ly; Cp tənily. Ken Hill adds Ktn tïmïna-č 'antelope' which resembles the best reconstruction. Add NP tïnna 'antelope'; Hp tïïni 'game animal, game successfully hunted'. Sapir considers SP tï- 'game' a reduction of SP tï̱gia (< *tïkia) 'deer'; similarly, Hp tïïvosi 'game, animals to be hunted' may suggest tïï- rather than tïïni. Sapir and Miller (M88-tï24) tie *tïnna 'antelope' forms to Num forms approximating *tïkïya 'deer, like Mn tïhïtta 'deer', Mn tïhïya 'old buck deer', and NP tïhïdda 'deer'; but NP tïnna 'antelope' and Tak contrast considerably; thus, I separate them due to distinct medial n vs. k/h. Ktn tïmïna-č is key: *tïn(nV) appears in three branches—Tak, Hp, and NP of Numic—all of which are reductions, since Ktn tïmïna-č 'antelope' suggests that the Cupan *tïni forms are a reduction from *tïmïna > *tïmna > * tïnna, just as Ktn and Sr *tïmï 'rock' suggest that that proto-form reduced similarly. Furthermore, the gemination in Num -nn- < -mn- also leans well for * tïmïna. SP tïnna 'hunt' etcetera may be a verbalization of the noun. [p1r,p2',p3m,p4n] [NUA: Tak, Hp, Num]

Other examples of initial r > t are throughout. While the block of UA words for 'rock' is displayed above, note that the Tepiman words for 'rock' *hoda < UA *soya/sora align with another Semitic word for rock.

605 Hebrew ṣwr / ṣuur 'rock, rocky ground, rock face, rocky hill, mountain'; Samaritan(KB) ṣor; with the Aramaic suffixed '-the'—Aramaic ṣuur-aa 'rock-the' or Samaritan Aramaic ṣor-aa is a match with Tepiman:
UACV-1829 ***soya** 'rock': B.Tep69 *hodai 'stone'; M88-so12; KH/M06-so12: TO hoḍai 'stone, gravel, a charm'; NT ódai; ST hodái; PYp hodai 'rock, stone'; Nv (h)otta 'piedra'; LP(EF) hod. [s4,2w,3r] [SUA: Tep]

5.6 More Examples of b, d, g Devoicing to p, t, k and Simpler Parallels:

606 Arabic dbr 'turn one's back'; Arabic **dubr/dubur** 'rump, back(side), buttocks, rear, hindpart':
UACV-339b ***tupur** 'hip, buttocks': NT túpuli 'buttocks'; TO čuul, pl: čučpul 'corner, hipjoint'. Intervocalic *p > TO w would be quite invisible between two u's (uwu > uu), but it appears in the TO reduplicated plural form čučpul though invisible in the sg čuul. [SUA: Tep]

UACV-339a ***atapuri** 'buttocks': TO atapuḍ 'buttock'; Nv atuporha 'nalgas [buttock]'; ST atpor 'nalga' (pl: a'tpor; poss'd: ataa'n / a'tpora'n). TO has a match above for the NT form as well as a match for the Nv form given here. These match the Hebrew prefix ha(C)- 'the' before the word with an assimilated vowel. As well, -t- (vs -d- or -l/r-) points to a geminated (doubled) consonant, as the Hebrew *hal- prefix causes: *haC-dubur > *hattupur. Add Wr(MM) to'í 'volver [return]'. [1d,2b,3r] [SUA: Tep]

607 Hebrew **dobɛr** 'pasture, vegetation'; Aramaic(J) dabr-aa 'pasture, field':
UACV-1063 ***tupi** 'grass, vegetation': Sr tuuvit 'green grass'; Ktn tuvi-t 'small shrub or grass, a grass with edible seeds larger than foxtail'; Cr tu'upí 'vegetation'; Tb tuubuu-l 'salt grass, growing' vs. Tb tuut 'salt grass, already gathered'; Wr to'íwe 'grass, pasture'; Cr tu'upí 'grass' likely derives from a redupl *tutupi > *turupi > tu'upi, and Tb's 2nd vowel is another example typifying Tb's behavior as explained in UACV, p. 39. [Tb preservative V assim] [kw/p? 1d,2b,3r] [NUA: Tak, Tb; SUA: TrC, CrC]

This Semitic root dbr includes Arabic dabr / dubr / dubur 'back, hind part' and the Arabic I, IV, X conjugations mean 'turn the back to'. Relative to 'grass' and 'back' and 'return' all from dbr are Wr to'i 'to return the same way' and Wr to'iwe 'grass, pasture' in which -b- is lost in a -br- cluster.

608 Hebrew **gdʕ** 'hew down, hew off':
UACV-620 ***katu'** 'cut, wound': Sapir: CN kotoona 'cut s.th., break s.th. off, wound s.o., vt'; CN kotooni 'snap, break (of thread, rope), vi'; SP qur'u/quttu 'poke in a hole'. Added to the preceding pair (CN, SP)

noted by Sapir, Sr katu' 'cut up, cut (into several pieces), vt' fits well and likely shows the original voweling; for whenever two similar vowels occur, probabilities are 80% (vs. 20% in a 5 vowel system) that one assimilated to the other rather than originally being identical; in this case, the 1st V assimilating to the 2nd in SP, and the vowels leveled in CN. Because Cp i < *o, Cp ŋeti 'split, crack, cut with axe' would align with UA *ŋïto of Sem-kw. [p1g,p2d,p3'2] [NUA: Num, Tak; SUA: Azt]

609 Hebrew **ha-** 'interrogative particle prefixed to the first word in a yes-no question':
UACV-2528 ***ha-** 'interrogative particle' (Langacker 1977, 49): Langacker notes PUA *ha, a question marker widespread throughout UA (Langacker 1977, 49):

Eu ha(i)- interrogative particle (Shaul 1991, 94); ha-/he- 'interrogative marker' (Lionnet 1986, 45);
Hp -haa 'interjection: 1. 'Yes? What? When asking for a repeat, at not understanding';
2. 'tag question suffix—isn't it so?—requiring a yes or no answer';
TO ha 'what?' used to ask for a repeat of something spoken';
NP -ha (bound form after first constituent of sentence),
ha'a (free form) 'interrogative particle for yes-no questions';
TSh -ha 'interrogative for yes/no questions, 2nd element in sentence' (Dayley 1989, 45);
Sh ha 'enclitic particle used to make yes-no questions and indefinite sentences, usually placed after the first word of the sentence (Miller 1996b, 699);
Cm -ha 'interrogative particle after first constituent of sentence' (Charney 1993, 209);
Kw ha;
WMU -a / -aa' 'interrogative suffix, usually after the first sentence element'
CU -aa 'question marker after first word of a sentence' (Givon 1980, 241-2);
ST -a 'interrogative clitic for yes-no questions when speaker seeks confirmation (Willett 1991, 142).

In the following Tak languages (Ca, Sr, Cp), the use of *ha* as both an interrogative in Ca and to mean 'or' is interesting. If a question shaped like 'whether [this] or [that] prefixes ha- to both parts, and if the first ha- were lost, then the middle ha- would certainly act like it means 'or' as in Ca and Sr:

Ca haa/ha' 1. 'or' 2. an interrogative: it adds indirect character;
Sr ha 'or';
Cp ha 'probably' but the examples are questions.
Tbr ha Lionnet considers this an interrogative element as most Tbr wh-interrogatives begin with ha- (Lionnet 1978, 40); likewise, many UA languages have a number of wh-interrogatives beginning with ha-.
SP ai- 'interrogative'

For many UA languages, this ha-/-a- is the 2nd element in the sentence or suffixed to the first word, which means that after a topicalization (putting at front of sentence) of an emphasized word, then the question about it follows, putting ha- as the 2nd element. Consider these English sentences:

Statement: 'We bought sheep with our fortune.'
Questions after hearing the statement: 'Sheep, you bought?'
'Our fortune went to sheep?' 'Sheep? That's what you bought?'

Whether surprised by sheep being the purchase or loss of the fortune—the word questioned goes to the front (is topicalized/emphasized), then the question about it follows. [TO h < *h] [1h] [NUA: Num, Hp, Tak; SUA: Tep, TrC]

610 Hebrew daabaar 'speech, word > thing, matter'; Hebrew haddaabaar 'the thing, the word':
UACV-2281 ***(hi)-tapi(ri)** 'thing': Eu hitávic 'algo [some(thing)], cosa indeterminada [unspecified thing]'; Wr ihtapéripéri 'thing'; Tr tábiri 'cosa [thing]'; Wr ta'peri 'thing'; Tr ŕapé 'thing, a little (amount)'; CN tepi/tipi- 'small thing' in tepi-cin 'small thing' and CN tepiton 'small thing'. [p1d,p2b,p3r] [SUA: TrC, Azt]

611 Hebrew daabaar 'speech, word, discourse, saying, report, tidings'; Hebrew daabar 'to speak':
UACV-1881 ***tapay(a) / tapiya** 'speak': Ktn taviya' 'to talk Tataviam language' (Ktn ahuŋu' a-tavia'[a] 'He is talking Tataviam'); Ktn taviya'-i-c 'the Tataviam language'. Ktn taviya' matches well as if with an Aramaic article suffix (-a') on the Semitic word dabar-aa' > UA *tapaya'); and the frequent UA verbalizations of nouns would have the suffix draw the stress and cause the middle of the three syllables to have so little stress that the vowel often disappears or does the unstressed schwa behavior: a > i. Note that of the three *a*-vowels, the first and third hold the original vowel sounds, but the middle goes to the standard UA unstressed schwa equivalent (i) and also submits to anticipating the next consonant y, another tendency of unstressed vowels. Other than t > l, Hp lavay aligns with *tapaya. Instances of initial t- often becoming intervocalic -t- supports a tie to Hp lavay-i 'talk, speech, discussion, word(s), news' which quite identically parallels the meanings of

Hebrew daabaar ‘speech, word, discourse, saying, report, tidings’. The -l- in Hp lavayi is also non-initial in many forms: Hp lalvay ‘to talk about, relate’; Hp laalavayi ‘different kinds of speech, talk, language, news’; Hp lavay-sowa ‘run out of words’, perhaps backwards consonant harmony. Ls tavá-lavi- ‘talk rudely, without letting anyone else speak’ ties in and such a redupl may underlie the Hp form. As for Sr vïrav(k) ‘speak, talk’ and Sr vïraavïra’n ‘talk, speak’, Ken Hill notes it may derive from Spanish palabra—a good possibility, eliminating its tie to the others. [p1d,p2b,p3r] [NUA: Hp, Tak]

612 Hebrew **ze haddabar** ‘this [is] the thing, this is it; Is this it? Is this the thing?’:
UACV-2282 ***ti**’**ita** 'thing': Cr ti’itaï ‘cosa [thing]’; Wc tííta ‘lo que, que? [what, what?]’; AYq hita ‘what, thing, something’ and UA *hiCta ‘what’. Cora (Cr) and Huichol (Wc) fit well Hebrew *ze haddabar*, of Semitic-p where Semitic *đ (Hebrew z) > UA *t. [SUA: CrC]

613 Hebrew *dobboot ‘bears, f pl’; *dobbootee^{y} ‘bears, construct pl’; Arabic dabbaat ‘bears, f pl’:
UA ***posi** ‘bear’: the Tepiman languages—PYp vohi ‘bear’; NT voohi ‘bear’; ST voohi ‘bear’—all show *posi (> Tep *vohi/wohi); Tr (g)ohi and Wr wohi are loans from Tep forms. The CrC languages— Cr huuce'e ‘bear’; Wc huuce ‘bear’—match also since PUA *p > CrC h and PUA *o > CrC u; CrC could suggest *c. A 3rd syllable is added in the construct which causes the first syllable to become so short and unstressed that its loss is more probable, which appears to be the case here. Compare Tr gohi (a recycling of a Tepiman loan) with Keresan *gúháya 'bear' (Miller and Davis 1963), one of several terms suggesting Tep influence in the Puebloan languages of New Mexico. [Sem-p t > s] [p1d,p2b,p3t]

614 Hebrew **makteš** ‘mortar, grinding stone’ (a noun from the Hebrew verb **ktš** ‘grind, v’):
UACV-1082 ***maCta / *mattas** ‘grinding stone, mortar, grind’: Sapir; M67-283 *mata ‘metate’; BH.Cup *malál; HH.Cup *maláal; B.Tep143 *mahuturai ‘metate’; L.Son141 *mata; Munro.Cup72 *maláá-l ‘metate’; M88-ma21; KH/M06-ma21 *mataR (AMR): NP mata (< *matta); Kw mara-ci; SP mara-ci; CU mara-ci; Hp mata; Tb mana-l; Ls maláá-l; Ca mála-l; Cp malá-l; TO maččud; LP mahtur; PYp maatur; NT máúturai; ST mattur; Eu metát; Tbr matá-t; Yq máta; My matta; Wr mahtá; Tr ma’tá; Cr mwaatá; Wc maatáá; CN metla-tl. Note the h in Wr and LP, and the glottal stop in Tr and the doubled consonants in TO and other languages, all of which tend to align with Bascom’s proposal of another C between m and t, though I would guess a cluster. Of great interest is the denominalized verb Ca mataš ‘crush, squash, vt’ showing final -š and a medial cluster or geminated *-tt-, though Ca mála-l does not. In spite of the 2nd vowel changing in Tep, this widespread etymon is found in every branch of UA. [*-t- > -L->-n- in Tb; * -CC-] [p1m,p2k,p3t,p4s1] [NUA: Num, Tak, Hp, Tb; SUA: Tep, TrC, CrC, Azt]

615 Hebrew **ktš** ‘pound, pound fine, bray, v’; kaataš (perfect qal); unattested *kitteš < *kittaš would be the qittel form: Yq **kitta / kittasu** ‘grind, mash’. Some say the final -su of the Yq form is another morpheme; even if so, kitta is striking enough, as we seldom see 3rd consonants in UA anyway. [SUA: TrC] [p1k,p2t,p3s1]

5.7 Proto-Semitic đ vs. Proto-Semitic z in Uto-Aztecan

Hebrew z, when from **Proto-Semitic đ (> Arabic đ, Aramaic d**), corresponds to **UA *t,** in Sem-p, but **Hebrew z,** when from **Proto-Semitic z (> Arabic z, Aram z**), corresponds to **UA *c** or ***s,** in Sem-kw, at least, if not both. Thus, the Semitic-p in UA comes from a dialect that had not yet merged Semitic *đ and *z as the dialect of the Masoretic text had. For Hebrew z (< Proto-Semitic *z) > UA *c, see ‘moon’ (1077). For Hebrew z (< Proto-Semitic *đ) > UA *t, see below ‘male’ (616), ‘beard, chin’ (617), ‘wolf’ (618, 619), and ‘flea’ (620).

616 Hebrew zakar ‘male, man’ (< Proto-Semitic *đakar); Arabic đakar ‘male, man, penis’;
Aramaic **dakar** ‘male, man’:
UACV-1414 ***takaC / *takaN** ‘man, person, body’: Sapir; VVH145 *taka ‘man’; M67-272 *taka ‘man’; BH.Cup *tax ‘person’ (Cp ’atáx’a; Ca táxlis-wet; Ls ’a-táax ‘person, self’); BH.Cup *taxawi ‘body’ (Cp táxwi; Ca táxawily; Ls tááxaw); L.Son270 *taka ‘cuerpo’ (Op takat; Eu taka; Yq/My taká); CL.Azt105 *tlaaka ‘man’; KH.NUA; M88-ta25 ‘man’; AMR 1993c *taka; KH/M06-ta25: Hp taaqa; Tb tahambi-t/l/š ‘old man’; Sr taqtqa(ṭ) ‘body, picture’; Ktn taka-t ‘person, Indian’; Ktn tahtaka’ / taqtaqa ‘body’; Gb táx; My taká ‘cuerpo, alma, veinte’; CN tlaaka-tl ‘person’; CN tlaak-tli ‘body, torso’. Note Ca taxa-t ‘he, that guy, brave man’; Ca tax ‘self’; and Ca táxawily, all derived from Semitic đakar ‘man, male’. A third C is apparent in Tb, SP, and others. AMR (1993c) notes SP taġap-pïa-pi ‘servant’. We should include Cr taáta’a; pl: téteka ‘man’ and Sh(GL) daga’ ‘friend (male)’ and perhaps the -taka of Ch kaiva-taka ‘mountain peak’. This is one of the fairly pervasive stems of UA, though it has different meanings in different branches: ‘man’ in Hp, Tb, CN; and

‘body, person, self’ in other branches. However, the presence of w or rounding after the k repeatedly reappears in different branches, probably possessive -wa: the Tak words for body may better reconstruct to *takaw; and Yq and My show *takawa; Eu and other TrC languages show *takwa.

In spite of a *-k-/-kk- question, Num *takkaN ‘semen’ and *takkaN-pi ‘arrow(head)’ may belong here, as opposed to the Numic words *taŋwa- ‘man’ below, which are from *tatwa ‘man’ like Tb. In numbers Yq and My show sénu taka ‘twenty’ (one body, the number of all fingers and toes); this stem is also used in CN ma’-tlaak-tli ‘ten’ as ‘hands (of) man’. [p1z2,p2k,p3r] [NUA: Num, Tak, Tb, Hp; SUA: TrC, CrC, Azt]

617 Hebrew zaaqaan ‘beard, chin’; Assyrian **ziqn**u; Aramaic(J) **diqn-aa** ‘beard-the, chin-the’; Mandaic ziqnaa; Arabic đaqan/ điqan ‘chin’; Arabic đaqn ‘beard’; Hebrew zqn ‘be old’; Hebrew zaaqen ‘old’; construct pl: zəqen-/ziqn- ‘old ones, elders’:

UACV-1469a ***tï’na > *tï’ni** ‘mouth’: Sapir; VVH19 *tï$_u$ni ‘mouth’; M67-293 *teni ‘mouth’; I.Num242 *tïmpe ‘mouth, lips’; B.Tep241 *tïni ‘mouth’; L.Son293 *tïni ‘boca’; M88-tï5 ‘mouth’; KH/M06-tï5: TO čini; Eu téeni / tení-t; LP tïiñ; PYp teni; NT tïñi; ST tyiñ/čiñ; Tr ŕiní; Tr ŕe’načí; My teeni; Yq tééni / téni; Tbr tiní-r; Wc téetaa ‘mouth, lip’ (cognate? Miller queries); Cr tyéñi; CN teen-tli ‘lip, mouth, edge, word’. Wc téetaa is cognate, being nearly identical to the pre- or proto-Aztecan form from which CN teen-tli derives—*teen-ta—missing only *n*. Note also Tr ŕe’na-čí, with a glottal stop or other consonant in a cluster. This element appears in compounds of other languages as well: Cm parïïci ‘chin’; TSh patïnci ‘chin’ and in *tï’ni-po’wa 'facial hair, lit. mouth-hair'.

UACV-1469b ***tï’nV-pa > *tï’n-pa > *tïmpa** ‘mouth (in)’: Mn tïpe; NP ddïba; TSh tïmpe; Sh tïpai ‘mouth, lips’; Kw tïbi-vi; SP tïmpa-vi; CU tïpá-vi; Hp tïmp(aq) ‘at the brink, top edge of a drop-off, such as cliff, mesa edge’; Hp tïmkye’ ‘along top edge of cliff’. An additional and definite *-pa suffix distinguishes the Num forms, as nearly all have a final vowel -a, not typical of the *-pï/-pi of absolutive suffixes. [NUA: Num, Hp; SUA: Tep, TrC, CrC, Azt]

618 Hebrew **zə’eb** ‘wolf’; Arabic **đi’b** ‘wolf’; Proto-Semitic ***đi’b** (Bennett 1998, 60);
Syriac **di’b-aa** ‘wolf-the’; Aramaic **di’b-aa** ‘wolf-the’:

UACV-2570 ***tïpa / *to’apa** 'wolf': M67-469 *tïpa ‘wolf’; M88-tï42 ‘wolf’; KH/M03-tï42: Ch tïváci; SP tïva-ci 'wolf, mythical being/powerful one'; Tb tïbaič; Tb(H) tïpay-č ‘wolf’; Mn(KH) to’oppi ‘wolf’; Mn to’ápe ‘timber wolf’; TSh toopi / tooppi ‘wolf’; TSh tïpo’isa ‘wild dog, coyote’; Kw tïvi-ži; TO šee’e. Jane Hill (p.c.) astutely adds Ktn tïva-č ‘God’ as coyote/wolf terms elsewhere semanticly extend to ‘god’. Mn shows a glottal stop, while SNumic and Tb have lost it, but considering its original presence via Mn, all 3 consonants correspond as expected, even the vowels match Aramaic wonderfully, and the meanings are identical. The glottal stop may be the cause of Mn’s round vowel, while SNumic and Tb show a slight assimilation to ï, but show the vowel of the Aramaic definite article suffix, as is common for Semitic-p nouns. The following three—Cr ïïra’ave; Wc ïraave; Eu húrve / húrue / wurwe (from *hunapï or *hu-tu’apï?)—could feasibly belong here, yet they may fit *hunapï ‘badger’ too, as Ken Hill has them both places as well. I’ll continue indecisive with him. In fact, they fit phonologically best there, semantically better here. [p1z2,p2’,p3b] [NUA: Num, Tb, Tak]

619 Hebrew **zə’eb** ‘wolf’; Arabic **đi’b** ‘wolf’; Proto-Semitic ***đi’b** (Bennett 1998, 60); given the Tepiman sound change *c > *s (well established in UA), and a 2nd consonant of glottal stop, these are likely from the Hebrew **zə’eb** of Sem-kw, with lost 3rd C b:

UACV-2569 ***cï’ï** 'wolf': B.Tep211 *sïï’ï 'wolf'; Fowler83; M88-cï12; KH/M03-cï12: TO šee’e; Nv sï’i; PYp see’e; NT sïïyi/sïi; ST sïï’. [p1z2,p2’,p3b] [SUA: Tep]

620 Hebrew zəbuub ‘fly’; Arabic đubaab ‘fly’, Arabic đubaabat ‘a (single) fly’;
Syriac debaab/dabaab-aa ‘fly-the’; most Semitic nouns of 2nd and 3rd C -bb- have them clustered like *şabb ‘lizard’, so an unattested f. pl form analogized thusly (*đabboot(ee^y) would likely underlie this UA set:

UACV-914 ***tapputi / *tïpputi / *tïCpu**-ti ‘flea’: VVH146 *tï$_u$pu ‘flea’; M67-175 *tepu/*tepuci ‘flea’; L.Son298 *tïpu ‘pulga’; Fowler83; Dakin 1991; M88-tï6 ‘flea’; KH/M06-tï6 (AMR *tïpu-ti): TO čïïpš; PYp teepas; NT tapïïši; ST tapïïš; Eu tepú’u / tepú; Yq téput, tepučim (pl.); My tépput; Wr tehpucí; Tr ŕipučí; Tbr tipú-t; Wc teepïï; Cr tepï-, tepï-ci (pl.); CN tekpin-tli; Pl tekpin; HN tekpi(mi)-tl. Azt -k- is from a stop-like intensifying of -pp- > -kp-, or a glottal stop hopped then was reinterpreted as -k-, or as Dakin’s (1991) suggestion *tï-tïpu > *tïtpi > tïkpi to yield Aztecan *tekpi forms. PYp teepas ‘flea’ suggests a cluster in contrast to PYp teev ‘shoe’; PYp teevi ‘corn husks’; PYp teevin ‘thin rope’. Terms for ‘cricket’—Eu tepósti; Wc tïïpuuši—also likely tie to ‘flea’, though Cr and Wc both have *tïppu ‘flea’ above. Wc tïïpuuši may be a loan from Eu or Tep, for Wc u corresponds to Eu and PUA *o. Sem-p -t > s in other items too. [iddddua] [1z2,2bb] [SUA: Tep, TrC, CrC, Azt]

621 Hebrew zkk ‘be bright, clean, pure’; Hebrew zak ‘pure, clean’; Aramaic(J) **zky / zakaa** ‘be pure, clear’: Ca **cexi** ‘to clear up (of sky or water)’. [p1z,p2k,p3k]

622 Arabic zğğ < *zagga, impfv *-zuggu ‘throw, squeeze, force, cram (s.th./s.o. into s.th.)’:
UACV-**1443 *cukka/i** ‘crowded, mixed’; I.Num264 *cïhki ‘mixed, crowded’; M88-cï5 ‘crowded, mix(ed)’; KH/M06-cï5: SP cïkki ‘be mixed with’; CU cïku’mi ‘narrow, constricted’; Cm cïhki-/cïkk- ‘crowded’; CN ciciika ‘stuff s.th. tight’. Since *u > ï in Num is frequent, and *u > i in CN, the Num and CN agree through *cukk, and final vowels often show active -a and stative -i. [*u > ï in Num] [p1z,p2g,p3g] [NUA: Num; SUA: Azt]

The next three relate to zrʕ ‘sow (seed), engender/bear (seed/offspring)’:

623 Hebrew zrʕ / zaaraʕ ‘sow (seed)’; Arabic zrʕ / zaraʕa ‘sow, plant, cultivate’:
CN cayawa ‘sew, scatter seed’ (Andrews).
624 Hebrew zrʕ / -zriiʕ ‘bear a child’ (-zriiʕ is the hiqtiil stem with prefixes: ta-zriiʕ, ma-zriiʕ, *hi-zriiʕ):
CN ciiwa ‘beget, gender’.
625 Hebrew zéraʕ ‘seed, offspring, descendants’; Arabic zarʕ- ‘seed’:
Hopi cayo ‘child’ (2nd and 3rd C not clustered). Masoretic *e* > UA *a* and in mortar (614) and belt (592). [1z,2r,3’2]
626 Arabic zrʕ ‘sow, spread, scatter’; Hebrew zrʕ ‘sow’; because ʕ > w or l in Hopi, the Hopi l may be from an -rʕ- cluster of the verbal noun or femine sg perfect or other forms that cluster the 2nd and 3rd consonant:
Hopi cala- ‘scatter’.
627 Hebrew zḫl ‘creep, crawl’; Arabic zḫl ‘to move away, withdraw’; Aramaic(J) zḫl ‘to creep’:
Ca cawa-y ‘to crawl, climb, ascend’. [p1z,p2h2,p3l]
628 Hebrew zaaqaan ‘beard, chin’; Assyrian ziqnu; Aramaic(J) diqn-aa ‘beard, chin-the’; Mandaic zîqnaa; Arabic đaqan / điqan ‘chin’; Arabic đaqn ‘beard’; In contrast to Semitic-p *điqn-aa ‘chin’ > UA *tï’na ‘mouth’, the following SUA *ca’lo ‘chin’ is from Sem-kw *đaqn-o, Hebrew **zaqn-o** ‘chin-his’ and a would-be but unattested NUA *ca’no:
UACV-1472; **SUA *ca’lo** ‘chin, jaw’: Tr ča’ró ‘chin’; Wr caló ‘chin, jaw’; CN teen-čal-li ‘chin’;
CN kama-čal-li ‘jaw’; Yq čao ‘barba’; My čaro hímsim ‘bigote’; My čaro wá’asa’ari ‘quijada’;
Hp càŋw-ti ‘open the mouth’. [r/l > ’ > ø] [kw1z2,kw2q,kw3n] [SUA: TrC, Azt; NUA: Hp]

5.8 Semitic-p Distinguishes Proto-Semitic x and Proto-Semitic ḫ

Proto-Semitic *x and *ḫ eventually merged, that is, both became the voiceless pharyngeal ḫ in Hebrew, Phoenician, and Aramaic (but remained distinct in Ugaritic, Arabic, and Akkadian). So the Hebrew voiceless pharyngeal ḫ is a merger of two different sounds, which are distinguished in UA’s Sem-p, but not in Semitic-kw. The Israelites, after arriving in Palestine, borrowed the Phoenician alphabet and language, such that Hebrew and Phoenician are dialects of the same language. (Hebrew was not spoken where Abraham came from.) The fact that the Phoenician alphabet had only ḫ (ḫeyṭ) to represent both Proto-Semitic *x and *ḫ suggests that these sounds were already merged in Phoenician when they developed the Phoenician/Hebrew alphabet (Blau 1998, 12, 30). However, the Israelites kept these two Semitic consonants distinct until 300 B.C. (Kutscher 1982, 13-18; Sáenz-Badillos 1993, 81; Blau 1998, 12, 30), in contrast to the Phoenicians who merged them a millennium earlier. Eventually, the Israelite dialects merged the two sounds also, though for most of ancient Israel’s history the two sounds were maintained as distinct; for example, the Septuagint Greek Old Testament of about 300 B.C. shows those phonemes as still distinct (Blau 1998, 30). In UA, Semitic-kw shows them merged to pharyngeal ḫ (and ḫ > UA *hu/o), but Semitic-p distinguishes the two and has several vocabulary items showing both an alignment of Semitic x > UA k/h and Semitic ḫ > UA *hu/o. Arabic, Old Epigraphic South Arabian, Ugaritic, and Akkadian show the original distinction, so cognates from those languages are cited to show the original x. Besides the fact that UA distinguishes the pharyngeal ḫeyṭ (Sem *ḫ > UA hu/o/u/w) from the velar/uvular fricative (Sem *x > UA k/x/h), examples of the latter sound-change (Semitic *x > k in UA) happen within Semitic itself (*x > k), such as Arabic loans into Aramaic: Arabic xabbaaz > Aramaic(S) kabbaaz ‘baker’ and Arabic xaraağ ‘tax’ > Aramaic(J) karg-aa / kərag-aa ‘tax-the’. Also in Arabic loanwords into Ethiopic, x > k (Kapeliuk 2002, 313) as in UA. So UA’s Semitic-p aligns with Hebrew phonology dating before 300 B.C. The next 14 sets (629 to 642) show Proto-Semitic x > UA *k, the first half in initial position and the last half in non-initial position:

629 Arabic xbṭ ‘beat, strike, knock, rap’; Hebrew ħbṭ ‘beat off, beat out’; Semitic *xabbiṭ:
UACV-1196 ***kappica** ‘clap, slap’: NT kapííšai ‘manotear, darle guantadas [slap, hit]’; ST kapiasa ‘clap hands’. The UA doubled middle consonant and the vowels all suggest gemination of an intensive conjugation (an Arabic II or Hebrew impfv *-xabbiṭ form). [p1x,p2b,p3t2] [SUA: Tep]

630 Hebrew ħole (< ***xole**) ‘be sick, hurting’ > UA Sem-p ***koli** ‘be sick, hurt, vi’
At p. 50 and in UACV 2.6, I note consonant clusters of *-’C- that separate the cluster with an epenthetic vowel: *-V’C- > -V’VC-. I later found that Cora (Casad 1984, 158) has the same rule synchronically (presently) that I had proposed for UA diachronically (in historical change over time). NUA often has the base form, while SUA has the reduplications that created the cluster and caused the liquid to change to glottal stop, which later separated from the other consonant by an echo vowel: *-VLC- > -V’C- > -V’VC-.
Egyptian **wr/wrw > UA *wïr** (221), reduplicated ***wïrwïru** > ***wï’wïru** > ***wï’ïwïru** 'big' or Tep gï’ïgïru: among the several UA forms, the reduplicated form is usually the plural form of *wïr.
Hebrew **xolɛ** > UA ***koli**, reduplicated ***kolkoli > *ko’koli** > ***ko’okoli** 'hurt, be sick, chili pepper':
UACV-1597 ***qoli (*qolqoli > *ko’okoli)** ‘hurt, be sick, chili pepper’: M67-129c *ko/*koko ‘hurt’; L.Son92 *koko ‘be sick’; L.Son93 *kokori ‘chile’; B.Tep117 *ko’oko ‘be sick, hurt’; Fowler83; M88-ko7; KH/M06-ko7 ‘hurt, (be) pepper hot’: Cp qil^{y}íqa-t ‘hot, spicy, strong’; Cp qil^{y}íqtu’ni ‘hurt, sting, vt’; Ca qél^{y}a ‘feel sore, v’; Ca qél^{y}ak ‘peppery, pungent, creating a burning sensation’; TO s-ko’ok ‘be painful’; TO ko’okol ‘chile pepper (plant and fruit)’; TO ko’okoḍ ‘hurt, give pain to, vt’; NT kóóko ‘be sick’; NT kóókoli ‘chile’; ST -ka’ook ‘be sick’; ST ko’okoly ‘chile’; Eu kókoe-n ‘doler’; Eu kókocem ‘estar enfermo’; Wr ko’kó- ‘estar chileoso’; Wr ko’koré- ‘dolerse’; Wr ko’kóri ‘chile’; Tr ko ‘pica (chile)’; Tr ko-rí ‘chile’; Tr o’-ko-rí ‘dolor’; My kó’okori ‘chile’; My kó’oko ‘enchiloso’; My kó’okore ‘enfermo’; Tbr kokó-l ‘chile’; Tbr ko/kokó ‘dolor’; Wc kookóri ‘chile’; CN kokoy(a) ‘be sick’; koko-k ‘be spicy’; Pl kukuk ‘strong, hot, spicy, painful’; Pl kuukua ‘to hurt, ache, pain’. Add Cr kwi’i ‘sick’ (Casad 1984, 178). Note Eu lost r. Note simple *qolV in Cupan; thus, I consider *ko’okoli a reduplication of *koli, lik *wï’ïwïru ‘big’ is a reduplication of *wïru. Of course, superlatives for ‘big’ and ‘pain’ (I hurt!) are always in high demand conversationally, so fossilized reduplications of such words early in UA prehistory should not be surprising. Besides liquids in both NUA and SUA, note also *-l- > -y- in CN. [liquids in NUA/SUA; l > CN y] [p1x,p2l,p3i] [NUA: Tak; SUA: Tep, TrC, CrC, Azt]

631 Aramaic(J) ħamar (< *xamar) ‘wine’; Hebrew ħɛmɛr ‘wine’; Arabic xmr ‘to ferment’; Arabic xamr ‘wine’; Arabic ximiir ‘drunkard’; Arabic xamrat ‘wine’; Ugaritic xmr ‘wine’:
UACV-9 ***kamaC** 'drunk': KH.NUA; M88-ka42; KH/M06-ka42: Gb xamá 'emborracharse'; Sr qäm|(ä)’q ‘get, be drunk, crazy’. Ken Hill (KH/M06-ka42) adds Ktn ka’mïk ‘be crazy, dizzy, drunk’. The liquid, in its rightful place in Sr, is anticipated as a glottal stop in Ktn, as in Hebrew tašleeg ‘to snow’ > UA *ta’asiC ‘to freeze’. [p1x,p2m,p3r] [NUA: Tak]

632 Semitic (Ugaritic, Aramaic(J), Arabic, Ethiopic, Akkadian) ***xnq** ‘strangle, put around the neck’; Hebrew ħnq (< *xnq) ‘strangle, hang (self)’; Syriac ħnq (< *xnq) ‘choke, strangle, hang’; Syriac ħanaaq-aa (< ***xanaaq-aa**) ‘band, collar (of a yoke), strings with which yoke is tied to the neck’ (note also Aramaic ʕanaaq ‘necklace, chain’); Aramaic(J) ħaneeq-aa / ħanaaq-aa (< *xanaaq-aa) ‘ropes or chains around neck’:
UACV-1505 ***konaka** ‘necklace, collar, beads, string of beads’: M67-28 *koka ‘beads’; Langacker 1970; L.Son95 *koroka ‘collar’; KH.NUA; M88-ko9 ‘beads, necklace’; KH/M06-ko9: Sr qöönqa-t ‘necklace, collar’; Cp qínexa ‘put on necklace, vi’; Cp qínxa-t ‘strings of shell beads, necklace’; Ca qénxa(t) ‘s.th. around neck, beads’; Ls qénxa-t ‘necklace, beads’; Gb xúnso’ar ‘beads worn as necklace’; Ktn konakat ‘necklace, belt’; Sh kotokki (actually korokki) ‘necklace’; Wr koloká ‘sogilla’; Tr go-ro-gá ‘collar’; My kóokam ‘collar’; but CN kooska-tl ‘jewel, ornament, necklace’; Pl kuuska-t ‘necklace’ may belong at 1248. Miller also lists Mn qakki ‘beads’; Kw kaki ‘necklace, collar’; CU kaaka ‘necklace’, which belong, but with different voweling. The Takic, TrC, and CN forms show a liquid as 2nd C, like Lionnet’s reconstruction *koroka, as NUA n corresponds to SUA l/r. For devoicing of r > s in CN, see Elusive Liquids. Tak shows the third consonant *k and the first vowel, all very nicely. [r/l > s in cluster with a voiceless C] [1x,2n,3q] [NUA: Tak; SUA: TrC, Azt]

633 Ugaritic xtn ‘marry’; Arabic xatana ‘circumcise’; Hebrew ħoten ‘father-in-law’ [literally, the circumciser]; Hebrew ħaataan ‘related by marriage’ [the list of Semitic terms in KB includes most kinds of in-laws]; Aramaic(J) ħatn-aa’ / **ħataan-aa** ‘son-in-law, connection’
UACV-1791 ***kusana** ‘sibling-in-law’: KH.NUA; M88-ku31; KH/M03-ku31: Sr kuuhan ‘cross sibling-in-law, WiSi, WiF/Co, HuBr, HuM/Co, MaBrWi, Ma/CoWi, WoSiHu, Wo/CoHu’; Ktn -kuhana (pl -m) ‘sister-in-law’;

Gb kúsna’ ‘brother-in-law’. [*-t- > -s-] [p1x,p1h2,p2t,p3n] [NUA: Tak]

634 Hebrew ħalaaṣ-ayim ‘loins’; Hebrew ħalaaṣ-aa-w ‘loins-his’; Akkadian xanṣaatu; Syriac **ħaṣṣaa;** Arabic **xaṣr-** ‘hip, haunch, waist’; Samaritan ħarṣ-aa; Aramaic ħarṣ- ‘hip’; Mandaic halṣa, haṣa:
UACV-1183 ***kaca-pawï** ‘hip’: Tr kačá ‘hueso de la cadera [hip bone]’; Wr kahcá ‘cadera [hip]’; Cp kepáwe ‘hip, poss’d’; Wc kwacápaï ‘hip’. Tr and Wr clearly match, and Wc is a compound. Cp may match Wc well, in that *-c- > -y- in NUA, and if e < *ay: *kacapawï > kay(a)pawï > kepáwe. In fact, Cp -p- signifies a cluster, as easily *-yp- < *-cp-, as anything else. Wc’s final ï (<*u) may be left from the w of *kwacapawï. [CrC p-] [p1x,p2l,p3s4] [NUA: Tak; SUA: TrC, CrC]

635 Hebrew **ħbt (< *xbt**; e.g. Arabic xbt ‘be obscure, IV be lowly; Arabic xabt- ‘low ground, wide valley, spacioius low tract of ground easy to walk through’ [in other words, flat])’:
Hebrew ***xabitt**-iim ‘flat cakes or wafers’; Hebrew ***maxabat** ‘flat plate, pan or griddle’:
UACV-903 ***kapal** ‘flat’: M88-ka5 ‘flat’; KH/M06-ka5: TO kawadk ‘be flat’; TO kapad ‘lie flat’;
TO kawad ‘war shield’ pl: kakawad; PYp kaper ‘bent down, low, flat’; PYp kaper-ek ‘flat’;
NT kapááraturui ‘become flat’; NT kapáárakami ‘flat, level’; Wr kapó ‘flat’. What of CU paáy ‘be smooth’ and Ls laqápa ‘be smooth’ and Ls laqapi ‘make smooth’? Certainly related, but with semantic tangent, are shield terms: TO kawad ‘war shield’; Nv kava’arha, pl: kavparha ‘adarga’; Nv kavar’ha ‘make a shield’. [iddddua] [NUA: Num; SUA: Tep, TrC]

636 Syriac kp’ ‘bend, bow, incline, curve, lean over’; kappep ‘bend, vt’; Syriac kapaap-taa ‘anything hollow or curved, coffer’; Assyrian kappu / Hebrew kap ‘hollow or flat of hand, palm, sole, pan’:
UACV-1705a ***kapaC** ‘pot’: BH *kavá’mal ‘pot’; HH *kavá’mal ‘pot’; M88-ka21 ‘pot’; KH/M06-ka21: Cp kavá’mal ‘pot’; Ca káva’mal ‘olla, water jar, cup, pot’; Ls kaváá’a-l ‘clay pot’; Ls kapa-kpa-ma-l ‘short, low’. [NUA: Tak]
UACV-1705b ***(ca)kaput** ‘pot’: Hp caqapta (combining forms caqap-, ca**qavut-**, etc.) ‘pottery bowl, earthenware dish or bowl’ is likely related to Ca **káput**ma-l ‘cup’, and both to the Tak *kapa’-ma-l forms above. [a/u] [p1h2,p2b,p3t] [NUA: Tak, Hp] A cup or bowl hollow is the sememe ‘hole’, also shifting to ‘open’ and ‘yawn’:
UA *kapa/i / kappV '(make/be) a hole, open, yawn': Ca kavi ‘have a hole, be open (window, etc)’; Ca kávi-ve 'hole'; Cp kápe ‘yawn’; Cp kápele ‘to open’; Cp kápal 'make hole'; Sr kïvïhka’ ‘hole’; Sr kïvïhï’q ‘be a hole’. **UA**CV-2600 *kappï 'yawn': Ca kákape ‘yawn’; Cp kápe. [NUA: Tak]
Of Syriac kp’ ‘bend, bow, incline, curve, lean over’; kappep ‘bend, vt’; Syriac kapiipuu-ta ‘crookedness’: Ca kapu-kapu- (<*kappu) ‘be crooked (back, tree)’; Ca kávaqi/kávat ‘lie on one’s side, lean sideways (tree)’.

637 ***pxd** > Hebrew pħd ‘shiver, tremble, be startled (with horror)’; Akkadian paxaadu ‘be startled, tremble’: Ktn **pokat**-ïk ‘get frightened’; Numic *-paka- in iya-paka- ‘be afraid’ at 728. [p1p,p2x,p3d] [NUA: Tak, Num]

638 Hebrew **raaħeel** (< ***raxel**) ‘ewe’; Arabic raxil / rixl- (KB); Akkadian laxru(m) ‘ewe’; though Akkadian metathesizes (switches) the liquids (r, l), both Arabic and Akkadian show that proto-Semitic *x is the middle consonant (not ħ), and UA shows *k (often softening to h); the semantic change from ‘sheep’ to ‘deer’ is not great, or at least understandable, as both are the primary meat source for the respective cultures:
UACV-643a ***tïkïya** (> tïhïya) 'deer': M67-123 *te/*tek 'deer'; I.Num237 *tïhï 'deer, horse'; Fowler83; M88-tï24 'deer'; KH/M06-tï24 'deer': Mn tïhïta 'deer'; Mn tïhïya 'old buck'; Mn(L) tïhïhta ‘deer’; NP tïhïdda; TSh tïhïya(n); Sh tïhïyan; Cm tïhïya 'horse'; Kw tïhïya; Ch tïhíya; SP tïǧia (< *tïkia) ‘deer’; SP tï- 'deer, game'; CU tïíyï. The SP form suggests *k, while the other Num forms show h or nothing. In light of a palatalisation of the initial t (*t > c/č), the Tepiman forms below also likely belong, as UA *c > Tepiman s:
UACV-643b ***ciki** 'white-tailed deer': TO siiki 'white-tailed deer'; PYp siiki 'white-tailed deer’. [iddddua] [NUA: Num, Tb; SUA: Tep]

639 Hebrew psħ (< *psx) ‘be lame, limp’; Arabic fsx, ya-fsaxu ‘dislocate, disjoint’; the UA form below is from the impfv stem (present/future) ***-psax**, with bilabials (b, p) disappearing as 1st consonant in a cluster, so *sakV is as expected in UA and is what we see in CU, and WMU with assimilated/raised vowel a > ï/ü: CU sakï- ‘limp, v’; WMU süǧűy / sügű-y ‘limp, be lame, vi’. [p1p,p2s3,p3x]

640 Hebrew psħ (< *psx) ‘be lame, limp’; Hebrew pisse^{a}ħ ‘limping’, pl: pisħiim ‘limping’ (verbal adj); Arabic fsx (< *psx) ‘dislocate, disjoint, put out of joint; abolish, revoke, nullify, void; lose color, fade (color)’; Akkadian pessu ‘lame, limping’; while the previous set (639) aligns with the impfv stem and the exact meaning, this set (640) is from an adjective and encompasses the larger semantic range. Note Arabic ‘dislocate/limp’ and ‘nullify/void’ and ‘fade/lose color’ all reflecting generally ‘go bad, not good/viable any more’; and rotten (UA) is no good any more; the clincher is Eu piopiioké ‘walk limping’ reflecting the others of UA *pisokV ‘rot’; and Eu shows initial p and has the exact primary meaning and also phonologically

aligns with *pisokV ‘rot’; even today ‘lame’ has recently come to mean ‘bad’ or ‘substandard’: ‘lame excuse’ = ‘lousy/bad excuse’ and ‘lame decorations’ = ‘not good’. So from ***pissex** ‘limp, lame’:
UACV-1847a ***pisika** / *pis(i)ki ‘(become) rotten, infected’: BH *pisa? ‘to rot’; L.Son197 *pika ‘podrirse’; M88-pi7 ‘be rotten, estar podrido’; Stubbs2000b-50; KH.NUA; KH/M06-pi7 and KH/M06-pi30: besides the many forms below, Miller astutely adds TO wi’ikam ‘remnant, survivor’; Tr bi’ká ‘podrirse’. Consider also terms for ‘pus/infection’ in addition to ‘rot’. Three consonants appear to be involved, with possible reconstructions being *pisika/pisaka/pisoka > *piska. Note the cluster -sk- in Sr, Ktn, and Tb, but -s- in most of Takic and in Central Numic, but -kk- in SNum and -k- in TrC, and -h- in WNum.
UA *piska/*pisVka ‘pus, infection, rot(ten), spoil(ed)’: WNum: Mn pihi ‘rot’; pihika ‘be infected’; NP pihi ‘rot’
CNum: TSh pisiC ‘rot’; pisippï ‘pus’; Sh pisi-ppï ‘rotten’; Cm pisi(ppï) ‘pus, infection’;
SNum: Kw piki ‘rot’, piki-pï ‘pus’; Ch piki ‘rot’ (< *pikki); SP pikki ‘semi-liquid mass’; SP pikkya ‘sore, hard’
WMU p*ih*kkí-y ‘rot, spoil, be/get infected, vi’; CU piki ‘be rotten’ (< *pikki)
Hp peekye ‘pus, pus-filled infection; vi: get infected, rot, decay’; Tb piškiš-(ït) ‘have pus’
Tak: Sr piṣqa’ ‘rot’; Ktn piska’ ‘rotten’; Ca písa ‘spoil, rot’; Cp pisá’e ‘rot, go sour’; Ls pisa’(a) ‘rot’
Cah: Yq bikáa ‘rotten’; AYq viika ‘infected’; My biká ‘pus’, bikára ‘rotten’
TrC: Eu viikát ‘pus, sore’; Wr piga-ní ‘rotten’, pigapá-ni ‘rot’; Tr biká / bi’ká (Tr(L)) ‘pus, rotten’, biká-mea ‘rot’
Cr pe’ečíra’a ‘está hueco, podrido’

Clearly ***pi** is the first syllable. Beyond that, several languages show ***s** and several show ***k**; however, some show both **s** and **k** (Sr, Tb, perhaps Mn), and others show hints of both. For example, the glottal stop in some Takic languages (Cp, Ls) aligns with **k**. In addition, the word-final gemination in the Central Numic languages (TSh, Sh, Cm) suggests an underlying third consonant, and k is a good guess, judging by the other forms (pisi-ppï < *pisik-pï). Therefore, ***s** is clear and ***k** a definite possibility in Central Numic. The Hp form is extremely interesting in that the palatalization of the k (ky) is a natural for a possible underlying **sk** cluster, with a near palatal plus velar reducing to a palatalized velar (sk > k^y). What’s more, Hp vowel leveling of **i-a** or **a-i** combinations to **e-e** is apparent elsewhere: Hp kele-vosna ‘kidney’; SP kani ‘kidney’ and Hp cekwe at *cikwa ‘rain’. Hopi e is alone among Hopi’s six vowels in not aligning clearly with PUA’s five vowels; thus, vowel leveling of i-a and a-i combinations is often the source of Hp e. Ken Hill (p.c.) also mentions reductions of ai dipthongs as a possible source of e, which too is a form of vowel leveling. So of the 20 languages represented, 10 show **s**, 13 show **k**, 2 or 3 show both, and 7 display phonological hints of such a cluster (Hp, TSh, Sh, Cm, Mn, Cp, Ls). Thus, it is another example of the eventual loss of a syllable in many of the languages, though the languages are fairly split as to which syllable is lost—2nd or 3rd, but never first. A reconstruction like*pisoka could also include Wr and Tr *piso, though Wr and Tr *pika ‘rot’ also exist. Curiously, Quechua pusqu-y ‘rot’ has the same three consonants.
UACV-1847b ***piso** ‘pus, infection’; Tr bisó/wisó ‘supurar [suppurate], infectar un grano o herida [infect pimple or wound]’; Wr pehsoní ‘pus’.
UACV-1847c ***pikka** ‘sore’: Mn piha’ayee ‘become itchy, rash-like’; Kw pakagi’i-dï ‘sore, pain, ache, be sore’; SP pakka ‘sore, pain’; SP pikka ‘sore, hard’; CU pikyá-vi ‘poke-mark, sore’. Eu biikát ‘llaga, materia’ and others above are likely reductions: *piska > pikka, i.e., *-sk- > WNum -h-, SNum -kk-.

Eu piopiioké ‘andar cojeando [walk limping]’ (< *pisokV); Eu secures it with the exact primary meaning and phonologically aligning with *pisokV ‘rot’. [p1p,p2s,p3x] [NUA: Num, Tak, Tb, Hp; SUA: TrC, CrC]

641 compounds with the above UA *pisikV > *piskV > *pikkV ‘rotten, gooey, gone-bad stuff’ follow:
UACV-279 ***coC-pikki** ‘brain, lit: head-goo’: I.Num *cohpi(h)ki ‘brains’; M88-co5; KH/M06-co5: Mn copígi;
NP igicopigi (<iki-coppiki) 'brain'; NP mubigi (< mu-piki) ‘nose-snot'; Ch copíki; SP čoC-pikki / soppikki / cöppikki ‘brain, lit. head-fluid'; WMU č*öh*ppíkk*i* ‘brain(s)’; CU cïpiki-vi (< *coppikki-pi); Hp cöqya 'brain’.
NP, SP, and Miller all suggest that Num *coC-pikki is probably a compound of *coC- 'head' and *pikki ‘gooey or coagulated fluid’ because Num *mu-pikki 'snot' contains *mu- 'nose’. Kw wiya-biki-vï ‘brain’ also agrees with the same morpheme boundary. Hp is interesting in having apparently reduced the medial syllable—*coC-pikia > *copkia > *cokya—and in having acquired or preserved final -a that the other languages do not show. Note also *u/o > ï in CU. [iddddua] [bilabial > ø/_C; *o > ï in Num] [NUA: WNum, SNum, Hp]

642 another compound with the above UA *pisikV > *piskV > *pikkV ‘rotten, gooey, gone-bad stuff’ is the following in CNumic with a different first term of the compound than in the Southern Numic term above:
UACV-280 ***ku(p)-pisiC** ‘brain < head-goo’ CNum: TSh kupisiC 'brain, marrow'; Sh kupisi; Cm kupisi; as TSh mupisippï 'mucus' (nose-goo), *ku-pisi 'brain' is a compound. [NUA: CNum]

Semitic-kw's Proto-Semitic x > Hebrew/Phoenician ħ > UA *hu/ho/o/w

The above 14 sets (629-642) show Sem-p retaining Proto-Semitic *x, which later became pharyngeal ħ, merging with ħ in later Hebrew. In contrast, Sem-kw does not distinguish Proto-Semitic *x and *ħ, like Sem-p does, but Sem-kw has them already merged, as if from Pheonician, such that Proto-Semitic *x is reflected as *ħ > UA hu/w in Sem-kw. To help non-Semiticists keep it all straight, the matter of Hebrew/Phoenician ħ in this work involves four separate groups of data or categories:

1 Proto-Semitic *x in Sem-p: *x > UA *k, with no rounding (sometimes softened to x or h)
2 Proto-Semitic *ħ in Sem-p: *ħ > UA *hu/ho/o/w, always associated with rounding
3 Proto-Semitic *x in Semitic-kw: *x > ħ > UA *hu/ho/o/w, always associated with rounding
4 Proto-Semitic *ħ in Semitic-kw: *ħ > ħ > UA *hu/ho/o/w, always associated with rounding

The next 15 sets (643-657) exemplify category 3 above and show Proto-Semitic *x > ħ (of Sem-kw), which ħ > UA hu/ho/o/w: e.g., in contrast to Sem-p's UA *waxay 'two, after' from Semitic *'axar 'after' (at 570), note Sem-kw *ahoy < 'aħar (< *'axar) (643), showing ' > ø, *x(>ħ) > ho, r > y, all consistent with Sem-kw:

643 Semitic/Hebrew *'xr > 'ħr 'be behind, after, to the back'; Hebrew *'axar 'behind, adv, after, prep'; Hebrew 'aħare^{y} (< *'axare^{y}) 'back, rear end, n, behind, prep'; Hebrew 'aħer (< *'axer) 'other, later, following'; Hebrew 'aaħoor (< *'aaxoor) 'back, rear, behind, west, later, n and adv':
Hp ahoy / áhoyi 'in return or reply, back, back to an earlier condition, place, or time, go back, return' (Hopi dictionary divides it a-hoy '3person-back to', which, even if so, works as well, like its cognate
TO oiđ 'follow, accompany' along with the rest of the Tepiman set below.
UACV-1237 ***oya** 'follow': B.Tep316a *'oida-i 'to follow', 316b *'oi 'he followed'; B.Tep318; M88-'o7; KH/M06-'o7: TO oiđ; LP oiji; PYp oi; NT oídyi; ST 'oid^{y}a. Ken Hill adds Wr oi-ná/má 'andar [walk]'; Tbr ona-on- 'andar, arrastrarse [crawl], nadir [swim]', both compounds, the first part being *oya / *oiya. Add PYp oi- 'around, round about'; PYp oida 'follow, vt'. [kw1',2x>h2,3r] [SUA: Tep, TrC]
UACV-1019 ***oi-mïra / *oiya-mïra** 'follow-go, after-go': B.Tep318 *'oimïrai 'to walk around'; B.Tep316; M88-'o7; KH/M06-'o7: TO oimmed / oimïdï 'walk around'; LP 'oimïr(ï), pl: oihopo; NT aimïrai. [SUA: Tep, TrC]

644 Semitic xḍr > ħḍr > UA *husa 'grass'; Arabic xaḍira 'be green'; Arabic xuḍrat 'greenness', its pl: Arabic xuḍar 'vegetation, verdure, greenery, greens, meadow'; Arabic xuḍaarat 'greens, herbs'; Arabic xaḍir 'green, greenery, young green crop'; Hebrew ħaṣiir 'grass':
UACV-1058 ***(h)usa** 'grass': Stubbs2003-44: Tbr osá-t, usá-t 'hierba, zacate'; Cr (h)ïša 'grass, straw'. These two agree with each other in *(h)usa, since Cr ï < *u. [*u–a > o–a] [kw1h2,kw2s4,kw3r] [SUA: TrC, CrC]

645 Semitic *xabala > UA *hupala; Akkadian xabaalu 'use violence (against), do wrong (by)'; Old South Arabic xabala 'be wild'; Ethiopic ħabala 'act corruptly'; Arabic xabala 'confuse, make crazy'; Syriac ħbl 'spoil, mar, corrupt'; Syriac ħəbaal 'corruption, harm'; Hebrew ħbl 'act corruptly'; Hebrew -ħabbel 'ruin':
Hopi hovala '1 waste s.th. of value, squander, 2 dishearten, destroy one's good spirits or hopes';
Hopi hovalan-ta 'be wasting, be disheartening'. [kw1h2,kw2b,kw3l]

Besides Proto-Semitic *'axar 'after, another' yielding a Sem-p reflex in UA *wakay 'two, after' and a Sem-kw reflex in UA *ahoy 'back, follow', we have another pair in UA, one from each, showing the distinctive correspondences for Sem-p and Sem-kw respectively:

646 Hebrew náħal (< *naxal) 'river valley, wadi, stream'; Ugaritic nxl;
Akkadian naxlu / naxallu 'wadi, gorge':
Ktn naka-č 'gully, ravine, cliff'. Meanings are identical and *x > UA k with no rounding, but loss of final consonant. [p1n,p2x,p3l]

647 Hebrew náħal (< *naxal) 'river valley, wadi, stream'; Ugaritic nxl; Akkadian naxlu / naxallu 'wadi': SP noiC / noi-ppi 'canyon, wash'. Meanings are again identical, and the rounding reeks of a pharyngeal, and just as the first vowel (o) anticipated the 2nd consonant pharyngeal, so did the next vowel (i) anticipate the alveolar l, as Sem-kw tends to do, and a 3rd consonant is apparent in the gemination of the -ppi of the absolutive suffix. A nice pair reflecting Sem-p and Sem-kw respectively. [kw1n,kw2x>h2,kw3l]

648 Semitic *xll: Hebrew **ħaaliil** ‘flute, pipe’ from Hebrew/Arabic *xll ‘bore, pierce’; denominative verb Hebrew **ħll** ‘play the flute’ and qittel yə-ħallel ‘play the flute’; Akkadian xalaalu ‘to whistle’; Ethiopic xellat ‘(hollow) stick’; the UA forms derive from a pharyngeal ħ rather than the velar fricative x, as seen in cognate languages Arabic, Ethiopic, and Akkadian, which means the following are of Uto-Aztecan’s Sem-kw:
Tb **luulu’~’uuluulu’** 'play a flute' and Ca yulily ‘pipe’ have all as expected, the latter for the qittel impfv—Hebrew yə-ħallel > UA yulil, with y- as fossilized 3rd sg masc impfv verb prefix y- and round u for the pharyngeal, and the 2nd and 3rd consonants, and the vowel i between them as expected for the *-ħallil.

649 Hebrew ħṭ’ / ħaaṭaa’ ‘miss (a mark), do wrong’; Ugaritic xṭ’; Arabic xaṭi’a ‘be mistaken, to err’:
UACV-1393 ***wa(C)tiN / *waCtiC** ‘lose, lost, misled’: Mn wacikï ‘lose, vt’; Mn waci ‘be lost, vi’; Mn na’waazi ‘hide from, hide, vi/vt’; Mn wazitïgï ‘hide, vt’; NP wacigga ‘lose s.th., vt’; NP nawaci’hu ‘hide, vt’; TSh waciC ‘be hidden, concealed, lost’; TSh waciŋkïtain ‘lose, vt’; TSh wacikkatï ‘hide, vi (hide-sit)’; Sh waciC ‘be lost, vi’; Sh waciC-mïï ‘hide, vt’; Cm waci-tïkitï ‘hide, vt’; Cm waci-habiitï ‘hide, secret oneself’; Cm wacitï, wacikatï ‘lose way, (become) lost’; Ch áaga-waci ‘hide, v’; CU ’áaġa-wací ‘hide, deny, vt’; Hopi wïci ‘articial thing, s.th. false, an imitation, pretense’; Hopi wïci-ta ‘make a false representation, deceive, mislead’. Note that UA has the Arabic voweling of the perfect. [kw1x>h2,2t2,3’] [NUA: Num, Hp]

650 Semitic *xṭ’; Arabic xṭ’ / xaṭi’a ‘be mistaken, to err’, impv: -xṭa’; Hebrew ħṭ’ / ħaaṭaa’ ‘miss (a mark): Ktn ’ačaw ‘miss (the mark)’. Whether loss of 1st consonant x or from impfv ’axṭa’ ‘I missed’, the meaning is identical, and the 2nd and 3rd consonants are exactly as expected for Sem-p, even the final ’ > w, while 649 above is of the Sem-kw in *x > ħ. [p1x,p2t2,p3’]

651 Semitic *xṭr: Hebrew **ħoṭɛr** ‘rod’; Akkadian xuṭaaru / xuṭartu ‘branch, rod’; Syriac ħəṭar ‘to beat with rods, to card’; Syriac etħaṭṭar ‘be beaten with rods, carded’:
UA ***(h)uci** ‘tree, stick’: TO us ‘a stick’; TO uus ‘tree, bush, stick, crutch, wood’ (distinguished from TO uuš ‘arrowhead, stinger’); Nv usi ‘arbol [tree], palo [pole]’; PYp uusi ‘tree’; Nv uskikitiguguba ‘dar palos [hit with a stick/rod/pole]’. [kw1h2,kw2t2,kw3r] [SUA: Tep]

652 Hebrew ħelɛb ‘fat’ < ***ħilb;** Arabic **ħilb** ‘midriff’; Syriac **ħelb**-aa ‘fat-the’:
UACV-844 ***wip / *wiCp / *wi’p (>*wi’i)** ‘fat’: VVH102 *wi ‘fat’; M67-166 *wi ‘fat’; KH.NUA; BH.Cup *wi ‘fat’; L.Son331 *wi’i ‘grasa’; B.Tep41 *giigi ‘animal fat’; M88-wi1 ‘fat’; KH/M06-wi1: NP wisokko ‘greasy like a mechanic’; Sh wiC- ‘greasy’, as in wikkamma ‘to taste greasy’; Cm wih-kkama ‘taste oily, v’; Hp wiihï ‘lard, fat, grease’; Hp wimcapï ‘omentum, inside lining of stomach fat’; Tb wip-t ‘fat, n’; Tb wiibït~’iiwiip ‘be fat’; Sr wipt ‘fat, grease, fat one’; Ktn wipt ‘fat, lard, butter’, pl: wipim; Ktn wipcu’ ‘get fat’; Ls wí’ ‘fat, grease, oil’; Ca wí-ly ‘grease, fat’; Cp wí-ly ‘lard, fat, tallow’; Cp wíwat ‘fat’; TO giigi ‘be fat’; TO gi’i/gii ‘become fat’; PYp gi’i ‘fat, n’; NT giigi ‘animal fat’; ST gi’iig; ST gio ‘greasy’; Wr wi’í; Tr wi’í; Yq ’áwi ‘gordo’; My áwwi ‘gordo’; Ch(L) wiwavi ‘oil, grease’. CU wina-tta-ppï ‘animal’s fat’ is in earlier cognate collections in the possibility of initial *wi-. Sr, Ktn, and Tb show *p for the 2nd C, Tep a glottal stop, and Num shows gemination. As Sr and Ktn often show later consonant clarity not in other UA languages, *wip / wi’p / *wiCp are decent reconstructions. Only Tb, Ktn, and Sr show p in a cluster, as Sr also does in ‘badger’ and Tb in ‘thigh’. 2nd C -p- = Sem-p as the cluster *-lb- > -kw- in Sem-kw. [p1h2,2l,3b] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC]

653 Hebrew(BDB) ħayil / ħail / ħeel ‘strength, ability, efficiency, worth, valor, wealth, army’; Hebrew(KB) ħayil / ħeel ‘faculty, power’; Assyrian xaltu / xailtu ‘army’ but Akkadian(KB) ellatu ‘strength, family, armed forces’; Aramaic(J) ħayil ‘army, strength’; not clear whether Semitic *x or *ħ: Ethiopic x, Ugaritic ħ; Arabic has a parallel for each, as does Akkadian; in any case, UA corresponds to pharyngeal ħ:
UACV-2216b ***wïl** 'strong, able': CN wel ‘successfully, well, able, possible, very’; CN weli-ti ‘to be able, successful, capable’; Tr hiwérame ‘fuerte [strong], vigoroso [vigorous], resistente’; Tr iwé-game ‘fuerte, vigoroso, resistente’.
UACV-2216a ***huwa** ‘strong, hard’: Eu huwarawe / huwariwe ‘fuerte [strong]’; Eu huwé’e ‘fuerte [strong]’; Wr u’á ‘estar fuerte [be strong]’; Wr u’aré-na ‘sentirse fuerte [feel strong]’; Yq ’útte’a ‘ser fuerte’; Tr wáre ‘duro, resistente’; Tr wataáre ‘fuerte, ser resistente’. [1h2,2y,3l] [SUA: TrC, Azt]

654 Arabic xrr / xarra ‘to snore’; Hebrew ħrr / ħarar ‘be hoarse’; Arabic xarxara ‘snore, vi’:
Ls xaráá-ya ‘to snore’. This matches Sem-p *x > x of Sem-p. [p1x,p2r]

655 Arabic xrr / xarra ‘to snore’; Hebrew ħrr / ħarar ‘be hoarse’; Arabic xarxara ‘to snore, vi’:
Yq hóroró’otia ‘roncar [to snore]’; AYq ho’otia ‘snore, vi’; My hooró’oti koče ‘duerme roncando [sleeps snoring]’; Hp heroro-ta ‘to snore’. Semitic *x > ħ > UA ho… identifies these as being from Sem-kw vs. 654 of Sem-p. The first Hopi vowel assimilated to or anticipated the following -r. [kw1h2,2r]

656 Hebrew ħórep ‘winter’; Hebrew(BDB) ħórep ‘harvest-time, autumn’;
Arabic xarafa ‘pluck’, Arabic III xaarafa ‘be autumn’; Arabic xariip ‘autumn, fall’:
TO ’oḍ ‘to harvest’. TO ḍ < Hebrew r/l. Sem-kw with Semitic *x > ħ. [kw1x>1h2,kw2r,kw3p]

657 Hebrew ħwṭ / ħuuṭ ‘thread’; Arabic xyṭ ‘to sew, stitch’; Arabic xayṭ ‘thread, twine, cord, string’; in this cognate pair, Hebrew has *w* as middle consonant, while Arabic has *y* (which alternation happens often enough in Semitic); the UA terms reflect medial -y- and the change of *x > ħ of Sem-kw:
UACV-1843 ***wit** > ***wi(C)-** (combining form) ‘string, rope, hemp or fiber plant for making rope’: M67-419 *wi ‘string’; I.Num280 *wisu(n) ‘string’; Fowler83; M88-wi6 ‘string’; KH.NUA; Munro.Cup43 *wíí-ča ‘fiber plant’; KH/M06-wi6; Jane Hill 2007: ***wit-tu’a** / ***wit-tiwa** ‘make rope’: Sr wiiču’ ‘make string, v’; Sr wiičua’t ‘string, n’; Ktn wicu’ ‘twist fibers into string’; Ktn napa-wicu’ ‘splice a rope (< together + twist)’; Cp wíču ‘twist string, rope, a net’; Cp wíčiwat ‘rope, thread, braiding’; Cp wí-š ‘bowstring, willow fiber, willow sp’; Cp wíču’et ‘string, rope’; Ca wíču’at ‘rope, thread, braiding’; Ca wíčiw ‘braid, as rope or thread’; Ca wi-š ‘bark of a tree providing fiber’; Ls wíí-ču ‘make string by rolling hemp fibers’; Ls wíí-ča ‘Indian hemp’; Ls wíí-ča-t ‘rope, string, twine’; Yq wíi’i ‘hilo’. TO giššum ‘a woven handle for a water jug’ and TO giššu|m ‘bind up, vt’ fit *wiccu well. Except for the final -m, TO giššum fits *wicu of the Tak languages for four segments (Tep s < *c, and Tep g < *w), and they all involve making rope. Add the TrC forms below, with suffixed -ta (*wit-ta).
***wit-ta** (> wita) ‘make rope’: Wr witá ‘make rope’; M67 lists Wc wíta ‘thread’ and Wc wíita ‘spin yarn, v’; deriving from a similar pattern (*wiC-ta) is Ls wíí-ča ‘Indian hemp’ though with an absolutive suffix *-ta instead of *-ta ‘do/verb’. However, adding another *-ta as absolutive suffix is what yields the below, that is, *wik-ta-ta with first the verbalizing *-ta (clustered with t) then absolutive *-ta (not clustered):
***wiC-ta-ta** (> *wi-ta-ri) ‘rope’: Wr witári ‘rope’; My witeri ‘mecate, soga, piola’; AYq wite’i ‘net, snare’; Tbr mitá-t ‘string of tendon, hebra de tendon’ (< *wik-ta, Tbr often shows m for *w, and usually a liquid for a lone intervocalic -t-) also in Tbr wikoli-t mita-rá-n ‘bowstring’.

The Tr and Wr common noun suffix -ri, like CN -tli, both derive from the absolutive suffix *-ta; thus, note intervocalic -t- > -r- in Tr and Wr. Therefore, intervocalic -t- in those languages may point to a reduced consonant cluster, such as *-tt- > -t-, as we see above. It is the same in most NUA languages: a lone intervocalic -t- usually goes to -l- in most Tak languages and to -r- in the Num languages, and intervocalic *-c- > -y-; so intervocalic -c- in NUA is likely a palatalization of a cluster *-tt- /*-Ct-.

KH/M06-wi6 and Jane Hill (p.c.) both recommend uniting these with the Num *wisu forms, to which I belatedly agree, as *wisu might be a softening from *wicu (< **wit-tu’a), so we include other *wis forms at *wisi / *wisu ‘net, web’ below. [C cluster] [NUA: Num, Tak, Hp; SUA: Tep, TrC, CrC, Azt]
UACV-1522 *wis ‘web, string’: I.Num280 *wisu(n) ‘string’; KH/M06-wi6 ‘string’: Mn wissi; NP wiha;
TSh wisipin; Sh wisun (acc. ~a); Hp wishövi ‘spider web’; Hp wiisila ‘string out, extend, stretch out on a surface’. Ken Hill adds Ch wisiavi ‘feather’ with a question mark and Tbr vivisa-t ‘látigo [whip, cord]’. As KH/M06-wi6 has them together, these might be related to others listed at ‘rope’ (*wit-tV > wicV) by a c/s split frequent enough in UA, but that -c- likely comes from a *-tt- cluster, and -s- perhaps from ṭ, often and easily palatalized to c/s, so the forms with *-s- are separated for now, but may tie in, the others having different affixes. Add Tr wesurá ‘kind of fishing net’. Hp wis- and Tr wesurá are probably cognate. Tr wesurá even vocalically aligns well with Num *wisu(n). For Hp hövi, see *hupa ‘spider’ as Hp wis-hövi is likely a compound ‘string out/web (of)-spider’. Other *wi- ‘web’ forms could belong with the group at ‘rope’ but are listed for reference: Eu wi-toroka ‘telaraña’; My turus wii’i ‘spider web’; My tuurus ‘spider’; My turus witeri ‘spider web’; Yq wite’i ‘trap for animals’; AYq witosa ‘web < thread-white’; AYq huvae toosa ‘spider white = web’. [Kw1x,kw2t2,kw3r] [NUA: Hp, Num; SUA: TrC]

Of course, Proto-Semitic *ħ > UA *hu/ho/w, in both Sem-kw and Sem-p. In addition to those listed previously (76-83), another 18 examples follow (658-675):

658 Arabic ħbl ‘bind’; Ethiopic ħbl ‘tie together’; Hebrew ħbl ‘bind, pledge’ (BDB); the UA forms reflect an unattested Arabic II -ħabbil or Hebrew *-ħabbil:
SP wïkkwinta 'to wrap around, coil’. [l > n in SP] [kw1h2,k2bb,3l]

659 Hebrew **ħqq** ‘cut in, inscribe’:
UACV-625a ***wïk** ‘cut’: KH.NUA; KH/M06-wï14: Cp wéke 'cut, slice'; Ca wék ‘cut, slice, plow’; Ls wóki ‘cut, let bleed’; Sr wïhkuv ‘beat, vt, distributive of Sr wïqööv 'hit, vt’. [p1h2,2q,3q] [NUA: Tak]

660 Hebrew ħrm ‘ban, devote, exterminate’; the most frequent usage in the Biblical text is ‘devoting to destruction’ though ‘prohibiting or setting apart from common use and dedicating or devoting to God as sacred or for sacred use’ is also found in Biblical usage and is the fundamental meaning found in the cognate languages. From that root are many Arabic nouns for woman: Arabic **ħaram** ‘wife, something sacred’; Arabic **ħurmat-**‘woman, wife’; Arabic **ħariim** ‘woman, wife, female members of the family, harem’: Uto-Aztecan’s Wr **oerume / oorume** ‘woman’ matches very well. Other UA terms may not be as impressive, but

are worth noting, especially since the verbal root has to do with ‘devotion to Deity’ and ‘sacredness’ as well as ‘women’: Ca, Hp, and Tr recommend UA *waym:
UACV-1796 ***way / *waym** ‘marry in a religious ceremony, v’: Ca -way- ‘to take as wife’ (r > y, missing -m); Hp wiimi ‘religious rite, ritual, ceremony, religious practices open only to initiates’; Tr niwi- ‘to marry in a religious ceremony’ (contains the fossilized na/ni- reflexive/ passive prefix ‘be married, marry each other’; the Wr and Ca forms suggest an initial voweling of **ɧaram**, then assimilations to points of articulation, i.e., fronting and raising before r and rounding before m (in Wr only, the m non-existant in Ca). NUA forms show r > y and subsequent assimilations of most vowels to y. [NUA: Tak; SUA: TrC]
UACV-1795 ***waym > *wam / wim** ‘religious ceremony’: BH.Cup *wámkic ‘ceremonial enclosure’; M88-wa19; KH/M06-wa19: Cp wámki-š; Ca wámkiš; Ls wámku-šu ‘brush lean-to’. With regard to Tak *wam-(ki), ki is likely ‘house’; thus ‘ceremony-house’ relating to Hp wiimi/wim- ‘religious rite, ritual, ceremony, religious practices open only to initiates’. [p1h2,p2r,p3m] [NUA: Tak, Hp]

661 Arabic **ʼɧɧ** ‘cough, v’; of course, this can be labeled onomatopoeia, and perhaps so in original Semitic; yet both Tb and Hopi have two *ho syllables, perhaps reduplicated, and a vowel before it, even a glottal stop in Tb, and the vowel matches pharyngeal ho vs. haha, hïhï, or any vowel could resemble coughing; so the pattern of Semitic ***ʼaɧaɧa** and **UA *ʼohoho** are worth noting:
UACV-560a ***oho / ohoho** ‘cough, v’; M67-105 *’oh; B.Tep314 *’i’ohogïi 'cough’; I.Num14 *ohni; M88-o12 ‘cough’; KH/M06-’o12: Hp öhö / öhöhö-; Tb(V) hooh / ’ohooh; Tb(M) hoohat / ’oohooh; Ca ’ú’uhu; Mn ohi; NP ohi; TSh ohiiC; Sh ohaiC / ohoi.
UACV-560c ***ihoho** (> Tep *i’oh... ??) 'to cough': B.Tep314 *’i’ohogïi 'cough': TO i’ihog; LP ihoga / ihosana; PYp i’osin; NT yóógïi; ST ‘i’oo’; ST iogia. Often PUA *h > Tep ’ though Tep may retain h; these may exhibit one of each: *ihoho > i’oho. Perhaps with y- of 3rd m. impfv prefix. [SUA: Tep]
UACV-560d ***ohni(C)** 'cold, have/be sick with a cold': these may contain the preceding compounded with s.th. beginning with -ni… : Sh ohni-ppïh; Cm onibwekakat; Cm ohnitï 'to cough’; Kw ’ohni; Mn ohi ‘to cough’; NP ohibba wïmma; TSh ohi kammanna. [NUA: Num] [h > Tep h] [1’,2h2,3h2] [NUA: Num, Hp, Tb, Tak]

662 Hebrew ɧnn ‘to favor, have compassion on’:
The -wen- of Eu na-vencem/na-wencem ‘pity’ (Shaul, 2008/9). [1h2,2n,3n]

663 Hebrew ɧrp ‘reproach (BDB), annoy, taunt (KB)’; Hebrew **ɧɛrpaa** ‘shame, mutilation (1 Samuel 11:2)’, the shame or object of reproach (usually a perceived deficiency like being childless, uncircumcised);
Arabic ɧarrapa ‘slant, distort, corrupt, twist, pervert, falsify’; denominalized from the Hebrew noun:
Hp ööpï ‘sickly one, frail one, wounded one, invalid, one with disabling sickness’;
Hp ööpï-ta ‘injure, wound, cripple, disable physically or emotionally’. Note Hp -p- from the cluster -rp-; otherwise -p- > -v-; and another instance of Hopi -ö- between a pharyngeal and -r (also 686). [1h2,2r,3p]

664 Hebrew ɧtr ‘to dig’:
UACV-665 ***hotaC** ‘dig’: I.Num34 *hota ‘to dig’; M88-ho1; KH/M06-ho1: NP tïhonna ‘dig roots’; TSh hotaC; Sh hota; Cm hora-; Kw horo-; SP oraC; CU oray. Add Ch hóóra ‘dig’; Mn tïhoowi ‘dig, dig up, vi, vt’; Tr ho- ‘cavar, escarbar, hacer agujeros, sacar algo escarbando’; Tr hora- ‘cavar [dig], escarbar, hacer hoyo(s) [make wells]’. [p1h2,p2t,p3r] [NUA: Num; SUA: TrC]

665 Syriac ɧrg ‘rub, polish, rub against [surface, as stones rubbing against each other to become gravel, or polish, leaving small particles]; Aramaic(J) ɧargaa’ ‘rough sound, sawing’;
Aramaic(J) ɧirgaa’ ‘saw-dust’; Aramaic(CAL) **ɧirgaaʼ** ‘dust’:
UACV-764 ***huCkuN** > *hukkuN ‘dust’: I.Num36 *huhkumpï(h) ‘dust’; M88-hu11; KH/M06-hu11: Sh hukkun ‘dusty’; WSh hukkumpïh; Cm huhkuppï; Kw hukubï, hukwabï ‘dust, fallen dry pine needles’; SP ukkumpu / ukkumpa; Ch hukump(ü) ‘dust’; WMU *huh*kkúpp*ü* ‘dust’; CU kukupï (< *kukkuppï).
[’ > N in Numic; C harmony in CU] [1h2,2r,3g,4’] [NUA: CNum, SNum]

666 Arabic ɧaṭab ‘firewood’; Arabic ɧaṭaba ‘to gather firewood’:
UACV-1631 ***hucakwa / *husapa** ‘pitch’: B.Tep328 *’usaba-i ‘pitch’; KH/M06-’u11: TO ušabi ‘gum, pitch, resin’; NT usába; ST ’usaab; PYp usava ‘pitch, sap’; Nv usabagadi ‘resina’. *-kw- or voiced *-p-? [1h2,2t2,3b] [SUA: Tep]

667 Syriac ɧwr / ɧuur ‘look, behold, gaze’:
UACV-1910 ***hura** ‘come up, look in/over’: M88-hu19; KH.NUA; KH/M-hu19: Sr huur-q ‘come up (as sun), come up over’; Sr huur-kin ‘peek over, look in’; Ca húlaqan ‘peek at s.o., lifting/sticking one’s head out, v’;

Ls húla ‘sprout through the ground, poke through the surface, v’. Hill adds Ktn hurïk ‘look forth, peep out, v’. With a question mark, Hill also offers possible Hp hölö(k-) ‘rise flatly, v’ (comb. -wlö thus < *holö < **hulo). Add Tb huuda ‘sun is up’; Tb(H) huutat ‘rise, come up (sun)’; or Tb hooyibï’ït~oohooy ‘watch over, vt’? Note also PYp hoohod ‘look’; ST hoohoiñ ‘look at it’. [1h2,2w,3r] [NUA: Tak, Hp, Tb; SUA: Tep, TrC]

668 at 79 is the Sem-kw perfective of Hebrew **ḫmr** ‘smear, cover’; Arabic xamara ‘to cover, leaven’; Arabic(Lane) xamara ‘veil, cover, conceal, impfv -xmuru:
UACV-2381b ***ma’a** ‘smear on, paint’: Ch ma’á- ‘color, mark, paint’; SP ma’a- ‘decorate, mark’; WMU ma’á-y ‘smear on, paint, decorate, spread (like jam on bread)’ (past: ma’á-qa); CU ma’áy ‘put on, rub on/into, apply to, anoint with’; and the -maa of Wc šúurí.maa 'smear blood' (Wc šuure 'red'). Perhaps impfv -xmar or loss of first short syllable of pfv. Short, not a strong item. [NUA: SNum]

669 Arabic ḫariḍa ‘to be yellow’; Hebrew ḫaaruuṣ ‘gold’; Syriac ḫraaʕaa ‘gold-colored’:
Tr ura-kame ‘pale yellow’; Tr ura-na-ma ‘become yellow’; Hp höya ‘yellowjacket’. [1h2,2r,3s4]

670 Hebrew ḫɛrɛṣ ‘earthenware, vessel, potsherd’ > Ca wayisma-l ‘plate, dish’. [1h2,2r,3s4]

671 Arabic ḫmm II ‘to heat, bathe, wash’ Arabic X form of the verb means ‘take a bath’:
Hp paa-homa ‘to wash, bathe, v.t.’; Hp naa-va-homa ‘take a bath, bathe oneself’. The paa- is ‘water’. 1h2,2mm

672 Arabic ḫabaqa ‘to pass air, break wind’:
Hopi hovaqtï ‘to smell, have an odor, (with intensifier) smell bad, stink’; the Hopi dictionary divides this as hova-qtï, but with a question mark for -qtï, or the following may lack final -C: Hopi hova-/hovàa- ‘smell, odor’; Hopi hovàa-ta ‘let rot’; Hopi hovàa-ti ‘putrefy, become smelly from rotting or decomposing’. [1h2,2b,3q]

673 Hebrew ḫnk ‘train up, dedicate’; Arabic ḫnk ‘(for trials, time) to make (s.o.) experienced or wise’; Hebrew ḫanukkaa ‘dedication, consecration’:
Ca huneke ‘to take an Indian bath’. The Ca meaning aligns with dedication, initiation and the phonology is as expected; Yq húnakte ‘sentenciar [sentence], señalar [show, point, appoint], ordenar [order, arrange, direct], criar [raise (young)]’. [1h2,2n,3k] [NUA: Tak; SUA: TrC]

674 Syriac ḫrb ‘wasted, lay waste, destroy’; Arabic ḫaaraba ‘fight, wage war’; Hebrew impfv ye-ḫrab ‘massacre’, *hoqtal impfv: *yuḫrab: SP yurava ‘be overcome’. [1h2,2r,3b]

The Semitic verbal root (ḫnp) meaning ‘be crooked, have crooked or turned-in feet’ has nouns for turtle and lizard-type animals with turned in feet. They phonologically match UA words for ‘badger’ and ‘bear’ whose feet are similarly turned in like a turtle’s or lizard’s.

675 Hebrew **ḫnp** ‘to limp’; Arabic **ḫnp** ‘have a distorted foot, be inclined, curved, pigeon-toed, to be or walk bow-legged with toes pointing inward’ (like turtles, badgers, and bears); Arabic uses that root in words for ‘tortoise’ and ‘chamelion’ while the correspondences match UA words for ‘badger’ and ‘bear,’ all of which have turned-in feet;
Arabic ḫanpaa’ ‘tortoise, chameleon’ (that is, creatures whose feet turn inward);
Arabic ḫanap ‘an inversion of the feet, toes pointed inward;
Arabic aḫnap ‘a person who walks pigeon-toed’; Arabic *ḫannaap ‘one walking with turned-in feet’:
UACV-107 NUA ***hunap-** ‘badger’; NUA ***huna-wï** ‘bear, ie, badger-big’: Sapir; M67-18 *huna; KH.NUA; I.Num43 *hïnan/*hunan; BH.Cup *hunwït ‘bear’ (badger-big); Fowler83; M88-hu10; Munro.Cupan9 *húúna-l; KH/M06-hu10 *hula:
Sr hoonav-t ‘badger’; Ktn huna(-)vi-t ‘badger’; Ca húna-l ‘badger’; Cp húna-l ‘badger’; Ls huuna-l ‘badger’; Hp honaani ‘badger’; Hp hoonaw ‘bear’; Kw huna-ci ‘badger’; Ch huna ‘badger’; CU una-pï-ci ‘badger’ (< *hunaC- or *huna-ppï); SP ïnaC-; TSh huna-cci. CU, SP, and TSh all suggest a third consonant in the gemination that doubles the following suffix, though Cupan (Ca, Cp, Ls) lacks that evidence in *huna-l ‘badger’ and *huna-wï-t ‘bear, badger-big’; but most impressive is that Sr huunav-t ‘badger’ shows exactly the expected 3rd consonant v (< *p) as well as Ktn. Yq huuri ‘badger’; My huuri ‘badger’; Cah (Yq, My) huuri ‘badger’ suggest a denasalization of n > r. [iddddua] [p1h2,p2n,p3p] [NUA: Num, Hp, Tak, TrC]

5.9 Semitic-p Distinguishes Proto-Semitic ʕ and ġ

In addition to ħ and x merging to ħ, a similar pair ʕ and ġ merged to ʕ, such that two pairs of Proto-Semitic consonants, each containing a pharyngeal and a velar fricative—ʕayin, ġayin, ħeyṭ, and x—were originally part of the Israelites' language, but one of each pair had no place in the Phoenician alphabet (or Phoenician language, apparently). So in Phoenician these four had merged to two—ʕayin and ħeyṭ—but not in Israeli Hebrew until sometime between 300 BC and the first centuries AD (Kutscher 1982, 13-18; Sáenz-Badillos 1993, 81; Blau 1998, 12, 30). The merger of ħ and x to ħ has just been treated above. The ʕ (ʕayin) is difficult to describe until one hears an Arabic speaker say it. The way-back-and-down root of the tongue narrows a voiced airflow at the pharynx. The nation's name— SaʕudiʕarabiaSaʕudiʕarabia—has one ʕ in each word, which are not transcribed in English, but are very much pronounced in Arabic, and anciently in Hebrew, and in White Mesa Ute today. The ġ is like an uvular tap or fricative gurgle with the back of the tongue where uvular q is pronounced). The four Proto-Semitic consonants changed thusly:

	Proto-Semitic	earlier Hebrew	Sem-p	Phoenician/later Hebrew	Sem-kw
V'ced uvular fricative	ġ	ġ	k	ʕ	w/o/u
V'ced pharyngeal fric	ʕ	ʕ	w/o/u	ʕ	w/o/u
V'cless uvular fricative	x	x	k	ħ	hu/w/o/u
V'cless pharyngeal fric	ħ	ħ	hu/w/u	ħ	hu/w/o/u

The pharyngeal ʕ is more frequent than ġ in Arabic and Semitic generally, and their proportionate reflection in Uto-Aztecan is similar, that is, more instances from Semitic ʕ than from ġ. In addition to the 7 examples of ʕ > UA w/o/u presented earlier (84-90), another 14 examples of Semitic ʕ > UA w/o/u follow (676-689):

676 Arabic(Lane) **faqʕ-** < ***paqʕ-** 'intense whiteness, and refers to some species of fungus':
UACV-1480 ***pakuwa** 'mushroom, fungus': Mn paagú' 'type of pink mushroom'; PYp vikoga 'mushroom(s)'; Wr wehkoári 'fungus'; Tr wikubékuri 'large white edible mushroom'; Tr wekogí 'mushroom'; Tr wehorí 'type of edible mushroom'; Tr čohowékuwi 'large white edible mushroom'; the phonological variety in Tr is typical (-weku-, wiku-, béku, weko, weho-) and suggests some borrowing between Tep and Tr/Wr. The Mn, PYp, and one Tr form (-beku-) suggest initial *p, whose reflexes in Tep (v/w) are the source of some loans in Tr/Wr. The 1st V is likely *a* like the Mn form, which *a* easily assimilates or centralizes to ï/e/i in unaccented syllables. [p/w] [p1p,p2q,p3'2] [NUA: Num; SUA: Tep, TrC]

677 Hebrew **ʕagol** 'round':
UACV-436 ***wakol** 'round(ed)': TO gakoḍk 'curved'; ST gakoly 'go around'. The Num forms more nearly approximate *wïkono: NP wïkkono'o 'ring, circle'; Mn wiġo'onogi 'crooked'; SP wïkkonuiC 'round, circular'. Add Tb(M) wiiginat ~ iwiigin 'stir, v'. Perhaps Kw woko 'big' (< 'round'?) as in Kw wokotïnihi 'be round'? [1'2,2g,3l] [NUA: Num, Tb; SUA: Tep]

678 Arabic ʕṭw 'give, present to': **UA**CV-1005 ***uttu** 'give': TSh uttu 'give, present to'; Sh uttuH 'give s.th. to s.o.'; Cm utu-ka-tï 'give s.th., vt'. [1'2,2t2,3w] [NUA: CNum]

679 Hebrew ʕśy / ʕaaśaa 'make, make (write) books, create, put into effect, do'; Ugaritic ʕšy:
UACV-711 ***osa/i / *oswa** (Tb, Eu) 'paint, draw, write': L.Son22 *osa/os-i 'write'; M88-'o11 'write, read'; KH.NUA; KH/M06-'o11: Cp íse 'have lines, be colored'; Cp is-nin 'write, color, paint' (*o > i in Ca/Cp); Ca kwá'isne 'paint, put design, write'; Ls 'éskani 'make a pattern (as on baskets), paint, mark'; Tb(H) oowat 'be marked'; Tb(H) oowanat 'to mark, write'; Tb 'oo'owaan 'to mark, write'; Gb eša 'pintar [paint]'; Gb 'ésin 'pintura, body painting'; Sr 'öösan 'write'; Ktn 'ošan 'paint, write, tattoo'; TO o'ohan 'write, draw'; Eu óosa-n 'pintarse [paint self]'; Eu hioswa-n 'escribir, pintar'; Wr osa-ní / osi-má 'write, read'; Tr osí-mea 'escribir'; Tr osá 'irregular present and imperative of osi-mea'; My hi'ohte / hioste 'escribir'; My hio'sia 'papel'. We should add Cr ne-tá'usiïhmwa 'yo dibujo [I draw]' as the -usi- portion agrees perfectly with *osi. Add Tr osí-ma 'hacer [do, make]' also used as an auxiliary verb! [iddddua] [Gb e <*o] [1'2,2s2,3y] [NUA: Tb, Tak; SUA: TrC, CrC]

680 Hebrew **yaʕᵃśɛ** > UA ***yo'osa**; this is the conjugated 3rd person singular impfv of ʕśy above and the UA forms are quite as expected with round vowels flanking the pharyngeal or UA glottal stop:
Tbr yosá-t 'papel [paper]'; Tbr yosa-ñá-t 'escribe [he/she writes]'; Cr yu'uša / yu'usi 'write' (Casad 1984, 159) and in Cr té'eyu'usa 'escribiendo'. Cr u < UA *o, so Cr and Tbr agree in *yo'osa, and show the Hebrew 3rd sg impfv verb prefix yV- while the others in 679 reflect the perfective. [iddddua] [SUA: CrC, Tbr]

681 Hebrew ʕlw / ʕly / **ʕalaa** ‘ascend, go up, grow’; two meanings of the causative hiqtiil are to ‘rear/raise up (young)’ (Ezekial 19:3) and ‘cause to grow’ (Jeremiah30:17, 33:6; Ezekial 37:6), which would also suggest that the non-causative meant ‘grow up’:
UACV-1100a ***wïla/i** ‘grow’: Ca wél ‘to grow, rise up high’; Cp wéle ‘to grow’; Ls wola/i ‘grow (of plants or anim subj)’; Hp wïŋwa ‘grow, grow up’, with *l > N in a cluster with -w-. Add Tb wilaa’lat ‘to climb, vt’. Might Tb(H) oolït ‘get up, fly’ be a ptc? [Hp N/Tak l] [NUA: Tak, Hp]

682 Hebrew ʕly / ʕalaa ‘ascend, go up, grow’; feminine sg impfv: Hebrew **taʕalɛ** ‘it/she grows’:
UACV-1100b ***tïwïl** ‘grow’: Cp tewe ‘to grow of plants’; TO čïwïl-him ‘to grow’. This matches the f. sg imperfect. TO does palatalize t > č adjacent to high vowels like ï and it does have -l-, but normally *w > Tep g. So could it be a loan from Takic? Cp and TO a little west and east of the Yuman desert respectively, perhaps closer to each other formerly, make it possible. [1’2,2l] [NUA: Tak; SUA: Tep]

683 Syriac **ʕmṭ** ‘become dark, cloud over, be obscure, concealed’ (The Tr meanings support the secondary meanings of Syriac ‘be obscured, concealed’); Note the Sr, Tbr, and Tr meanings ‘cloud up’ rather than rain:
UACV-1764a ***(w)umaC / *(w)ïmaC** ‘rain’: M67-338 *(w)ema ‘rain’; I.Num23 *ï(h)ma ‘rain’; M88-ï9 ‘rain, v’ and M88-wi16 ‘rain, v’; KH/M06-ï9: TSh ïmaC / ïmmaa / ïŋwaC; Sh ïma/ïmaH ‘rain, v (-H = a final consonant); WSh ïmaC; Cm ïmaarï ‘rain, vi’; Cm ïmapï ‘rain, n’; Kw ’uwa; SP uŋwa; WMU uwaC; CU ’uwáy; NP pauma ‘raining’; NP powma ‘raining’. Ken Hill adds Ch ïwárï ‘rain’. Also belonging are those of
UACV-1764c *uma ‘be cloudy’: Hopi oomi ‘be cloudy, overcast’; Hp oomaw/oom-a-wï ‘cloud’ (cloud-nominalizer- wï); Tbr homé-k ‘be cloudy’; and the -’oma of Tr na’oma ‘borrarse [be erased, wiped out], esfumarse [disappear], opacarse el ambiente [atmosphere to become opaque/dark/non-transparent], nublarse [become cloudy]’; Tr(H) na’oma ‘tapar [cover], borrar [erase]’. A reconstruction of first vowel *u instead of *o is preferred because we would expect Hp ö < *o, and Tr sometimes shows o for u, and even if that were not the case, a vowel assimilation or lowering *uma > *oma, common in UA, could also explain the Tr and Tbr forms. In fact, they all match SNum *umaC well, with unknown final -C. Num ï < *u often, or the vowel ï, common in many of the forms, may be an unaccented schwa-like result.

I agree with Miller, that these two sets (a and b) are probably related as in Miller 1967-338; and Miller’s 1967 reconstruction with an added final C *(w)ïmaC serves the two sets well. A 3rd C is apparent in CNum and in WMU compounds, and the velar nasal apparent in the forms below is a common result of an *-mC- cluster after vowel loss. The 2nd and 3rd consonants remained separate in Num, but clustered in Tak and the cluster reductions in Tak could send the vowels in various directions.
UACV-1764b ***wïN / *woNC / *wVN**... ‘rain, be cloudy’: Sapir; M67-338 *(w)ema ‘rain’; M88-wi16 ‘to rain’; KH.NUA; KH/M06-wi16: Cp wéwe; Ca wéwen / wéwn; Ca wéwn-iš ‘rain, clouds’; Sr wöörŋ ‘rain, vi, rain on, vt’; Cr me-viiye ‘it is raining’; Cr víítye ‘the Rains (rain gods)’ (Casad reconstructs Proto-Corachol as *víiye < *wiiyï; similarly, McMahon & McMahon list Cr biite ‘lluvia(s)’); Wc wíwíye ‘lloviznar, vt’. Miller notes after each Tak form that the vowel is wrong, apparently siding with the Cr vowel in his listing this set under initial *wi... However, Cp and Ca agree with *wï..., Sr with *wo, Gb disagrees with both, while Ktn woŋ ‘rain, vi’ and Ktn woŋ-a-t / wo’ŋ-ut / wahŋ-a-t ‘rain, cloud, n’ agree well with Sr wöörŋ-t ‘rain, n’ and Sr wööŋ-tu’ ‘cloud up, look like rain’, both with *wo, though some of Ktn’s vowel patterns look like Gb’s. Sapir suggests *wïwa (with a question mark) and ties together the CrC, Tak, and Num forms above (*uwa < *wïwa). Sr’s V might be the result of a reduplication like Cupan’s: *wïwïN > *wïwN > *wooŋ > *wööŋ, the -wN- cluster causing both the rounding of the vowel and -ŋ- < -wN-. [med *-m(C)- > ŋ/w/ŋw; Gb V, Sr ö; *u-a > *o-a] [1’2,2m,3t2] [NUA: Tak, Num, Hp; SUA: CrC, TrC]

684 Hebrew ʕeṣaa ‘advice’; *na-ʕaṣa/e ‘to argue, quarrel’
UACV-1870 ***na-wïsa** / ***na-oca (> nooca)** ‘speak’: Wr naósa ‘speak’; Tr nawesa- ‘speak in public’; CN nooca ‘call, summon, talk to s.o.’ Perhaps Wr wahci ‘truth, right, straight ahead’. [c/s; wV > o in CN] [1’2,2s4,3y] [SUA: TrC, Azt]

The next three exemplify Semitic ʕ > UA *w > Hopi l before low vowels:

685 Hebrew ʕaaqeb ‘heel, footprint’ > UA *wakVpi ‘track’: Hp -laqvï in Hp kïk-laqvï ‘tracks all over’ (< kïk-laqvï ‘foot-?’); Hp kïkï ‘foot’ is combined with Hp -laqvï matching Hebrew ʕaaqeb ‘heel, track, footprint’ (UA *w > Hopi l before low vowels). Another e > a like 614 makteš. [1’2,2q,3b] [NUA: Hopi]

686 Hebrew ʕɛrwaa ‘nakedness, genital area’; Akkadian uuru ‘nakedness, genitals (of a woman)’:
UA *wowa > Hp löwa ‘vulva, vagina’. Note here and at (663) ħrp also has ö between 1st C pharyngeal and 2nd C r in a cluster. [1’2,2r,3w]

687 Arabic ʕarḍiy ‘cross- (in compounds), horizontal’:
Hopi lèesi- ‘horizontal’; Hopi lèe-ta ‘lay across, secure by barring’ [1’2,2r,3s4]

688 Hebrew ʕaazab ‘leave, abandon, leave behind, leave over, let go, give up s.th.’; Arabic(Lane) ʕzb / ʕazaba ‘be or go far, go away, depart’; Akkadian ezeebu ‘leave behind’:
Sr wiđap-kin ‘leave, leave alone, let go, release, abandon, quit, stop (doing s.th.)’; note that Sr -wađ ‘tail’ (< UA *kwasi ‘tail/penis’ < Hebrew baśar) similarly voices the intervocalic ś. Sr vowels are Sem-p. [p1’2,2z,3b]

689 Hebrew **ʕaroʕer** / **ʕar****ʕ**aar ‘juniper tree’; Arabic **ʕar****ʕ**ar ‘juniper’; Samaritan **ʕar****ʕ**ar:
UACV-423: Tr gayorí / kaorí / kawarí / aorí / aborí / waorí / awarí ‘enebro, táscate [juniper]’; Wr aóri ‘táscate, juniper’. Both the Semitic and UA terms are semantically specific to ‘juniper’, and Tarahumara’s plethora of forms all seem to be related variants, somewhat clarified by Semitic **ʕar****ʕ**ar, with subsequent cyclical borrowing. From an expected UA *wa’war (< Semitic **ʕar****ʕ**ar), note the four resultant plausibilities in bold:
Semitic **ʕar****ʕ**ar > *wa’wari > wa’ori > **waori**, then to **aori**
Semitic **ʕar****ʕ**ar > *wa’wari > wawari > **awari**
Semitic **ʕar****ʕ**ar > *wa’wari > wa’wori > **abori** (see example of w > v, for -’w- > *-p-)
Tr gayorí looks like a loan from Tep (note NT gááyi ‘táscate’), which has g < *w. The two Tr forms starting with k—kaorí / kawarí—may be devoicing of Tepiman loans (Tep g > k) though it may be that ʕ later in a word were not as subject to *w > g as initial ʕ. No less than 7 variant forms in Tr suggest a collection at the central position of a dialect chain that includes Tep languages. [p1’2,p2r,p3’2,p4r] [SUA: TrC, CrC]

Four examples of Proto-Semitic ġ > k of Sem-p (690-693):

690 Arabic **ġayr**- ‘other than, different from, unlike, **no, not, non-, un**-’; Arabic ġyr ‘be jealous, display zeal, vie (for), guard or protect jealously’; Arabic ġyr III ‘be different, haggle, vie, compete’:
NO, NOT

Mn	qádu’/qadu’ú-tu	Hp	qa; qa’e	Eu	ka
NP	kai; gi haga ‘nobody’	Tb	hayi ‘nothing’	Tbr	ka; ka-i; ka-té
	gi ‘don’t’ (neg. imp.)	Gb	qaay (Munro, p.c.)		
TSh	ke	Sr	qai	Yq	kaa
Sh	ke	Ca	kílye ‘not’; kí’i ‘no’	My	ka
Cm	kee	Ls	qáy	Wr	ka’í
Kw	yuw-aa-tï; kedu	Cp	qáy	Tr	ke
Ch(L)	kaču	TO	pi; pi’a	Cr	ka; kai
SP	ka; kaču	Nv	pima; koi ‘aún no’	Wc	ka; ’aací ‘nada’; maave ‘no haber, ausente’; ’íma ‘negar, no permitir’
WMU	ka; kač	PYp	hii; im; kova		
CU	ka; kač	NT	čo; kááki	CN	ka

UACV-1533 ***kay / *kaC** ‘no, not’: Sapir; VVH136 *ka ‘no, not’; M67-306 *ka, *kai; I.Num57 *ke ‘no, not’; KH.NUA; M88-ka1 ‘no’; KH/M06-ka1: Ktn kay; Most UA languages show a form of *ka(y) or *ke (< *kay), except rarely in the Tepiman branch. Of additional interest are Tb(H) haa’išš(a) ‘no, not’ and Ls qáá’iš ‘without’.
For q in Tak, see 6.6. [*k > h in Tb] [p1g2,p2y,p3r] [NUA: Num, Hp, Tb, Tak; SUA: TrC, CrC, Azt, Tep]
UACV-1534 ***kaN-tu**: Mn qadu’ú-tu; SP kaču; WMU kač; CU kač; Kw kedu. Kw d often suggests a nasal cluster *-Nt- > -d- (because *-tt- > Kw -t- and *-t- > -r-). [NUA: Num]

691 Ugaritic rġb; Arabic rġb / raġiba ‘to desire, wish, want, crave’;
Hebrew rʕb / raaʕeb ‘be hungry, suffer famine’:
UACV-2293a ***takuC** 'thirst(y)': Stubbs2003-11: TSh takuC 'thirst, n'; TSh takukko’ih 'be thirsty';
TSh takuccïïwah ‘be thirsty’; Sh taku-pïkkah 'be thirsty'; Kw tagu-(ye’e) ‘be thirsty’; Kw tagu-pï ‘thirst, n’; SP taġuC ‘be thirsty, vi’; WMU tagúnarű’i; CU tagúy-narú’ay 'be thirsty, lit: thirst-buy'; Mn pasïtugu’i 'be dry from thirst'; Ca tákut piš 'with/because of thirst’.
UACV-2293b ***pa-takcï** ‘thirsty’: Stubbs2003-1: Eu varákce 'tener sed'; Tr baracé- 'darle a uno sed, tener sed’. Perhaps * pa-takcï < *pa-takucV, i.e., with Num *takuC. [*-CC- red] [p1r,p2g2,p3b] [NUA: Num, Tak; SUA: TrC]
UACV-1230 ***tïkï** ‘hungry’: Kw tïgï-ye’e ‘be hungry’; Ch tïgï-’iva ‘lack, hunger, n’; Ch tïgï-’i ‘need, lack, v’; CU tïgï**í**-pï ‘hunger’; CU tïgï**í**-narú’ay ‘be hungry’. [NUA: Num]
UACV-1229 ***ciha** ‘hungry’: Mn cihaya’i ‘to be hungry’; NP pazia’hu ‘hungry’; TSh cia-tiyai ‘starve, be hungry’; TSh cia-ko’i ‘starve, be hungry’; Cm cihasuarï ‘hunger, have an appetite’; Cm cihasi’apï ‘hungry person’. This set may be less likely than the first three sets associated with Semitic rġb, though a palatalization of t before high-front vowel and softening of k > h are common enough in UA, except that CNum also has *takuC; however, this may be the WNum form later borrowed into CNum. [NUA: Num]

692 Arabic ṣġr / ṣaġura / ṣaġira ‘be small, little, scanty, young, dwindle’:
UACV-1365 ***cako** ‘small’: Hp cay / caa, pausal acc: càa-ko ‘small, little, young, child’; CN coko ‘s.th. very small’. CN does anticipatory assimilation of 1st V to 2nd V frequently. This is Sem-p in light of ġ instead of ʕ. [CN 1st V to 2nd] [p1s4,p2g2,p3r] [NUA: Hp; SUA: Azt]

693 Arabic ġasala / ya-ġsil(u) ‘to wash’
UACV-2485a ***(hi-)pa-ksi (<*pa-kasi):** My baksia ‘be washing, vt’; My hípaksia ‘be washing’; Yq hipáksia ‘lavar’; AYq vaksia ‘wash, vt (not clothes). [Cah]
UACV-2485b ***(na-)pa-kka/i** ‘bathe’: NP napaki’a ‘bathe’; Kw na-vaka-tii (< *na-pakka-) ‘bathe oneself’; SP na-vakkï 'bathe, v refl'; Mn nabakiya; Ch navákï; CU naváki; Ls páči ‘wash’; CN paaka ‘bathe, wash’. [CN p] [p1g2,p2s,p3l] [NUA: Num, Tak; SUA: Azt]

While the four above show Proto-Semitic ġ > k of the early Israelite Sem-p, the next three show Proto-Semitic ġ > ʕ > w of the Phoenician-like Sem-kw. Listed again are 36 and 37 in order to show that these two are from Sem-kw for two reasons: first, they begin with kw, and second, Semitic ġ > ʕ > w in Sem-kw as it did in Phoenician and later Hebrew, in contrast to Semitic ġ remaining ġ in earlier Hebrew and being k in the Sem-p’s contribution to UA.

36 Hebrew bʕy / baʕaa[1] ‘enquire, search’; Ug bġy ‘wish’; Arabic bġy ‘search’:
UACV-1493 ***kwawa/i** ‘invite, call’: Stubbs 1995-11: Cp kwawe ‘call, invite’; Tr o’wí ‘invite’; Wr oí ‘invite to work’ (perhaps borrowed from Tr; otherwise, woí); Eu bowá (= UA *kwowa, as Eu b = UA *kw) ‘convidar [invite]’; perhaps Sr koohan ‘call, invite’ and the baa- of TO baamuđ ‘plead, invite’ (lack of TO g < *w is frequent enough). [kwV > ku] [NUA: Tak; SUA: Tep, TrC]

37 Hebrew bʕy / baʕaa[2] ‘bring to a boil, bulge out’; Arabic bġw ‘swell up’:
Hopi kwala-(k-) ‘boil, come to a boil’.

694 Hebrew ṣʕy (< *ṣġy) ‘stoop, bend, incline’ (BDB); Arabic ṣġy / ṣaġiya ‘incline, bend, lean’:
Wr cucuwi ‘be hunched over, on all fours, face down, hanging’. Also ṣ > c in Sem-kw. [kw1s4,kw2g2>’2,kw3i]

5.10 Semitic Liquids R and L in Uto-Aztecan

Initial *l > l: Uto-Aztecan languages generally do not have initial liquids—l and r—at the beginnings of words; however, a few languages do show a few initial liquids and a dozen of those few UA sets or words with initial l align with Semitic words of initial l (695, 698-708) and of medial -l- > -l- (709-721). For a fuller treatment of the liquids, both l and r, see 7.9 :

695 Hebrew **lqḥ / laaqaḥ** ‘take (in hand), grasp, take as wife’; Arabic lqḥ / laqaḥa ‘to impregnate’; Hebrew impfv yiqqaḥ ‘take, take as wife’; imperfect yiqqaḥ derives from pre-Hebrew *ya-lqaḥ > Masoretic Hebrew *yi-qqaḥ; the final pharyngeal assimilated/rounded the vowels in UA:
Hopi **lööqö(-k-)** ‘(for a bride) to go to the groom’s house to begin the wedding ceremony’;
Hopi(S) löhqö / lööqö ‘she married’; Hopi(S) **löhqö-qna/ lööqö-kna** ‘they gave her in marriage, he married her’. The -h- in Seaman’s Hopi dialect is devoicing of the long vowel’s end. [1l,2q,3h2]

696 Hebrew lqḥ / laaqaḥ ‘to take (in hand), take as wife’; Arabic lqḥ / laqaḥa ‘to impregnate’; from pre-Hebrew *ya-lqaḥ > Masoretic Hebrew ***yi-qqaḥ** ‘take, take as wife’; the final pharyngeal rounded UA Vs:
UACV-529 ***yïkoC > *yokoC** ‘to copulate’: Sapir; I.Num291 *yo(h)ko ‘copulate’; M67-99; M88-yo3; KH/M06-yo3:
Mn yoqqo; NP(B) na-yogo ‘have sexual intercourse’; TSh yokoC; Sh yokoC; Kw yoko-; SP yoġo-;
CU yoġo-. Sapir notes CN yekoaa ‘taste, sample food or drink, copulate with s.o.’ and Numic *yoko, only a vowel assimilation away, and CN yekoaa resembles the Hebrew voweling. [p1l,p2q,p3h2] [NUA: Num; SUA: Azt]
UACV-574 ***yoko-pï-ci** ‘coyote (the copulater)’: SP yoġo-vïci ‘coyote’ (< SP yoġo/*yoko ‘copulate’);
CU yoko-vï-ci; WMU yoqő-vi-č*i* / yoqő-vü-č*i* / yöqowi-ci / yogöwü-č*i* / yogó-vi-č*i* ‘coyote, n’. This SNum form shows a fossilized absolutive suffix *-pï to which a later suffix *-ci was added. [1y,2l,3q,4h2] [NUA: Num]

697 Hebrew *hiqqaḥ ‘cause to take, that is, give’; though this hiqtil form is unattested in the Biblical text, it would match well with Wr ihko- ‘to give as a present’. Above are three different conjugations of lqḥ.

698 Arabic *lahgat ‘tongue’, the Hebrew voweling for an unattested plural would be *lahgoot:
UACV-2364 ***laŋi / *laŋu** 'tongue': Sapir; VVH94 *lïŋi 'tongue'; M67-441a *neni 'tongue'; L.Son176 *nïni/*nïnï; B.Tep182 *nïïnï/i; M88-nï3 'tongue'; KH.NUA; KH/M06-nï3: Hp leŋyi / leŋi ‘tongue’; Cp naŋ; Ca náŋ-il^{y}; Sr naŋ|ač; Ktn nïŋi-č; Gb -nóŋin (poss'd); Tb lalan-t / lalun-t; Eu nenét; Tbr niní-r; Yq níni; My ninni; Wr yení; Tr inará/inirá; TO neeni; LP nïnni; PYp neeni; NT nïïni; ST nïïn; Cr nanuri; Wc neení; CN nene-pil-li 'tongue'; CN nene-tl 'female genitals'; Pl nenepil 'tongue’. Sapir suggests that Hp and Tb dissimilated *neŋi > leŋi, then Tb assimilated again > l-l. The reverse seems more likely (*laŋa > naŋi), the liquid assimilating to the following nasal, as anticipatory consonant harmony is most common in UA. And Tb does preservative V assimilation, so perhaps in this case preservative C harmony also. Initial *l is not common in UA, so assimilation to the usual (*l- > n-) seems more likely than dissimilation to the unusual (*n- > l-). Note also that initial l happens in Hopi (695, 698, 700). Sapir also notes the voweling *a-u in Cr and Tb. Since none of the languages show *e-u, but rather all with u show first vowel a, then the voweling *ï-i is the 1st assimilating to the 2nd, such that the original 1st vowel was likely *a*, as it appears in Tb, Sr, Ca, and Cr. The 2nd was u, aligning with Hebrew pl -oo- > -u-, or i from the sg lahgat > laŋi, or default final V is *i*, perhaps common to Sem-kw (see 7), but u is from round vowel, thus the reconstruction *laŋu. [kw1l,2h,3g,4t] [NUA: Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

699 Hebrew lmd / laamad ‘learn, exercise in, be trained, accustomed to’; Hebrew **loomed** ‘participle form: one learned in, trained in’; lummad ‘quttal form, intensive passive: learned, trained, taught, accustomed to’; Hebrew -lmad ‘impfv: ‘learn’ which easily equates to ‘know’ as in Tarahumara:
UA ***lomi** ‘know’: Tr **lomi**-mea ‘saber muy bién [know very well], dominar un conocimiento [master a knowledge/skill/specialty]’; cf. Hebrew **loomed** and in UA, the qal participle raised the 2nd vowel from *e > i, or was the early or original vowel in the Semitic participle as well: Sem *CaaCiC > Hebrew CooCeC.

700 Hebrew lmd / laamad ‘learn, exercise in, be trained, accustomed to’; Hebrew loomed ‘participle form: one learned / trained’; **lummad** ‘learned, trained, taught, accustomed to’ (quttal form, intensive passive); UA ***luma** ‘good, etcetera’: Hopi loma ‘good, beautiful, fine, nice, fit, aesthetically pleasing’. Because Hp o < UA *u, the vowels also match, and the semantic shift from Hebrew **lummad** ‘trained/taught’ to UA *luma ‘good, fine, beautiful’ is not so great when one considers that ‘knowing’ the desired skills makes one ‘desirable’, and in the case of women, ‘aesthetic desirability’ inevitably gets mixed into the package and, over time, not surprisingly emerges later as the more salient semantic dimension. 699 and 700 and 701 are different conjugated parts of the same root (lmd). This Hp form is male perspective, probably originally speaking of a woman who is pleasing/desirable, i.e., knowing well her work/arts/duties as the ancient culture defined her desirability; the semantic tie is also exemplified by the two similar meanings of Tr gamea/kamea ‘(1) be able, capable; (2) look good to one, like, prefer’ (< Semitic gml ‘be beautiful, complete’). [iddddua] [p1l,p2m,p3d] [NUA: Hp; SUA: TrC]

In contrast to the two morphological shapes above, which so far match only one UA language each, the impfv verb stem, whose l is absorbed in the cluster (*-lmad > matV) is a common stem throughout UA:

701 Hebrew lmd / laamad ‘learn, exercise in, trained, accustomed to’; Hebrew imperfect: **-lmad**:
UACV-1272a ***mata / mati** ‘know’: Sapir; VVH25 *mati ‘know’; M67-249 *ma/*mai/*mati/*maci ‘know’; I.Num93 *mayï(h) ‘find, become, be, do’; BH.Cup *mí ‘be’; L.Son142 *matï, mac-i ‘saber’; B.Tep142 *maatï ‘he knows’, and *mai ‘he knew’; CL.Azt *mati ‘know’, 165 *mačtia ‘teach’; M88-ma2 ‘know’; KH.NUA; AMR1992-15; KH/M06-ma2: Mn pummaaci ‘recognize, vt’; Sr maaţ ‘hear, listen to’; Hp màataq- ‘become visible, come into view, vi’; Hp màatakna ‘go to show, display, reveal, vt’; Hp maaciwa ‘be named’; Hp maaciw-ta ‘be visible’ (the central semantics of the last two Hp forms perhaps *maaciw ‘be known’); TO maač ‘have knowledge of, be aware of, learn, find out’; LP maat; PYp maata; NT máátï ‘saber’ (vs. NT maáši ‘parecer’); ST maat ‘saber’ (vs. ST maaš ‘verse, notarse); ST mačia ‘learn, come to know’; Cr ra-mwa’a-ty-é ‘he knows him’; Wc máte (perf ma-) ‘saber, conocer’; Wc maté ‘sentir’; Wc mai ‘saber (participio)’; CN mati ‘know s.th., vt.’ Sapir (1913) suggests that CN mačoo ‘nonactive / passive of mati’ derives from passive *mati-o, the i palatalizing t before its disappearance or absorption into o. Both Miller and Kenneth Hill note Sr maaţ ‘hear, listen to’ as a semantic extension of ‘(come to) know’ also belongs. Tb maancu’(ut) / ’aamaancu’ ‘be tame’ is from Spanish manso.
UACV-1272b ***maci / *ma’ci** ‘appear, be visible, known, light’: VVH36 *maci ‘to appear, come to light’; M67-261 *maci/*masi ‘light’; B.Tep141 *maasi ‘appear’; L.Son131 *maci ‘haber luz’; M88-ma3; AMR 1992a; KH/M06-ma3 *ma’ci’: TO maasi ‘emerge, appear (as newborn or the sun), dawn’; Wr ma’cí ‘haber luz [be light]; aparecer [appear]’; Tr mačí ‘visibilidad [visibility], luz [light]’; My máaci ‘hay luz [be light]’; Miller also includes Hp maasi ‘gray’. These are thought to relate to *mata/mati ‘know’ in a semantic spectrum that ranges through ‘know, see, find, be seen, visible, light, dawn, gray’. Manaster-Ramer (1992a) suggests s.th. like *maci (SUA), *mayi/mayï (NUA):

TO maaš-cam, maš-čam ‘teach’; PYp mastia ‘teach’; Eu mástiwa ‘enseñar’; My maaci ‘verse, lucir, amanecer, enseñar’; My maaci ‘know, feel’; My mah-tía ‘teach’; Yq máhta ‘enseñar’; Tr maci ‘see, know’; Wr maci ‘know’; Tbr may ‘saber’; CN mačiaa ‘be known, be apparent’; CN maC-tiaa ‘learn, teach’; TO maas ‘be like, seem/appear/look like’. Add NT maáši ‘appear, see, dawn, look like’; ST maašik ‘visible, easy to see’; Wc máásïïkï ‘clear, visible’ perhaps borrowed from Tepiman. Note *s > h in PYp maahad ‘appear, arise’. [p1l,p2m,p3d]

702 Arabic lawz ‘almonds (collective) (root lwz)’; Arabic lawzat ‘an almond’, pl: lawzaat;
Aramaic(J) luuz (lwz) ‘nut, almond, hazel-nut, nut tree’; Hebrew luuz (lwz) ‘almond tree’:
Tb lalwaš-t ‘pine nut cache’, likely from reduplicated *lawas. [p1l,p2w,p3z]

703 Arabic lmm ‘gather, collect, reunite, IV causative: befall, overcome’:
UA *lïmm / lïmïmï ‘burn, fall in (structure)’: Ca -lémeme- / -lémm- ‘to burn a great deal’; Ls lóma/i ‘collapse (of a structure), fall into coals, vi; knock a structure down, knock off coals, vt’. As a fire burns, the wood structure falls in on itself, which ties the two Takic meanings together (Cahuilla ‘burn lots’ and Luiseño ‘fall into coals/knock down structure’), which UA semantic tie is otherwise opaque. The Semitic ‘collect, befall/overcome’ may resemble ‘collapse/fall’ and the resulting coals are collapsed/gathered/collected. The 3 consonants are identical—lmm in both Semitic and Takic—and the semantic combination is easily feasible, though not obvious. Taken together, the tie seems probable enough. [iddddua] [p1l,p2m,p3m]

704 Arabic laqlaq ‘stork, n’:
Ca la’la’ ‘goose, greyish with a long white beak’; Ls lá’-la ‘goose’; Cp le’e-l ‘a large water bird’. [p1l,2q,3l,4q]

705 Hebrew l’y /la’aa^{y} ‘grow weary, become tired of s.th.’, impfv: ti-l’e ‘you/she tire’; yi-l’uu ‘they are tired’; prtcpl: **loo’e^{y}**; Ugaritic l’y ‘to tire’; Aramaic(J) l’y ‘labor (in vain), be tired’; Arabic la’aa^{y} ‘be poor, unfortunate’; Akkadian la’uu ‘be weak’:
UACV-2336 ***lo / *loCi** 'tired': Tbr lo- ‘cansarse [get tired]’; Tbr lo-ká-n ‘cansado [tired]’; Yq lótte-k ‘cansar’; Yq lotlotte ‘cansado’; AYq lotte ‘get tired, vi’; AYq lottia ‘tire, vt’; AYq lottila ‘tired’; My lotte ‘está cansado’; Wr e’loí-na ‘be tired’; PYp lo’ig / lo’og ‘poor’. This is an impressive match: initial l in both Semitic and UA, the round vowel o due to the rounding influence of the glottal stop or to participial o; and some show the glottal stop, and those showing a 2nd vowel mostly have i (< y of Semitic). Wr e’loí may include the impfv prefix yi-/yV- or an et-l’y form, with a possible anticipation of the glottal stop. Most interesting are the semantics: most align with tired, both Semitic and UA, but Arabic and Akkadian include the ‘poor/weak’ dimension, which is also found in PYp. Along with the ‘poor/unfortunate’ semantic, we should also include Ls li’i-lí’a ‘to dress untidily, vi’; Ls li’í-l’i-š ‘sagging, loosely fitting (clothes)’; Ca lé’eley ‘to get loose, wobble (tooth, tree, stick, etc), vi’. [1l,2’,2’2,3y] [SUA: TrC, Tep; NUA: Tak]

706 Arabic lwy ‘turn, bend, twist’; Ethiopic lawaa ‘to twist’; Syriac ləwa’ / ləwiy ‘go/come with, accompany, follow’; Hebrew lwy / lawaa ‘to accompany, join oneself to’ [that is, twist together]:
Ls líwa/i ‘be tightly twisted, vi, twist tightly, vt’; Ca líwiwey ‘sing aloud, wring out’. [p1l,p2w,p3i] [NUA: Tak]

707 Hebrew le’ekol ‘to eat’ (the infinitive form): Cp lyéke ‘to eat’. [p1l,p2’,p3k,p4l]

708 As in Syriac laakẖ-aa active participle of lkẖ ‘to lick, lick up’ and a metaphor of fire;
Or III lbb ‘burn’ > Hebrew libbat ‘flame’; ‘(licking) flame’ and ‘lick’ are often associated in Semitic:
Hopi lekwi-ta ‘lap up (food, as cat or dog)’. [iddddua] [kw1l,kw2b]

709 Arabic **ṭll / ṭalala** ‘spray, sprinkle, drizzle, bedew’; Hebrew ṭal ‘night-mist, dew’; Arabic(L) ṭll ‘to rain a small rain’: Arabic **ṭall** ‘dew, fine rain, drizzle’:
UA ***cololo** ‘sprinkle, rain lightly, v’: Hopi cölö-(k-) ‘to drip (a single drop)’; Hopi cölölö-ta ‘be dripping, be sprinkling (rain)’. This and Hp kwelo above (< Hebrew blʕ) and Hp kele- (Hebrew kly) and Hp loma (Hebrew lmd) and Hopi taala (< Hebrew dlq) all suggest Hebrew l > Hp l. [p1t2,p2l,p3l] [NUA: Hp]

710 Hebrew **toleʕaa** / tolaʕat ‘worm, maggot’; Hebrew tolaaʕ ‘crimson (color, dye, or material)’; Hebrew(BDB) tolaaʕ ‘worm, scarlet stuff’; Syriac taulʕaa ‘worm, scarlet dye’; the crimson-worm is the source from which the crimson/scarlet dye is extracted; Hebrew(KB) mətullaaʕ ‘wrapped in scarlet’; some UA languages mean ‘embers’ resembling scarlet, then embers to coals (black) or the generally dark color (scarlet) surfaces as ‘dark’ or ‘black’ in UA, and the general shape of tolaʕ is consistent with UA *tulu / *tulo. PUA *u > i in Nahuatl explains NUA *tul(u) and CN tliil and CN tliilloo-tl, and so the TrC forms resembling *telu are likely loans from Nahuatl, and Ls -la also suggests a liquid-pharyngeal cluster (6.4):

UACV-241 ***tul** 'charcoal, embers, black': BH.Cup *túla 'charcoal'; Munro.Cup21 *túú-la 'charcoal': KH.NUA {Ls; Cp; Ca; Hopi toho}; M67-45 *tunu; CL.Azt *tiil- 'soot'; M88-tu23 and some of tu3; KH/M06-tu3 *tul and tu23: Ls túú-la 'charcoal'; Cp tú-l 'charcoal'; Ca tú-ly; Cp túla 'get black, get a tan'; Cp tulnək-ic 'black'; Cp túlnine 'make black' (similar forms, but with absorbed -ln- > -n- are Sr tïnäänä'n 'be black'; Sr tïnää'q 'bec, turn black'); Cp tultúlaxwe 'it is soiled'; Ca túl-nek 'black'; Sr tuu-ţ 'charcoal, coal(s), ember(s)'; Gb tur; Tb tuu-l 'charcoal, embers, coals'; CN tliil-li 'black ink, soot'; Pl tiil 'soot'; Pl tiil-tik 'black'. AMR (1996d) and Hill astutely add TO čuuḍ 'embers, charcoal'; TO čuuḍt 'make embers of wood'; TO čuuḍagi 'embers, charcoal', since TO ḍ < *l. In addition, Ls túú-la rather than *tuu-l, that is, the keeping of the vowel in -la is good evidence for a 3-consonant cluster: *-Vlʕ-ta; > V-la; thus, like CN tliil-li, an l existed that was absorbed by the absolutive suffix (*tul-la > tu-la) to become rather invisible in Tak, but helped preserve final -a. Add Ktn tu-č 'charcoal' and note also Tr čorí 'cosa negra' (borrowed?). Ken Hill (KH.NUA) rightly associates Hopi toho 'fine-grained reddish-brown rock used as a pigment' with the Takic forms. The Hopi term is closer to the color crimson, and hot embers (Sr, Tb, TO) are quite the color of crimson/scarlet, and turn into charcoal, which is black and a good blackener.

UACV-827 ***tulu / *tulo** 'dark, black': Stubbs2000b; Stubbs2003-41: relating to *tul 'charcoal, embers, black' and CN tliil-li 'black ink, soot' are CN tliilloo-tl 'blackness' and CN(S) tlilloa 'cubrirse de negro [become covered with black], ponerse color negro [turn black]', and Wr telúla 'smooth black stone for polishing pottery' and Tbr telu-r/ tilu-r 'eye', like a black stone as in Wr. [iddddua] [l > TO d, l > l in Tak] [p1t,p ,p3'2] [NUA: Tb, Tak, Hp; SUA: Azt, TrC, Tep]

711 Hebrew **kɛlɛb, kalb-** 'dog'; Arabic kalb- 'dog'; pl: kilaab would correspond to Hebrew *kiloob:

UACV-575 ***kalop** 'fox': Tb(V) 'iklooba-l 'fox'; Tb(M) yekalooba-l 'grey fox'; Tbr kahu-lowi / kahi-lówi 'fox'. Suspending Lionnet's morpheme break may have Tbr being a reduplication *kaklopi > kahu-lowi, which would agree with Tb quite well, sharing *kalop, especially since Tbr w < *p. The Tb form curiously resembles an Arabic broken plural kilaab which corresponds to Hebrew ***kiloob** 'dogs'. Another UA-with-Arabic broken plural look is 752 'arrow'. Tb and Tbr kahu-lowi / kahi-lówi 'fox' share *-lop, since Tbr w < *p. Tr kibóči 'fox' resembles an unattested f. pl: *kalboot. [iddddua] [p1k,p2l,p3b] [NUA: Tb; SUA: TrC]

712 Ugaritic hll 'to cheer'; Syriac hallel 'to praise'; Arabic hll / halla 'shout';
Hebrew **hillal-**, impfv: **-hallel** 'admire, eulogize, praise, exclaim halleluia':

UACV-1136 ***hala / *halala** 'happy': Hp hàalay 'be happy, content, cheerful, enjoy oneself'; Ls 'alaláá 'an exclamation of praise or pleasure'; AYq allea 'happy'; My al-leiya 'está contento/alegre [is happy/ joyful]'; My al-leewame 'gozo [joy]' (misperceived morpheme divisions for My); Tb yilaha-t~'iyilahaša 'be happy' also shows the 3rd person imperfective prefix of Hebrew yəhallel. [1h,2l,3l] [SUA: TrC; NUA: Hp, Tb, Tak]

713 Arabic ţlʕ 'to arise, come up': Tb tulu'ula- 'to get up from sitting'. [?p1t2,p2l,p3']

714 Hebrew pl' 'to be extraordinary, wonderful'; Hebrew *pl' is not attested in the biblical text for the qal (basic CaCaC), but is not at all unlikely in the ancient spoken language and would semantically parallel the attested niqtal, which means 'be unusual, wonderful, miraculous':
Ca pálaw 'be pretty'. [p1p,p2l,p3']

715 Hebrew dll / dalal 'to hang, be low, languish'; Hebrew dallaa 'hair, threads of a warp';
Hebrew dal 'low, weak, poor, thin'; Arabic tadaldala (*dl reduplicated) 'to be in motion, dangle':
Hopi tilili-ta 'quiver, tremble, shiver, shake'; Hopi tíli-k-na 'make quiver or tremble'; CN toli-nia 'suffer, be impoverished'; SP ton'ni 'to shake' (cf. 22 SP kwan'nu < ballu); Hopi toni 'yarn, string'. Whether the two Hopi forms both belong remains for further research, though separate l's (VlVlV) vs. two clustered l's (VllV) as in SP, make both worth listing for contemplation, and CN equates semantically. [iddddua] [1d,2ll]

716 Hebrew dlq / daalaq 'to burn (BDB), set on fire'; Hebrew dallɛqɛt 'flame'; Syriac dəlaq 'to blaze, flame, shine like fire'; Syriac dalq-aa < dalaq- 'a flame, blaze, torch, a bright shining':
Hopi taala 'be light, be illuminated, be daylight'; Hopi taala 'light, illumination, n'; Hopi qa-tala'-vo 'blind person, no-light-eyes'; Hopi tala' 'in summer'; Hopi tala'-pa-mïya / tala'-va-mïya 'in summer-water-moon, the month Paamuya'. Note the glottal stop where -q once was. [1d,2l,3q]

717 Aramaic / Syriac qlp 'peel off, shell, rub away'; Arabic qlp 'strip bark (from tree), v.n.: qalp;
Hebrew glb 'shear, shave':

UACV-1893 ***kïlipi** 'shell, shuck, degrain, v': B.Tep133 *kïrivi 'to shell corn'; M88-kï14; KH/M03-kï14: TO kïliwi; LP kïkv-; NT kïlivi; NT kïlíívai 'desgranarlo [degrain, scrape kernels off of it], vt'; ST kïlyiiv. [l/r; liquids] [p1g,p2l,p3b] [SUA: Tep, CrC]

718 Hebrew npl ‘fall, be born’; impfv stem -**ppol** < *-npul:
UACV-138 ***puli** ‘to fall, give birth, daughter’: Cp pulíne ‘give birth’; Cp pulíni-š ‘baby’; Ca púlin 'woman's daughter'; Sr pulin 'woman's daughter’; Ca púli 'fall, be born'. Sapir also ties CN -pil 'offspring, son, daughter' and Cr péri 'son, daughter, child' with the Tak forms. Normally Cr ï < *u (but e is close to ï) and CN i < *u, so vowels okay. [UA liquids; V's; *l not n in Tak??] [1n,2p,3l] [NUA: Tak; SUA: CrC, Azt]

719 Hebrew towlid ‘bear a child, fem impfv’ > Ls tóvli 'to bear a child, lay an egg. [1t,2w,3l,4d]

720 Hebrew **nebɛl** ‘skin-bottle, skin’ in a common phrase Hebrew nebɛl yayin ‘skin of wine’;
Syriac nbl / **n’bl**; interestingly, the meaning of the root nbl is uncertain, yet another identical root nbl means ‘be senseless, foolish’ [as when drunk]; therefore, consider:
PUA ***napai** ‘acoholic drink, drunk’: B.Tep168 *navaita/i ‘beer’; TO nawaitï ‘alcoholic drink’ (TO w < *p); NT navaityi; ST navaityi; Cr nawa; Tb namwa-t ‘tesgüino’ (Tbr mw < *w; thus, Tbr and Cr may be loans from a Tep language); Eu navei/nave ‘get drunk’; PYp naava ‘get drunk’; PYp naavam / nauvim ‘prog: be getting drunk’; TO nawm-k, naw-k ‘get drunk.’ [Tep, TrC, CrC]

If PYp nava ‘prickly pear’ ties in here, then the widespread UA stem *napo ‘prickly pear’ is likely related. But regardless that tie, the CN reflex—**CN no’pal-li**—even shows the final l, no less, and the glottal stop! Of extraordinary interest is that Syriac **n’bl** shows a glottal stop in the same place as CN **no’pal**-li, having exactly the same four consonants as CN no’pal-li. Just as “the bottle” signifies its contents (alcohol) in English, similarly bottle > alcohol > plant from which the drink is made in UA. PUA ***napol/napoi** ‘prickly pear cactus/fruit’ [from which alcohol is made] is found in at least 20 languages of the Num, Tak, Hp, Tep, TrC, CrC, Azt branches.
UACV-7a ***no’pal / *napu** ‘prickly pear cactus/fruit’: VVH16 *na$_{s}$pï ‘prickly pear cactus/tuna’; M67-70 *nap; BH.Cup *navït; L.Son165 *napo; B.Tep169 *navoi ‘cactus’; Fowler83 *napu; KH.NUA; Munro.Cup103 *náávə-t; M88-na5 'cactus fruit'; KH/M06-na5 *naaput (AMR): NP nabu; TSh napumpï; Sh nabombï (Fowler83); Kw navu-bï; Ch navumpï; SP nabumpï (Fowler83); Hp naavï; Sr naavt; Ktn navïh-t; Ca návet; Cp návet; Ls náávu-t; Gb návot ‘prickly pear cactus’; TO naw/nawï; Nv nubo(nïvo); LP(B) nav; NT návoi; ST nav; Eu navúc; Wr napó; Tr napó; Yq naabo; My naabo; CN no’pal-li. While the rest of UA shows *napo/*napu, CN reverses the two vowels to yield *no’pal-li. The 2nd vowel is curious in that TO, Hp and Takic agree in *ï (perhaps schwa-like behavior), while most of SUA shows o, yet several show u (NP, TSh, Kw, Ch, SP, Ls, Eu). Note a correspondence of final -i and -l (Tep and CN, respectively). Note the nasals in TSh, Sh, Ch, and SP aligning with CN’s liquid. Eu -c may also suggest a cluster of -lt-, -t- being of a fossilized absolutive suffix. [a-o vs. o-a; *o > ï in Hp, Tak; SUA l > NUA N]
UACV-7b ***napa** 'alcoholic beverage': B.Tep168 *navaita/i 'beer'; Miller’s M88-na34 and na-5, Ken Hill rightly combines in KH/M06na-5, though Miller’s na34 group with different vowel (*napa vs. *napo) might for clarity and study be kept in a different letter, as the Tep languages have separate forms for each: TO nawaitï; NT naváítïi; ST navaity. Cr nawá 'alcohol' and Tbr namwá-t 'tesgüino' may be loans from Tep, since *napa > Tep nawa (*-p- > Tep *-v/w-). [NUA: Num, Tak, Hp; SUA: Tep, TrC, Azt, CrC]
UACV-7c ***napa-mukki** ‘drunk, alcohol-smitten’ (> nawa/nah(w)a-m): L.Son161 *naha/*nawa 'emborracharse'; M88-na26; KH/M06-na26: TO naumk; LP nahamu; Eu náwe/nava; Yq nawáhe; My naa-mukúra; Tbr naham / nam 'emborracharse’.
Add Nv navamudaga ‘drunk’. This set is phonologically difficult, perhaps due to some terms being recycled diffusions/loans (like Yq), instead of cognates. While the TrC *nawa forms could be diffusions from Tep *nawa (< UA *napa), we also see medial h in LP and Tbr, which do not correspond to each other nor to *p, but may be lazy glottal stops representing some C. My and TO suggest a compound approximating *naw(a)-muk (< *napa-mukki). [iddddua] [reductions] [SUA: Tep, TrC]

721 A Semitic root of similar consonants is Hebrew nbl ‘wither, decay, wear oneself out, lose heart’:
Hopi na’pala ‘contract a disease or undergo some physical or behavioral change’. [p1n,p2’,p3b,p4l]

722 Syriac bl’ ‘grow old, wear out’:
Eu virúe- ‘cansarse [get tired]’; Eu virúhmukú ‘morirse de cansancio [die of exhaustion]’. In Eu, Semitic l > Eu r is usual; see 6 below and others. [1b,2l,3’]

In UA’s Sem-p, Semitic intervocalic -r- usually remains -r- in TaraCahitan (TrC) and Numic and NUA, though often represented as PUA *-t- which is pronounced -r- intervocalically:

723 Hebrew ṭaari ‘fresh’; Arabic ṭariy ‘fresh, moist’; Arabic ṭariya ‘to be juicy, moist, fresh’:
Wr weh-cori ‘mud, clay (weh = ‘land, earth’)’ that is, earth + moisture = mud. [iddddua] [kw1t2,kw2r,kw3i]

724 Semitic **parʕoš** ‘flea (jumper)’ from the verb prʕš ‘jump’; the jackrabbit, like the flea, is also a jumper, thus from this Semitic word for ‘flea’ and from the quadrliteral (4 consonant) verb prʕš ‘jump’, we see all 4 consonants in UA and with identical vowels to the Semitic term, “the jumper” simply being transferred from ‘flea’ to ‘jackrabbit’, two of the most extraordinary jumpers in the animal kingdom:
UACV-1758 ***par’osi / *paro’osi** ‘jackrabbit’: M67-336 *pa ‘jackrabbit’; BH.Cup *páxwut? ‘young jackrabbit’; L.Son189 *parosi ‘liebre’; M88-pa6 ‘jackrabbit’; KH/M06-pa6 *pa’rosi ‘jackrabbit’: Op paros; Eu barós / bwaros / paaros;

Yq páaros; My paaros; pl: paró'osim; Wr pa'loísi; Wr(MM) pa'rowisi / parowisi / pa'loisi / palowisi / paloisis; Tr ba'loísi. The jackrabbit, like the flea, is also a jumper, thus from this Semitic verb for 'jump'. PYp paaris 'jackrabbit' is likely a loan from Tr/Wr; otherwise, *s > h in Tep. I like the -r- in Ken Hill's reconstruction, for when we can demonstrate two liquids in PUA, I would choose r over l, as well. But on the strength of the My pl paró'os-im and the tendency of UA to anticipate glottal stops, I prefer reconstructing the glottal stop after the liquid, which then was anticipated in the other forms. [iddddua] [Wr anticip '] [1p,2r,2'2,3s1] [SUA: TrC]

725 Hebrew toor 'turtle-dove':

UACV-216 ***tori** 'domestic bird': M67-85 *totoli; CL.Azt15 *tootoo 'bird', 178 *tootol 'turkey', 316**totolii 'turkey'; M88-to16 'chicken'; KH/M06-to16: Wr to'torí 'chicken'; CN tootoo-tl 'bird'; CN tootol-in 'domestic fowl'; HN tootoo-tl / tootoolih 'turkey'; Pl tuutut 'bird'. Other inclusions or recycled loans are TO čučul 'chicken'; Nv totori / totoli / totoni 'gallina'; Yq tótoi; My tótori; Tr torí 'gallo, gallina'. A slight vowel change in TO would have triggered palatalization *to > *tu > ču; and the Tep and TrC forms could be Azt loans. In some cognate collections, combining *topa 'turkey' and *tor(i) 'domestic bird' with an entirely different 2nd syllable needs separation. [*o vs. *u] [1t,2r] [SUA: Tep, TrC, Azt]

Many SUA languages have only one liquid: e.g., CN has l, but not r, and Eu has r, but not l. However, many SUA languages have both -l- and -r- or show separate reflexes for the two: My, Yq, Wr, Tr, Tbr. Significant is that in those languages that have both liquids, Sem-p Semitic -r- usually reflects as -r- and -l- as -l-. For example, in (724), Semitic parʕoš 'flea (jumper)' from the verb prʕš 'jump' > UA *par'osi / *paro'osi 'jackrabbit', most languages (Op, Eu, Yq, My, PYp) show -r-, one (Tr) has -l- and Wr has variants with each. Notice in the several items listed immediately above that the great majority (perhaps 90%) show -r- < -r-, rather than -l-. Similarly, in the sets further above, showing Semitic l, it is l that is most often reflected in the UA languages that can reflect both, though liquid reversals also happen and are common in other language families as well. Even in Numic (below) we see Semitic-p -r- > Num -r-, though it has been reconstructed as intervocalic *-t- becoming -r-.

The following two My terms suggest a distinction between Semitic-p's -r- and -l-:
(527-p) My bérok-te 'to lightning' (< Semitic brq 'lightning' verb and noun)
(549-p) My béloh-ko 'to shine' (< Semitic blg 'shine')
The two Semitic-p forms in My are in identical environments with -r- in 527 and -l- in 549, and the -r- and -l- of UA align with Semitic -r- and -l-, and the definitions match perfectly as well.

In contrast to Sem-p, the Sem-kw items show **-r- > -y-** in most branches of Uto-Aztecan, but r > d in Tepiman. Likewise, Proto-Mayan *r > y in several Mayan branches (Campbell 1977, 97-100).

726 Hebrew **paraq** 'drag away, tear away':

UA *piyok 'pull, drag': Sh(C) piyokko 'pull, drag, tow, vt'; Sh(M) piyokkah 'drag, vt'; Sh(Cr) piyokkoh 'pull, drag, tow, vt'; Ch piyóga 'pull'; CU piyó-ġway 'pull'. [1p,2r,3q] [NUA: Num]

727 Semitic swr yields Akkadian saaru 'to revolve, dance', but Hebrew 'turn aside, leave, desist'; roots of middle consonant -w-, instead of doubling the middle consonant for the intensive, often double the 3rd consonant in what is called the polel form, yielding swr > swrr, in what Semiticists call the polel form. As Blau (1998, 324) states, "Several Semitic languages exhibit aversion to doubling w/y (i.e., pawwel, payyel), resorting instead to the doubling of the 3rd radical"; so with *-r- > -y-, UA *suyuy 'spin, whirl' parallels Semitic **swrr** 'turn, revolve, dance' well in both meaning and phonology:

UACV-447 ***suyuyu** 'spin, whirl': KH.NUA; Ca súyuy 'spin, whirl (e.g., of water)'; Sr suyuuyu'n 'whirling (like boiling water), v.i.' [kw1s,2r,3r] [NUA: Tak]

728 Hebrew yr' / yiiraa' '(he/it) fears'; Hebrew tiiraa' '(she/it) fears'; Hebrew yir'a(t) 'fear, n':

UACV-857 ***iya-paka** 'fear, v': Kw 'iya-vaga 'to be afraid of'; Ch iyávaga 'afraid'; SP iya-vaġa 'to be afraid'; SP yaa-vaga-i 'is afraid'; WMU iyá-vaġa-y 'be afraid'; CU iyá-vagáy 'be afraid of'; Sh tï'ïya-pïkkah 'be afraid'; Tb yaayaŋ / 'aayaayaŋ 'to be timid'. Notice that Sh aligns with the feminine prefix, the others the masculine. Note Tb ŋ < '. For 2nd part of the compound, see 637 *paxad. [tï- prefix] [*-r->-y-; Tb ŋ < '] [kw1i,2r,3'] [NUA: Num, Tb]

729 Aramaic(J) **'eebaar-aa** / 'eebr-aa 'limb, arm, wing, pinion, male member':

UACV-1813 ***pita / *pïra** 'arm, right arm': M67-346 *pet 'right side'; I.Num172 *pï(h)ta 'arm'; M88-pï7 'right side'; KH/M06-pï7: Mn pïta (< *pïtta) 'arm'; NP bïta (< *pïtta) 'arm'; TSh pïtapï 'arm'; Sh pïta 'arm'; Cm pïïra 'arm'; Kw pïra-vï 'arm'; WMU pïrá 'arm' (also found in compounds meaning right, but not in compounds

for left); CU pïrá-vi ‘arm’; CU pïra-na-kwa-tï ‘the right side’; SP pïra ‘arm, right side’; Hp pïtve ‘at the right side’; Hp pïtvaqe ‘along the right side’. Add Cp pilyá ‘right (direction)’; Cp pilyáwe ‘right hand’; Cp pilyáyka ‘to the right’; Ls -pli ‘right hand’, since intervocalic *-t- > -l- occurs in Tak. With assimilation of 1st vowel to 2nd (*pita > *pata), Yq báta-na ‘al lado derecho, la derecha’ and My bátatana ‘la derecha’ belong also. This appears to have lost Aramaic’s first syllable and kept the 2nd and 3rd syllables of the fuller form, as opposed to 794, the Sem-p variant. [*-t- > -l- in Cupan] [NUA: Num, Tak, Hp; SUA: TrC]

730 Hebrew śrp ‘to burn completely’; Hebrew śərepa(t) ‘fire’; Ugaritic šrp ‘to burn up’; Akkadian šaraapu(m) ‘to light a fire, burn up’:
UACV-890 ***saypa** ‘to burn’: Wr saipá-ni ‘quemarse [be burned]’; TO kohađk ‘something dried and burned’; Nv kusada ‘quemarse’. Again, *kut- is prefixed in the Tep languages, though Nv s is unexpected vs. TO h (expected) and may have to do with different behaviors of the cluster *-ts-. [*-r->y] [1s2,2r,3p] [SUA: Tep, TrC]

5.11 Semitic-p ṣ > UA *s vs. Semitic-kw ṣ > c (ts)

Sem-p ṣ > UA *s vs. Sem-kw ṣ > c (ts), though s vs. c alternations happen in UA also, since the two sounds can easily vaccilate to the other.

731 Hebrew **ṣwy / ṣawa** ‘give charge to, command, order’:
UACV-1858 ***sawi** ‘command’: Yq sáwe ‘mandar [command]’; Yq nésawe ‘mandar, gobernar [govern]’; My sawwe ‘manda [command], ordena [order]’; Tbr i-sawi-rá ‘mandar’. [p1s4,p2w,p3i] [SUA: TrC]

The next few items (732-737) are various conjugated forms of Hebrew **ṣwd / ṣyd** ‘to hunt’: 732 is the singular participle; 733 the plural perfect.

732 Hebrew **ṣwd / ṣyd** ‘to hunt’; Arabic ṣyd ‘catch, hunt’; Hebrew **ṣayid** ‘game, venison’; Hebrew **ṣaad** ‘hunter, (is) hunting’: Hebrew **ṣaduu** ‘they hunted, caught’: Hebrew 3rd sg perfective **ṣaad** ‘hunt(ed)’ or participle Hebrew **ṣaad** ‘hunter, (is) hunting’:
TO **šaad** ‘to chase’ (TO š < UA *c, Sem-kw).

733 Hebrew **ṣwd / ṣyd** ‘to hunt’; Arabic ṣyd ‘catch, hunt’; Hebrew **ṣayid** ‘game, venison’; Hebrew **ṣaad** ‘hunter, (is) hunting’: Hebrew **ṣaduu** ‘they hunted, caught’: UA ***sïtu** ‘aim, hunt’ matches the 3rd perfect plural Hebrew **ṣaduu** ‘they hunted, caught’:
Tr **seru** ‘atinar [aim], ser certero, tener buena puntería [have good aim], cazar [hunt], pezcar [fish], v’;
Tr seru-ame ‘(person who is) a good aim, a hunter.’

734 Hebrew **mə-ṣuudat** ‘net, prey’ i.e., game; Aramaic(J) məsuudtaa ‘hunting apparatus, net, trap, n.f.’:
UACV-641a ***masat / *masot** (< *masuta) ‘deer’: M67-125 *mas; L.Son140 *maso 'venado'; CL.Azt42 *masaa, 305 **maso; Fowler83; M88-ma5 'deer’; KH/M06-ma5: Eu masót; Wr mahói; My mááso; Yq mááso; AYq masso; Op maso-t; Cr mwašá; Wc máṣa; CN masaa-tl. Jane Hill astutely adds Tb(H) maašatt ‘antelope’, and Sem-p: ṣ > Tb š. In this set CN, CrC, and Tb agree in *masa, while six TrC languages consistently show *masoC. Perhaps Tbr hi-saru-t ‘fish net’; Tr wesurá / wisurá ‘type of fishing net’ (if we/wi- is Egyptian wʕ- or other prefix).
[Wr h < *s?; final a vs. o] [SUA: TrC, CrC, Azt; NUA: Tb]
UACV-641b ***masa-pu** ‘sacred items’: M88-ma5; KH/M06-ma5: Gb másavot ‘sacred objects’; Ls máaṣavut ‘ceremonial bundle’; Cp máasivet 'sacred treasure of the lineage’. Miller's including these Takic forms with M88-ma5 'deer' on the basis of phonological similarity is not out of the question, but not out of being questioned either, as to their tie with 'deer’. As compounds, they at least form a set themselves. [NUA: Tak]

735 While not attested in the Biblical text, huqtal forms of initial mu, such as *muuṣaad ‘game, what’s hunted’ (< *muṣa(y)ad) could easily have been in the spoken vernacular, which aligns with UA ***musayït / musayïd** ‘buffalo’: Hp cayrï ‘elk’; Hp cayrïra ‘moose’; Hp mosayrï, mosayïr- (combining form) ‘buffalo, bison.’ Note Hebrew/Egyptian d > Hp r here and at ‘tail’. [p1s4,p2y,p3d]

736 Hebrew ṣwd / ṣyd ‘to hunt’, prfv or participle: ṣaad; plural participle **ṣaad-iim** ‘hunters-pl’:
UACV-2327 ***sïr** ‘shoot, hunt’: Eu hísera ‘tirar [throw, shoot]’; the hi- could be many things, but among possibilities is an unattested hiqtiil. With a c/s explanation, ‘shoot’ may tie to *cïla ‘straight’ at ‘straight’.
UACV-2206 ***cïli** 'straight': B.Tep210 *sïrini 'straight'; M88-cï11; KH/M06-cï11: TO šelini(m) adv'; UP šïlinï; LP šïliñ; NT šïliñï; ST šïliñ; Wc šéu.ráïye 'derecho, recto’. Miller queries whether Tbr cira-voná 'a la derecha' is cognate. Note TO šel-wua 'practice shooting'; TO šel-wui-dag 'ability to shoot'; TO šel 'permission, a right';

TO šel-him 'go in a straight line, go continually'; TO šelin 'straighten'; TO šelina 'arrow shaft'. Add Cr siuúrara'a 'derecho'; PYp selini 'straight, adj'; PYp selin 'stretch'; Nv sïri 'derecho'; Nv aisïriga 'echar, pl' (Nv aibua 'echar, sg'). [SUA: Tep, TrC, CrC]

737 Hebrew **ṣirʕaa** 'hornets':

UACV-163 ***saŋa** 'yellowjacket, stinging one': M88-sa28; KH.NUA; KH/M06-sa28: Cp šéše'ŋimi 'yellowjacket'; Sr haaŋa-ţ 'bee'; Ls ṣaŋá-ṣŋa-š 'thorny, a thorn'. Ken Hill adds Ktn haŋa-č 'yellowjacket'. Add Ls ṣááṣaŋ-la 'yellowjacket'. Cp suggests a cluster. Cr sará 'bee' is a reasonable possibility. The fact that Cr keeps -r- (rather than -r- > -'- as usual) also suggests a cluster. A liquid (r) + pharyngeal (ħ) > velar nasal (ŋ) is natural, in NUA especially, where liquids tend toward nasals. [p1s4,p2r,p3'2] [NUA: Tak; SUA: TrC]

738 Hebrew **qayiṣ / qeyṣ** 'summer':

UACV-2228 ***kuwïs** 'summer': Note the exceptional similarity of kuvés / kuwes 'summer, dry season' in Eu kuvés-rawa 'summer' and Tr kuwésa 'be summer' as well as Tr kuwé 'summer, n'; Cora ta'uwaste 'summer' (-'uwas-te after a prefixed ta-; though Cora ï normally corresponds to *u, maybe the rounding influence of w afterwards retained the back round vowel). Also likely are Ktn 'oši' / 'ošit 'hot, be hot weather' and Ktn 'oši-va'a 'summer'. Hp ïyis 'early summer, planting time' reportedly derives from *ïca 'plant, v' and Hp ïïya 'plant, sow'. The rounding power of the uvular q seems pronounced in Sem-p, but not in Sem-kw. And it is that extraordinary rounding power that probably created an excrescent w to divide the resulting dipthong *–ue- (> uwe) of the rounding adjacent to the more prominent e-like vowel in Semitic. [p1q,p2y,p3s4] [SUA: TrC, CrC; NUA: Tak]

67 Hebrew ṣaaráʕat 'skin disease'; Hebrew(BDB) ṣaaráʕat 'leprosy' > CN siyo-tl 'rash, scab, leprosy'.

739 Hebrew ṣe'aa 'dung, excrement'; related verbs in the related Semitic languages mean things like 'stink, dirty, waste' all applying to urine and excrement. UA may show the original vowel *si'a > Masoretic se'a.

UA *si'a 'urinate, v', then n 'urine'

Mn	siina; n: síípï	Hp	sisiwkï(yi) v(n)	Eu	sísa-
NP	--	Tb	ši'	Tbr	n: sií-r
TSh	siiC; n: siippï	Sr	ṣii'; ṣiaa'vun	Yq	síisi; sí'ika 'bladder'
Sh	siiC; n: sii-ppï	Ca	sí'; pís	My	siise; n: siisi
Cm	siitï; n: siipï'	Ls	ṣíi'a-; pisá-ŋa-	Wr	si'a-ní; n: si'í
Kw	si'i-; n: nazipi	Cp	kílyma; n: sí	Tr	isá/isí-; n: isí(ara)
Ch	si'í	TO	hi'a (n. & v.)	Cr	se'e; n: sí'isuri
SP	si'i	Nv	i'a/'i'a	Wc	šíi v.
		PYp	hia'a; n: hi'i		šíi.pári 'vejiga'
CU	sï'í; n: sï'í-pï	NT	íištyai	CN	šiiša v.
		ST	ya'aa'; n: hi'	CN	šiš-tli n.

Miller helpfully separates the verb and noun as separate derivations of a common stem:

UACV-2446a ***si'i / *si'a** 'urinate, v': Sapir; VVH67 *si(ʾi)/*si('a) 'to urinate'; M88-si8; M67-447 *si' 'urinate'; I.Num188 *si'i 'urinate'; CL.Azt182 *šiiša 'urinate'; KH.NUA; KH/M06-si8: Mn; NP; TSh; Sh; Kw; SP; CU; Tb; Cp; Ca; Ls; Gb sí' 'mear'; Sr; Hp; TO; Wr; Tr; My; Wc; Cr; CN. Add Nv, PYp, and AYq siise 'check'. Note vowel anticipation in PYp.

UACV-2446b Num ***si'iC-pï** 'urine, n': BH.Cup *sí urine; L.Son237 *sia 'orinar', *si-i 'orines'; M88-si9 urine; KH/M06-si9: Mn; NP; TSh; Sh; K; SP; CU; Cp; Ca; Ls; Gb sí'iy; Sr; Hp sisikïyi; Hp sisimoki 'bladder'; TO; Wr; Tr; My; Tbr; HN maašiiš-tli'. [p1s4,p2'] [NUA; Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

740 Hebrew ṣe'aa 'dung, excrement':

UACV-645 ***ṣa'a** 'defecate, v'; ***ṣa'i** 'intestines': M88-sa12; KH.NUA; Munro.Cup *ṣaa'i-š 'guts': Tb ša'; Sr ṣaa' 'defecate, v.i.'; Sr ṣaii'č 'what has been defecated, feces'; Cp ṣá'i 'guts'; Ca sá'ily, poss'd: -sá'i 'guts'; Ls ṣá'a; Ls ṣáa'; Ls sáa'iš. Miller (M88-si7) includes these with *si below. [NUA: Tak]

UACV-646 ***si** 'intestines': VVH66 *si 'guts, entrails'; B.Tep61a *hihi 'intestines'; B.Tep61b hihidï 'his intestines'; M67-476 *si/*ci 'yellow (guts, gall)'; L.Son246 *siwa 'tripa'; M88-si7; KH.NUA; KH/M06-si7: Mn sihi 'entrails'; NP si 'guts'; Kw šii/sii-vi 'guts'; Cp ṣá'i 'guts, belly'; Ls ṣíí 'intestines, guts'; Gb -sín 'tripa (poss'd); Sr ṣi/ṣii 'intestines'; Hp siihï; TO hihij; Wr siwá; Tr siwá; My síiwa. [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC]

Remember in Sem-kw, Semitic ṣ > c(ts), for which more examples follow:

741 Hebrew **rwṣ** ‘run’:
UA ***tuca*** ‘run, hurry s.th. along, vt’: NT utuišai ‘run (the ball, as in the game), vt’; CN totooca ‘hurry s.o. along’. Other than NT acquiring a prefix, everything fits: NT does its usual anticipation of the palatal consonant by a slight palatalization of the vowel just before it (u > ui/_š) and CN assimilated the *u > o, lowering it in anticipation of the final low *a*; and NT š < PUA *c and thus corresponds to CN c, as well. [kw1r,kw2w,kw3s4] [SUA: Tep, Azt]
742 Hebrew **ṣɛmɛr** ‘wool’:
UACV-1107a ***comi / *comya*** ‘hair’: Sapir; VVH38 *co(ni) ‘head hair’; M67-219a *co ‘head’; I.Num256 *coV head; L.Son40 *coni ‘cabeza’; CL.Azt77 *con ‘hair, head’; CL.Azt241 *coni ‘hair, head’; M88-co6 ‘head, hair of the head’; KH/M06-co6: CN comi-tl ‘fleece, bristles, mane’; Hp sowi-cmi ‘facial hair’; Tb comoo-l ‘head hair’. Add Cm co’yaa’ ‘head of hair, hair’. CN con-tli ‘head of hair’ and the other *co(ni) forms below also belong. CN comi-, Hp -cmi, and Tb comoo- suggest *comi, with *m or *comi representing the original medial C. Cm co’yaa’ ‘hair’ further argues for *con < *comi / comya: *co’ya is an expectable reduction from *comya with loss of first C in a cluster, and if *comi / *comya, then a nasal-alveolar cluster (-my-) would nicely explain the cluster being reduced to an alveolar nasal (n). CN’s pair (CN con-tli and CN comi-tl) show alveolar n before an alveolar consonant and show m when followed by a vowel, which is consistent with a *-my- cluster.
UACV-1107b ***coni*** ‘head, hair’: My cóoni ‘cabello’; Gb cócon ‘face, eyes’ (vowel is unexpected, o < *o usually only after *k); Eu zonít; CN con-tli ‘head of hair’; Pl cun ‘point, head’; HN con-tli ‘head, roof’. Probably tied to these are Num forms (at ‘head’) with geminating effect in *coC-, or an underlying consonant: Sh coC ‘with the head’; SP čoC- ‘head’. [Sem-kw, N > gemination; Gb/NUA n = SUA n] [kw1s4,2m,3r] [NUA: Tak, Tb, Hp, Num; SUA: TrC, Azt]

Another cluster of -mr- as 2nd and 3rd consonants follows:

743 Hebrew taamaar ‘date palm tree’; Arabic tamr- ‘date(s); Aramaic(B) tuumar-taa ‘date palm-the’; Syriac / Aramaic(J) tamar ‘date-palm’; Aramaic(J) tamr-aa / **tuumr-aa** ‘palm-the, date-palm-the’:
UACV-1609 ***tu’ya*** ‘palm tree, sp’: Wr tu’ya ‘palmilla’; Tr ŕu’ya ‘kind of palm tree’. [p1t,p2m,p3r] [SUA: TrC]

As in 744 below, also within comparative UA linguistics itself, *c vs. *s ambiguities exist:

744 Hebrew **ṣeelaaʕ / ṣelaʕ** (constr) ‘rib,’ **ṣalʕ-** (construct/possessed with suffix pronoun), pl: ṣəlaʕoot / ṣəlaʕim/ ṣalʕoot-; Arabic **ḍlʕ** ‘incline/lean, be crooked, limp’;
Arabic **ḍilʕ-** / **ḍilaʕ-** ‘rib’; Aramaic(J) ʕ[a]laʕ ‘side, rib’; ʕilʕ-aa ‘rib-the’:
UACV-1809a ***cawa*** ‘rib’: M67-345 *ca ‘ribs’; M88-ca2 ‘ribs’; KH.NUA; KH/M06-ca2: Ca čáwa-’al ‘rib’, pl čáwa-’am; Ca -cáw’a ‘rib (poss’ed); Ca čá’aw-ika ‘sideways, to the side’; Gb -čáx / čáš ‘back’; Sr -ča’ ‘ribs’ (poss’ed);
UACV-1809b ***ca’aC***: Tb ca’apï-l ; Tb(H) čaa’ppï-l ‘ribs’; Cr i-ca’apwa-ri ‘ribs’. (-lʕ- > ’ at 816 too)
UACV-1809c ***caŋa*** ‘side, limp’: Hp cïŋï ‘rib’; Ls čááŋax ‘this side’; Miller queries whether Ls čááŋax ‘this side’ is cognate. Good question, unless -ŋax is a Ls affix/morpheme. Add Ca číŋay ‘limp, hop’ as a lopsided / one-sided gate is likely. In fact, Hebrew ṣlʕ ‘stumble, fall, limp, lame’ is a different root in Proto-Semitic and Arabic, but both merge to identical roots in Hebrew, so both Ca číŋay ‘limp, hop’ and Hp cïŋï ‘rib’ < ṣVlʕ.
UACV-1809d ***silaŋ / *salŋa*** ‘rib’: CN šillan-tli ‘side’; My sána’arim ‘costillas’; Yq sana’im ‘costilla’. Perhaps Ls ṣówlaka-š ‘rib’. I agree with Miller and Hill, that these are probably all related, in spite of the difficulties. Cahitan *sana’a may also tie in (Yq sana’i; My pl: sana’arim) since we see ŋ in NUA aligning with SUA n. The variety of 2nd consonants (w, n, l, ŋ, ŋw, ’) are beyond explanation for Uto-Aztecanists, but realizing some forms cluster -lʕ- and others separate -l- and -ʕ- may help. Adjusted Ca morpheme breaks such as Ca čáwa’a-l ‘rib’, pl čáwa’a-m; Ca čá’aw-ika ‘sideways, to the side’ are contemplatible, and CN šillan-tli ‘side’ has the Proto-Semitic and Arabic vowels **ḍilaʕ-**. [p1s4,2l,3’2] [NUA: Tak, Hp, Tb: SUA: TrC, CrC, Azt]
745 Hebrew(Klein) ṣhr ‘be bright, clear’; Aramaic(J) ṣhr ‘be bright, shining’; hiqtiil of MHebrew ṣhr ‘make shiny’; Arabic ẓhr ‘appear, become visible, arise’:
UACV-2235a ***cihari / *ci’rV*** 'sunrise, east, morning': B.Tep197 *si’ari 'east'; L.Son34 *cira 'amanecer'; M88-ci18; M88-cï1; KH/M06-ci18; KH/M06-cï1: TO si’al ‘morning, east’; NT šiáli; ST sia’ly; Wr ce’la-ni/ce’ri-ma ‘amanecer, despertar’; Tr če’rá / či’rí 'amanecer'. In Tepiman, *h > ’ is common, and in TrC it is common in

clusters. Combine M88-cï1 and M88-ci18 'east' since the change in vowels *i-a > ï-a is common, and the consonants and meanings are all quite identical. [i-a > e-a]
UACV-2235b ***ta-sï'aN / *ta-sïCaC** 'dawn': initial ta- 'sun'; then -sï'aN < ṣhr: Ch(L) ta-sïa 'dawn, v'; Ch(L) ta-sïapï / ta-sïantï 'dawn, n'; Ch(L) ta-sïaŋu 'it became morning, day broke'; Kw tasï'ï-zi 'dawn, n'; SP taššïaN 'dawn, v' (Sapir says likely contains ta- 'sun'); WMU t*ah*sŭ(ŋ)a-y 'be early dawn before sun comes up'. SP šïa-ppï 'after sunset'. Hopi se'el / sé'ele 'earlier this morning'. [p1s4,2h,3r]
[SUA: Tep, TrC; NUA: Num; Hopi]

746 Hebrew **'ɛṣbaʕ** 'finger, toe'; pl: **'ɛṣbaaʕ-oot**, plural construct **'ɛṣbəʕ-oot** 'fingers (of)';
Arabic **ṣbʕ** 'point with the finger, v'; Arabic **'uṣbaʕ 'finger';** Syriac **ṣibʕ-taa** 'finger':
UACV-2629 ***cipo** 'five': Hp civot 'five' and the *-s(i)po in TO hïtaspo 'five' and -spo in Nv utaspo 'cinco' point to *cipo / *cipu. NT ma-sááviga 'finger' (NT s < UA *c; NT v < UA *p; NT g < UA *w). [NUA: Hp; SUA: Tep]
UACV-2633 ***cikwa-sï'ïm** 'six (lit: 5 + 1): CL.Azt148 *čikwaseem 'six'; M88-cï10; KH/M03cï10: Po čukose; CN čikwasee, čikwasem- in compounds before a V; Pl čikwasin; T čIkwasie; Z čikwaseen. For CN ciko/cikwa 'five, one-half' to mean both five and one-half in the same morpheme can only refer to the ten fingers, each hand having five, one-half the total, and we expect a Sem-kw cluster -bʕ- > *kw (as in Syriac **ṣibʕ-taa)**. [kw1s4,2b,3'2] [SUA: Azt]

747 Hebrew **'ɛṣbaʕ** 'finger, toe'; pl: **'ɛṣbaaʕ-oot**, plural construct **'ɛṣbəʕ-oot** 'fingers (of)';
Arabic **ṣbʕ** 'point with the finger, v'; Arabic **'uṣbaʕ 'finger';** Syriac **ṣibʕ-taa** 'finger': various vowelings
UACV-1122 ***sipwa / *cap(i)wa** 'finger': Cr ansïbi 'five'; WMU ta-sivwə-n 'my toe(s)' (ta- 'foot'; -n 'my'; thus, -sivwə- 'finger'); SP sïu 'finger, toe'; Mn masïwaki-na 'have fingers'; Cm masïwïhki'; Ch ma-sïï; CU ma-sïï-vï; (perhaps TSh masïkïn /masikun; Sh masïki 'hand-leaf'); NT masááviga / masáágiga 'finger'. Note that Syriac ṣibʕ- aligns perfectly with WMU sivwə 'finger' and with the UA initial syllable of ṣi rather than 'Vṣ of Hebrew and Arabic, since UA shows no sign of the prosthetic aleph, but does show all 3 root consonants as expected in WMU, NT, and Hp. [C harmony in NT; reduction -vw- > v or w in Num] [p1s4,p2b,p3'2] [NUA: Num; SUA: Tep]

More sets of simpler t, m, s, etcetera:

748 Hebrew šibbeṣ, šibbaṣ- 'to weave patterns':
SP sikwa'a 'to braid'. Another example of the emphatic or pharyngealized ṣ > ' in Numic again. [1s1,2b,3s4]

749 Hebrew tmh, impfv: **-tmah** 'be astounded, amazed, freeze with fear, become speechless in the face of terror, v' (a dageshed/real h); Syriac tmh / təmah 'be numb, rigid, speechless, amazed, struck dumb, regard with awe, reverence'; this UA set reflects the impfv stem -tmah:
UACV-855 ***maha(-ri)wa** 'fear': Wr maha- 'be afraid'; Wr mahariwae 'fear, vi; Wr mahaté 'frighten, vt'; My maihwa 'hay miedo'; My mahwe 'tiene miedo'; Yq máhhae; AYq mahai 'scared, adj'; AYq mahiwa / mahe 'be scared, vi'; AYq mamaiwači 'scary'; Tr mahá; CN mawi 'be frightened'; CN ma'mau'-tiaa 'frighten, get frightened'. The last two CN forms vs. CN iimakasi show distinctive sets. Perhaps Ch(L) mahai-/ mai- 'with intent to harm'. For the pfv of same verb, see below. [p1t,2m,3h] [SUA: TrC, Azt; NUA: Num]

750 Hebrew tmh / taamah, impfv: -tmahV (impfv) 'be astounded, amazed, freeze with fear, become speechless in the face of terror, v' (a dageshed/real h); Syriac tmh / **təmah** 'be numb, rigid, speechless, amazed, struck dumb, regard with awe, reverence'; the first two UA forms could be a quṭṭal or huqtal (tutmah) or the basic form with very short first vowel, as in Aramaic, that assimilated to u before bilabial m in Sr and Ktn, and the last two (Tb and the 2nd Ktn form) reflect both Aramaic vowels (**təmah**) very well: Sr tuma'-q 'be/keep quiet, shut up'; Ktn tu'mï-k 'be quiet'; Tb **tehmat** 'be silent'; Ktn **tïhmï**-k 'be afraid, be constipated'. Anticipation of 3rd C h in most forms suggests Semitic tmh, and Ktn 'afraid' leans toward tmh too. [p1t,2m,3h]

751 Hebrew dmy / damaa 'to be like, resemble':
TO -dma 'to be like or look like'; examples:
TO kaij 'to speak in a certain way'; TO kaiji-dma 'to appear to be speaking in a certain way';
TO mumku 'to be sick'; TO mumku-dma 'to appear to be sick';
TO haivangakam 'one having a lot of cattle'; TO haivangaka-dma 'one appearing to have a lot of cattle';
Tr tami /timi 'a modo de, medio, parecido a [appearing like]'
Ktn tïm / tïhmea 'same as, similar to' [p1d,p2m,p3i]

752 Arabic **sahm**- ‘arrow, dart’; pl **suhuum**:
UACV-64 ***suhuma** 'arrow': Sr ṣumaant ‘bow, arrow’; Ktn šumana-t ‘arrow’; TO ho’oma-čuđ ‘make a charm, lucky arrow, etc, for’ (TO h < *s, and TO ’ < *h, so TO ho’oma < UA *sohoma / *suhuma); TO ho’oma ‘a charm, s.th. that brings good luck’. *h > ’ in Tep, so a medial h is reconstructed yet easily lost diachronically; Eu zamát 'arrow' (1st vowel assimilated to 2nd). Notice that Eu has the voweling of the sg while Sr and TO align with the voweling of the pl, which is better reconstructed as suhuma than sohoma, for two reasons: one, both Ktn and Sr have u; and two, we see the lowering of *u* > *o* before *a* (i.e., uCa > oCa) real often in UA. At 711 is another broken pl. [*o vs. Cah a; s vs. c] [p1s,p2h,p3m] [NUA: Tak; SUA: Tep, TrC]
753 Syriac kətif < *katip ‘shoulder’; Hebrew kaatep ‘shoulder’; Arabic katif < *katip ‘shoulder’; Aramaic(S) **ktp** ‘carry on the shoulders’; Aramaic(J) kattep ‘carry on the shoulders’; Aramaic(J) kattaap-aa ‘porter, carrier-the’:
UACV-407 ***kucupu** 'carry on the back/neck': B.Tep124 *kusuvui 'carry (on the back)'; M88-ku27; KH/M06-ku27: Nv kusubio ‘cargar en las espaldas’; UP kušïwï; LP(B) kušu; NT kušívu / kusúvui; ST kusvi. Add also PYp kusvim ‘carry on the back’ (PYp kusiv / kusuvar ‘neck’) and TO kušwi’ot ‘shoulder a load, vt’ (TO kušo ‘back of the neck’). Cf. *kucipu ‘neck’. [SUA: Tep]
UACV-1502 ***kutipu > *kucipu > Tep *kusivu** ‘neck’: TO kus(ï)wo; LP kúšiv; PYp kusiv; NT kušívu; ST kúšvu. The Tep forms collectively point to PUA *kucipo / kucipu. While TO kus-ta ‘tendon in the neck’ has another morpheme, TO kuswo ‘neck’ and TO kušo ‘back of the neck’ are similar, yet different. Cf. *kucupu ‘carry on back’. [1k,2t,3p] [SUA: Tep]
754 Hebrew(BDB) pny / panaa^{y} ‘turn, turn and look, look’; Hebrew(KB) pny ‘turn attention to, to care about’; participle **poone:**
UACV-449a ***puni** 'turn (around)': KH.NUA: Ca puni 'to whirl, spin'; Ls puna/i ‘to be round, form a circle, watch over’; Ls puní-va ‘to whirl’; Hp poni(k-) ‘coil up, vi’; Hp ponìl-ti ‘turn, vi’; Hp ponila ‘turn, vt’; Hp poniw-ta 'have a bend, curve or turn (as a road)’. Add Ktn punink / punihnïk ‘coil (as rope), go around’.
UACV-449b ***puni** ‘turn, look, see’: I.Num159 *puni/*puh- ‘see’; M88-pu6 ‘see’; KH/M06-pu6: Mn puni/poni; NP puni; TSh puniC ‘see, look at, study’; Sh puniC/puiC ‘see’; Cm puni-tï; Ch puunii ‘see, look’; SP pïnni ‘see’; CU pïni-kya ‘see, vt’; CU pïni-‘ni ‘look at’; Hp poniniykï ‘start moving, wake up’ (cognate? Miller queries); I say yes as ‘turning’ and ‘seeing’ are waking up. Note the segmental similarity of Ktn punink / punihnïk ‘coil (as a rope), go around’ to the Hp term. Ktn and Hp poni-ni-ykï are likely cognate with Num *puni ‘see/look’ as also the more basic stem Hp poni- ‘turn, bend’, as in Hp poni-l-a ‘turn, make turn, steer’ since ‘he turned to look’ and ‘he turned’ and ‘he looked’ can all apply to the same event/context. Jane Hill (p.c.) notes also Sh puinu ‘round, circular (spherical)’; Sh puinuinuih ‘spin’; Sh(C) puinuah / puinuiC / puinukkaC ‘turn, spin’. They have other morpheme(s). [*u > ï in SP and CU, i.e., eastern SNum] [1p,2n,3y] [NUA: Num, Hp, Tak]
755 Hebrew **kutónet** ‘shirt-like tunic’:
UACV-488 ***kutuni** ‘shirt’: ST kutun 'traditional tunic'; TO kotoni 'shirt'; NP pina-kkïtï ‘shirttail’ < (back-shirt; ï < *u). Saxton suggests TO kotoni 'shirt' from Spanish cotorina 'jacket'; but unless they were all borrowed from Spanish and all left out the -ri- syllable, similar terms in NP and ST and TO suggest a PUA term. [1k,2t,3n] [SUA: Tep; NUA: Num]
756 Hebrew śn’ ‘to hate’; Hebrew śoone’ and SamP šanna = Hebrew ***śannaa’** ‘enemy, one who hates’: Eu zináva ‘enojarse [get angry]’; UA *w often > Eu v (*woko > Eu vokót ‘pine’, *tawa > Eu tava ‘sun’), so Eu zináva and Numic sïnáwa-vi ‘coyote’ as the trickster often representing the cosmic ‘hater’ or ‘enemy’ of mankind; note Ch(L) šïnawavi ‘Mythic Coyote, the pre-human, immortal personage’:
UACV-569 ***sïna’a- / *sinawa** 'coyote': Dakin2004b: Kw sïna’a-vi; Ch sïná’avi; Ch(L) šïna’avi ‘coyote’; Ch(L) šïnawavi ‘Mythic Coyote, the pre-human, immortal personage’; SP šïnna-’avi ‘wolf, dog’; SP šïnna-ŋwa-viN ‘coyote’; WMU sïnáwa-vi / sünáʼa-v*i* / sanáʼa-v*i* ‘wolf’; CU sináæ-vi ‘wolf’; Cm ceena’ ‘gray fox, coyote’. Jane Hill astutely notes that Cm may be a loan from SNum in light of its lack in other CNum languages. Karen Dakin (2004b) makes a case for a tie between this set and CN šooloo-tl ‘page, male servant’ (Kartunnen); hermano gemelo de Quetzalcoatl [twin brother of Quetzalcoatl], siervo de su gemelo [servant of his twin], se representa como perro [is represented as a dog] (Dakin 2004b, 194)’ (keep in mind *n > SUA l) and CN aa-šooloo-tl ‘edible salamander (water-?); CN šolopi’-ti ‘be foolish, joke, lie like a fool’; CN šooloopi’yoo-tl ‘foolery, deceit’; CN šolopi’-tli ‘idiot, fool, dolt’. Might these relate to *sina ‘shout’ (Wr siná ‘shout’; Tr siná 'shout'; and Tep), when considering the identity of the first four segments and the frequency of ‘cry, call’ associations with coyote and wolf words? [w and glottal stop] [p1s2,p2n,p3’] [NUA: Num; SUA: Azt]

757 Hebrew **šipħaa** ‘maid, maid-servant’ possibly originally ‘concubine’ in light of Arabic sfħ III ‘have intercourse with’; also of the same root is Hebrew **mišpaaħaa** ‘clan, family connection’; so Hebrew **šipħaa** coming to mean any ‘female of the family’ is compatible. Keep in mind that bilabials as first consonant of a cluster typically disappear in UA (see 4.3), as here also; the pharyngeal does its usual w, but also ŋ as we sometimes see in UA, and which we might expect to be more likely when part of a consonant cluster. The vowels are identical to Hebrew in the first set (both are -i-a), but have assimilated in others:
UACV-2575a ***siwa < *si(ŋ)wa / *siwNa** 'female, sister, daughter': Sapir; M67-470; Munro 1973: Hp siwa 'sister of a man'; CN siwaa-tl / sowa-tl 'woman, wife’; Pl siwaa-t 'woman, wife’; Ls ṣawáa-may 'daughter’. Miller and Bright’s observation that Ls ṣawáá-may 'daughter’ is the diminuitive of Ls ṣuŋáá-l 'woman’ is very relevant to the nasal clustered with -w-. CN may show a vowel assimilation to w (*siwa > *sowa) that occurred in other languages also, probably in Tak *suŋa, TrC *sona 'wife' and Tep *hooniga 'wife’.
UACV-2575b ***sï’a** 'girl': I.Num195 *sï’a (young) girl; M88-sï11 'young girl’; KH/M03-sï11: Mn sï’a; NP sïa’a / cïa’a. Miller includes some *siwa forms, such as CN siwaapil-li ‘lady’; Pl siwaapil ‘girl (teenage)’. The WNum forms likely tie to *siwa/siwŋwa, but until an explanation emerges, a separate letter is good. [w/’ w vs. glottal, n/ŋ/w; NUA u and SUA o]
UACV-2575c ***suŋa** 'man's daughter, wife': M88-su21; KH.NUA; KH/M03-su21: Cp ṣuŋáma ‘man's daughter’; Ca súŋama 'man's dau'; Ls ṣuŋáá-l ‘woman, wife’; Gb ásoŋ 'wife'; Sr ṣuuŋ 'man's dau’. Add Ktn huŋ ‘descendant’ and Ktn nïmihuŋ ‘wife’, pl: nïmihuŋam (< *nïmi-suŋa ‘man’s-girl/woman’).
UACV-2575d ***sona < *suŋa** < ***si(ŋ)wa** 'woman, wife': B.Tep73 *hooniga 'wife'; B.Tep72 *hoonita/hoonata 'to take a wife'; L.Son256 *sona ‘esposa’; BH.Cup ṣuŋáma’ daughter of man (diminuitive of woman); M88-so8; KH/M03-so8: TO hooniga; NT ooniga; ST hooni’; Tbr soná-r ‘esposa’. [iddddua] [p1s1,p2p,p3h2] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, Azt]

758 Hebrew **š’l** ‘ask’:
UACV-74 ***sï’wï** ‘ask for’: Ca sé’we 'beg, ask for' and Ls ṣóovini 'ask for' agree with initial *sï and a glottal stop + w > p / v happens in UA. [p1s1,p2’,p3l] [Tak]

759 Hebrew **špl** ‘be low, fall’; Arabic safala / safila ‘be low, be below s.th., lie underneath, turn downward’: TO šopol ‘short’; TO šopol-ka ‘be short’; SP taššïppaN- ‘be early evening’. Sapir suggests SP ta- ‘sun’ is compounded, which remaining portion -ššïppaN would yield ‘sun-is low’ or ‘sun-turned downward’ and the final nasal (N) corresponds to Semitic l. So all corresponds as expected, except TO š puzzles. [1s1,2p,3l

760 Hebrew **šɛlɛg** ‘snow’; Arabic θalğ- (< * θalg) ‘snow’; Hebrew tašleg ‘to snow, v’:
UACV-2078 ***sïk** ‘snow’: CN sek-tli, se-tl ‘snow, ice’; the 2nd and 3rd consonants are clustered in Arabic, originally in Hebrew, and in UA; loss of -l- in a cluster is expected: -lk- > k. Cora seeri ‘nieve [snow]’?
UACV-1550 ***sïk-powa** ‘numb’: CN sepoowa ‘be numb (of body part, from cold or lack of circulation)’; CN sesepoka ‘get numb, have goose bumps’; the 1st element of the CN terms is suggested to be CN sek-tli ‘snow, ice’. CN -p- (and not ø) suggests a cluster. Might Yq si’ibwia ‘entumida/o [numb]’; AYq si’ibwia ‘numb’ be reduced loans from Azt? And what of Nv sivapagi ‘entumirse’? [-kp- cluster] [1s1,2l,3g] [SUA: Azt, TrC]

761 Hebrew **šlħ** / **šaalaħ** ‘stretch out, send, despatch’; Hebrew(qittel) **šille^{a}ħ** ‘let go, dismiss, send away, make water flow’; Hebrew **šélaħ** ‘offshoot, shoot, small shoot’ (BK) ‘missile, weapon, sprout, offshoot’ (BDB);
UACV-539 ***silo/*soli** 'ear of corn': M88-si14; KH/M06-si14: CN šiiloo-tl 'tender ear of green corn' and Tbr solí-t 'ear of corn' are identical except for a vowel metathesis in one or the other; Pl šiilu-t ‘small green ear of corn’. [p1s1,p2l,p3h2] [NUA: Hp; SUA: TrC, Azt]

762 Hebrew **šlħ** ‘stretch out, send, despatch’; Hebrew qittel: **šille^{a}ħ** ‘let go, dismiss, send away, make flow’: Hopi sïlaw ‘absent, missing, none there’; Hopi sïlaw-ti ‘be gone, vanished, depleted, used up’. Perhaps CN šooloo-tl ‘page, male servant’ (Kartunnen) i.e., one sent’. [iddddua]

763 Hebrew **šille^{a}ħ** ‘let go, dismiss, send away, **make water flow’** (qittel):
UACV-2315 ***sila/i** 'spill': Ls ṣíla/i 'spill, pour out'; Ca silye-če 'spill, drip (of liquid)’. [p1s1,p2l,p3h2] [NUA: Tak]

764 Hebrew **śimlaa / śimla-t** ‘wrapper, mantle’ [s.th. wrapped around]; Hebrew salma-t ‘garment’ meta-thesis of Hebrew simla-t; Arabic šamlat ‘cloak’; Arabic šamila / šamala ‘contain, include, enclose, envelope’:
UACV-2211 ***sam’aC** ‘spread, v’: Stubbs2003-22: Kw sa’ma 'spread out (e.g., a blanket)'; Kw sa’ma-pï ‘blanket, mat’; SP sa’ma / sam’a 'spread out (a blanket)'; SP sa’mappï ‘spread out, ptc, cover on which s.th. is laid’; Ch som’á 'spread a blanket’; Ch samápü ‘pallet, rug’; WMU sa̲’má-pp*ü* ‘rug, skin, thick blanket, saddle blanket, n’; CU sa’má-p*ü* ‘cover, rug, carpet, pad, pellet, floor’. Given the tendency of glottal stop

anticipation and having two forms with the glottal stop after -m- (-m'-), probably the cluster *-m'- > -'m- in the other forms. All Numic languages with a noun suffix (Kw and SP) suggest a final -C. Hebrew ha-ssimlaa > Hp ïsimni 'a wrap for the body, blanket, shawl, robe, cape'; Hp ïsiman-ta 'make a wrap' (*l > n in cluster or usually in NUA, but in Hp?); Tb 'ïšï-t 'blanket'. Note l > ' in a cluster with N at sml, gml, dll. My mistake in Tb at both UACV-2211 and UACV-248, now combined here; unstressed V changed. [p1s2,p2m,p3l] [NUA: SNum, Hopi, Tb]
UACV-248 ***'ïsï(C)-** 'blanket': NP ïzïggwi 'blanket'; Tb(M) 'ïsï-t 'blanket'; Tb 'ïsï'dït 'wear or wrap oneself in a blanket'; Tb 'ïsï'danat 'to put a blanket around s.o.'; the final -t (instead of -l) of Tb 'ïsï-t and the glottal stop in Tb 'ïsï'danat both suggest a final consonant no longer obvious; furthermore, the gemination in NP ïzïggwi suggests C cluster. [1s2,2m,3l] [NUA: Tb, WNum]

The next two items add two more examples of Proto-Semitic *x > k/x, in contrast to Sem-kw *x > ɧ

765 Hebrew ɧlq 'be smooth, slippery'; Arabic **xaluqa** 'be smooth'; Arabic xalaʕa, -xlaʕu 'take off, put off, slip off, to pull away'; less likely Hebrew ɧlṣ 'take off, bare'; Hebrew(BDB) ɧlṣ 'draw off or out'; Arabic xlṣ 'be freed'; Aramaic(S) ɧlṣ 'to bare (shoulder), remove'; Aramaic (J) ɧlṣ 'take off, undress':
UACV-2039 ***kalu** 'slide': Eu karú-da'a 'resbalar [slip, slide]'; Wc harúanari 'liso [smooth]'; Ca xáyuš / xáyuqi 'slide down, v'. [r > y; k > h?] [p1x,p2l,p3'2] [NUA: Tak; SUA: TrC, CrC]

766 Semitic **rxḳ** 'wash' (though Egyptian **rxt** 'wash' would match as well):
UACV-2491 ***pa-tïki** 'wash': SP parïġi 'wash'; WMU pa-rüġi 'wash (s.th. solid, like dishes, baby), vt'; CU na-vá-rïgí 'wash oneself'. [p1r,p2x,p3s4] [NUA: SNum]

767 Hebrew **ma** 'what? interrogative pronoun, also used as a relative pronoun' (Jeremiah 7:17 and 33:24; Micah 6:5, 8; Job 10:2 and 34:33; I Chronicles 15:13):
UA ***ma** 'subordinating conjunction, relative pronoun': (see Langacker 1977, 176-85) m- of TO m-a / m-o 'subordinator'; Wc m 'subordinator'; Tr ma- 'subordinator with affix': Tr ma-ne 'which-I'; Tr ma-pu 'which he/they.'; and My -me 'he who/which, those who/which'; Ca mi' 'interrogative pronoun'; Ca mi'vi 'which.'
UACV-2527 ***ma** 'what, which': Sapir: Tb(V) maal 'which one?'; Tb(M) maa'al 'which one?'; Tb(V) matwan 'what kind?'; Tb(M) ma'/mah 'where?'; Tb(H) ima 'while, same subject subordinator'; Tr ma 'rel pron'; Tr mapu 'what, rel pron'; NT maá 'how? in what way?'; NT maákïrï 'el que (rel pron)'; Hp himï 'what'; Mn himáa 'what'; SP ma-/maa- 'thing, clothing, brush, plant'.
UACV-2670a ***ma** 'that': Sapir: Cora ma / man 'hier, dort'; SP ma- 'that (visible)'. To Sapir, add Sr ama' (acc. amai; pl. a:m) 'that one, he, she, it' (Sr a- 'third person sg. pronominal prefix') and Ktn 'ama' 'that (distal)'.
UACV-2670b ***mi** 'that, this': KH/M06-dm5: Hp mi' (acc. mit; pl. mima, acc. mimïy) 'that (far from speaker and hearer)'; Gb menè' 'this'; pl. memo 'these'; Tr(H) mi 'aquel, aquella'; miká 'lejos' (Ht); Cr mïïmï 'ese'. [p1m] [NUA: Num, Tb, Hp, Tak; SUA: Tep, TrC, CrC]

768 Syriac makyaan / **mekaa** 'hurting, injuring' or Hebrew *makke 'smite' (active hiqtiil partcpl):
UA ***mïka / *mï'a** 'kill': VVH85 *mï'a 'to kill': all forms mean 'kill (sg obj) and/or beat/injure': Tb mï'gat; Cp meqe; Ca mékan/méqa; Gb moká; Ls móknu / mókna (Ls o < *ï/e); TO mï'a/mï'i/mïa'i; Eu méa; Wr me'á; Tr me'á; My mé'a; CN miktia; Cr -me'e-.
UACV-619 ***mak / *ma'k** 'chop': Tbr mak 'hachar [chop]' and Tbr isá-/ih- 'cortar [cut]' combine to yield Tbr mak-isa-mwa-y 'corta'; Yq má'ako 'chop'; My má'ako 'cut with an axe'; Tr me'té 'chop'; Wr me'te- 'cut with an axe or machete'. Tr and Wr may be compounds from *mak-tïk.
UACV-1262 ***mïCka / *mïkka (> *mï'a)** 'kill': VVH85 *mï'a 'to kill'; L.Son144 *mï'a; BH.Cup *məq 'kill'; B.Tep153 *mua 'he killed'; CL.Azt94 *mïktia; M88-mï3; AMR 1993c *mïkka'; KH.NUA; KH/M06-mï3: Tb mï'gat; Cp meqe; Ca mékan/méqa; Gb moká; Ls móknu / mókna / móqna; Ktn mïk 'kill, hit'; TO mï'a/mï'i/mïa'i 'kill'; Eu méa 'matar a uno'; Wr me'á 'matar sg. obj.'; Tr me'á 'matar a uno'; My mé'a 'matar'; CN miktia 'kill or injure s.o., commit suicide, mistreat self, vt, v.refl'; Cr ra-me'e-nyí 'he's going to kill him with a knife'
Miller includes Sr mïmï'kin 'hurt sg. obj.' (the causative of Sr mïmï'k 'die, be sick'), but Ken Hill's (KH/M03) association of Sr mÿkaan 'kill, hurt, sg.obj.' with the above forms fits better (ÿ = pharyngealized, somewhat retroflex barred ï). This stem seems to have derived into two forms: *mï'a and *mïkka. B.Tep153 *mua 'he killed' (UP mua; LP mua; NT múa; ST mua) belongs, though TO me'a / mu'a / mea / mua 'kill' shows variation. Note Tb -'g- < *-kk-, as also at *pakka 'hit' and almost at *pikka 'knife'. [*-kk- > -'- SUA] [NUA: Tb, Tak; SUA: Tep, TrC, CrC, Azt]
UACV-1097 ***maki** 'grind': M67-233; M88-ma18; Munro.Cup1 *mááxi-š 'acorn flour'; KH/M06-ma18 'hit/golpear': Ls mááxi 'grind acorns on a metate'; Ls maxi-š 'acorn flour'; Cp máxi-š 'acorn flour'. Similarly ground, add Tr ma*kí 'membrilio Cimarron, su hoja, muy fina, la muelen seca y hacen pinole'. [p1m,p2n,p3kk] [SUA: TrC; NUA: Tak]

769 Hebrew **tqp** ‘to overpower, v’; Aramaic(J) təqef ‘be strong’; the 2nd vowel of Aramaic means it is from Proto-Semitic *taqipa (sg), *taqipu (pl), exactly as the UA forms:
UA *takipa / *takipu ‘push’: KH/M06-ta9: Wr tahkipúna ‘empujar muchas veces [push many times]’; Tr raki- ‘empujar’ (L) / rakibú ‘empujar [push]’ (Ht); My táktia ‘tocar [touch], picar [prick, pierce]’; SP tïŋwipa ‘push in with the hand’. [kw1t,2q,3p] [SUA: TrC]

5.12 Semitic Emphatic or Pharyngealized ṭ

Hebrew emphatic ṭ > UA *c usually, like the other emphatic consonants: namely, Hebrew ṣ and its three proto-Semitic sources, which remained separate in Arabic ṣ, ḍ, and ẓ, but all merged in Sem-kw to UA *c, especially before high vowels (i, u, ï). or even s, as c/s issues plague UA too. However, ṭ often remains t-like, especially in consonant clusters. The next 24 items (770-793) exemplify ṭ.

770 Arabic **ṭwy / ṭawaa** ‘spin (thread)’; Hebrew ṭwy / ṭawaa ‘to spin’; Hebrew maṭwe ‘yarn, s.th. spun’: CN cawa ‘to spin’. [kw1t2,kw2w,kw3i]

771 Hebrew **ṭʕm** ‘taste, eat’; plural participle **ṭoʕmiim**; UA *cu’mi aligns with the pl participle:
UACV-2222a ***cu’mi > *cuŋV** 'suck, sip, kiss': M67-420 *cun ‘suck’; CL.Azt10 *cinaakan ‘bat’; M88-cu7; KH.NUA; KH/M06-cu7: Kw čohmi ‘suck, v’; Hp còocona 'kiss, suck, suck on pipe'; Hp(S) cohcona ‘suck’; Cp čúŋe ‘kiss, vt’; Cp čúme 'suck'; Ca čúŋ ‘suck’; Ca čúŋ-in ‘cause to suck’; Ls čúúŋi 'suck (breast)'; Ls čúŋi 'kiss'; Sr čuuŋ ‘suck, vt’; Ktn cuŋ ‘suck’; Eu čúca; Wr cu’mi 'suck, sip, slurp food'; Tr cu’mi ‘suck, kiss, sip, eat soft things’; Tr ču’mí 'lip, mouth'; My čuune; AYq čuune; CN (paal)čičiina 'soak up, suck in, smoke, vt'; CN ilčiina 'suck up, consume' and HN čičiina/čičiini ‘suck’. Ken Hill adds Ktn cuŋ. Also add -suma of Nv tup’suma ‘suck, v’; NT višúúsumai 'suck'. The NT form fits well a compound of *pici-cu’ma ‘breast-suck’ since Tep/NT s < *c. The Tep forms suggest *čuma or *ču’ma, like Tr, Wr, and Cp. Wc céena 'lick' looks like the Azt forms. Add the -čomi- of Ch(L) ko’^{w}a-čomi-gyah ‘tobacco-chewing-is’. Worth listing, but having variant correspondences are CU sőö’mi ‘suck, sip, vt’; Ls ṣóómi ‘swallow whole’; the -coma of CN ke’coma 'bite'. In the below and some of the above, the cluster -ʕm- > -ŋ- and then > -n- in SUA.
UACV-2222b ***cuŋuC** ‘tobacco pipe’: M67-321 *cunu 'pipe'; M88-cu8 'pipe'; KH/M06-cu8 ‘tobacco pipe’: SP čuŋuC; CU cuu-ci 'pipe, sucker (the fish); Hp cooŋo ‘tobacco pipe’; Hp coocoŋa ‘smoke (tobacco)’; WMU čúúči / júújі ‘pipe, smoking pipe, n’. Note WMU loses medial nasal, but keeps a nasal vowel uu here at ‘suck’, at ‘liver’, and at *nïmi ‘go, person’. [NUA: Hp, Tak, Num; SUA: Tep, TrC, CrC, Azt]
UACV-2274 ***tïma / *tïCma** 'taste': Mn tïma ‘taste, v’; Sh tïmmai ‘taste, v’; Kw tïmaka’a ‘taste, v’; Cr ra-teémwa’a ‘lo prueba, lo saborea’. What of Tr ɾa*ma ‘probar, gustar, tomar el sabor’? [iddddua] [kw1t2,kw2’2,kw3m] [NUA: Num; SUA: CrC, TrC]

772 Hebrew **ṭame’** ‘(be) unclean’; Hebrew **ṭum’a(t)** ‘uncleanness, filthy mass’:
UACV-1474a ***co’ma** ‘mucus, have a cold’: M67-219b *com ‘snot’; M88-co4 ‘snot’; KH/M06-co4: Eu zóma ‘moco de narices [mucus]’; Wr co’má ‘moco [mucus]’; Tr co’má / -cum ‘moco’; My cóómi-m; Cr cu’umé ‘mucus’; PUA *c > Tep s: TO šomaig ‘catch a cold’; TO šoša ‘nasal discharge’. Add NT sósoi ‘catarro [cold], moco’; ST somaigi ‘have a cold’; Yq čom watte ‘to blow the nose’; Yq čoomim ‘mocos’; AYq čoomim ‘phlegm’. For the glottal stop to jump before the preceding consonant, compare star 154, steal 157, shirt 199, or Tep g < UA *w < Sem ’ (glottal stop). Is TO šoša a reduplication of *soma in which the medial cluster reduced, losing the bilabial nasal: *šošma > šoša; likewise for NT sósoi. [cluster reduction] [SUA: TrC, Tep]
UACV-1474b ***co’m-pil** ‘have a cold (mucus appendage/falls)’: L.Son41 *cop ‘moco, catarro’: northern Eu cóbá-t; Wr cohpé; Tr cohpé. CN compiil-li ‘a cold, n’ and CN compiiliwi ‘have a cold, v’ are likely fuller forms of the reductions in TrC: Wr copé ‘cold (sickness)’; Tr co’pe ‘catarro’. The CN, Wr, and Tr terms, of course, seem related to *co’ma above, compounded with an extra morpheme -pil. [N > ø as 1st C in cluster] [kw1t2,kw2m,kw3’] [SUA: Tep, TrC, Azt]

773 Syriac ṭẖn ‘grind, pound’; Arabic ṭẖn ‘grind, mill, crush, destroy’; VI ‘quarrel, be in conflict’ Arabic ṭaaẖuun ‘mill, grinder’; Hebrew ṭəẖoon ‘hand-mill’; both ṭ > c and ṭ > t at times:
UACV-621 ***to’na(C)** ‘hit, pierce, stab’: Mn tona ‘prick, stick (with a sharp object), nail, vt’; Mn tonakï ‘puncture, nail, vt’; Mn to’noo ‘hit by throwing, shooting’; NP tona ‘hit with fist, vt’; TSh tonnaC ‘poke, stab, stick, pierce’; Sh tonaC/tonoC ‘pierce, stick with sharp point’; Cm tonarï ‘stab, pierce, sting (of insect)’; Kw tono ‘hit, strike, pierce, puncture, stab’; Ch toná ‘hit, punch, stab’; SP tonna / ton’na ‘strike, hit, stab’; CU tö’náy ‘hit, strike, punch (only once)’; CU töná-pagá-y ‘strike (of lightning)’. Wr(MM) to’na ‘estar tocandose, golpeandose [hitting self/each other]’. The k in Mn (vs. g), the p in CU (vs. v), and the gemination feature of the CNum forms all point to a final consonant. [NUA: WNum, CNum, SNum; SUA: TrC]

UACV-1188 ***co'na / *co'ni** 'pound, hit': M67-232 *con 'hit'; L.Son39 *cona/*con-i 'abofetear'; M88-co1 'pound'; KH/M06-co1: TO ṣoni 'action of the hand or of s.th. held' (usually of striking, note: TO ṣoni-kon 'strike, hit'; TO ṣoni-ak 'chop down'; TO ṣoni-čk-wua 'move s.th. by striking it'; TO ṣoni-hin 'to hammer'; TO ṣoni-win 'reduce to small bits by pounding'); Eu zóna/cóni 'moquetear [punch], bofetear [hit, punch]'; Wr co'na-ní/co'ni-má 'machacar'; Tr me'-čó-n-a 'machacar [pound, mash], clavar [drive, stick, nail]'; My cónna 'pegar con mano [hit with hand]'. Add CN cocona 'strike s.o., beat s.th., play instrument'; and Tr co'ná / co'ni-mea 'punch, hit with hand'; Yq čóčona 'dar trancazos'; AYq čočona 'hit one'. This ties to Num *to'na 'stab, hit'. A similar example is bɧn > po'na 'pull out'. [1t2,2h2,3n] [SUA: Tep, TrC, CrC, Azt]

774 Hebrew nṭʕ 'to plant', yi-ṭṭaʕ 'he plants':

UACV-1635 ***'ïca** 'to plant': VVH119 *'ïs(ca) 'to plant'; B.Tep339a *'ïsai 'he plants'; B.Tep339b*'ïsi 'to plant'; B.Tep339c *'ïi 'he planted'; B. Tep 338; B. Tep 340; B. Tep 341; B. Tep 343; M88-ï1 'to plant'; M67-323 *'e/'ei 'plant, v'; L.Son10 *ïca 'sembrar'; AMR92-6 *ïca 'to plant'; KH/M06-ï1 *ica 'plant, v': TSh ïa; Kw 'ï'a; SP ïa; CU 'ïay 'trap, plant, sow, cultivate, farm'; Hp ïïya; TO eš(a); PYp esa; NT ísai; ST 'ïs; Eu ecá; Yq 'éeča; My eeča; Wr eca; Tr iči-mea, eča (pres.); Wc 'e-. Tbr sa 'sembrar' is possibly borrowed from Tep with loss of initial vowel. All the other TrC and Tep forms reflect *ïca clearly. SUA *ïca, Hp ïïya, and Num *ï'a make this set a prime example of *-c- > NUA -y- (Manaster-Ramer 1992), also suggesting cultivation among the Proto-Uto-Aztecans as Jane Hill (2007) suggests. Sem-kw with no rounding of pharyngeal. [kw1n,2t2,3'2] [NUA: Num, Hp; SUA: Tep, TrC, CrC]

775 Hebrew **nṭʕ** 'to plant'; Hebrew nɛṭaʕ / naaṭaʕ 'a growing plant, plantatino':
Hp natwani 'plants, harvest' [kw1n,kw2t2,kw3'2]

776 Hebrew **nṭr** 'watch over, guard', Aramaic by-form of nṣr; Hebrew maṭṭaaraa 'target, mark (as kept in the eye, watched)'; Arabic nṭr 'to watch, guard':

UACV-2289 ***natya / *natay** 'plan': Hopi tïnatya-w-ta '1 be careful, prudent, mindful 2 intend to, plan 4 watch over, pay attention to, care for'; Hopi tïnatya 'plan, goal, n'; Tr natá 'think, reflect'; TO ñenašaḍ 'to check s.th., stay awake' (Mathiot); TO nenašan 'look, investigate, become alert' (Saxton 1983); TO nenašani 'be alert, be early-waking' (Saxton 1983). Hopi tïnatya- may have the indefinite object prefix tï- fossilized into the form, because -natya- reflects nṭr with the cluster -ṭr- > -ty- much like the cluster -ṭʕ- > -tw- in Hopi also. [iddddua] [kw1n,kw2t2,kw3r] [NUA: Hp; SUA: Tep, TrC]

777 Hebrew **ṭabbuur** 'navel'; MHebrew **ṭibbuur** 'navel'; Aramaic(J) ṭiibbuur 'navel':

Mn	póji / pózi	Hp	sipna	Eu	sikát/siikát
NP	sibudu / cibudu	Tb	šiiduluš-t 'umbilicus'	Tbr	sikú-r
TSh	siiku(cci)	Sr	ṣuur	Yq	síiku
Sh	siku	Ca	-'ul	My	siiku
Cm	siiku	Ls	tíidi	Wr	sikú
Kw	šigu-vï	Cp	mex	Tr	sikú-či; sikura
Ch	--	TO	hik	Cr	sipu
SP	siġuN	Nv	'ikudi	Wc	šïï.temúuci;
WMU	siġú-ppi / suġú-ppi	PYp	hikor	Wc	cikïri 'simbolo usado en la
CU	sigú-pï	NT	--		fiesta del tambor'
		ST	--	CN	šiik-tli

UACV-1495a ***sikuN / * sik^{w}ur** 'navel': VVH68 *si$_{s}$ku 'navel'; M67-301 *sik; I.Num191 *siku(n); L.Son240 *siku 'ombligo'; CL.Azt113 *šiik, 257 **siku; M88-si2; KH/M06-si2: TSh, Sh, Cm, SP, CU, TO, PYp, Tbr, Yq, My, Tr, Wr, CN. Is Tb šiidulust cognate? Miller queries. *si… 'intestines' compounded with else is a frequent suggestion—and possible. On the other hand, we may be dealing with *sikwu or *siku and *sipu (cf. Labial Labyrinth, IJAL 61:394-420). Note bilabials in NP, Cr, Hp, and Tewa sipu. Note also Eu sibúra 'belt' and Eu b < *kw. While CN šiik-tli 'navel' is cognate, CN sikwil-li (< *sikwul) 'waist' may be also. Kw šigu-vï 'navel' and Kw šiku-pï 'rib' in light of CN omi-sikwil-li 'rib (bone-waist)' are noteworthy. A final consonant -r or similar appears in Tbr, PYp, and Nv, and most of Numic shows some kind of final consonant in the gemination of the absolutive suffixes. Medial kw suggest Sem-kw, with Hebrew emphatic ṭ > UA *s. [kw1t2,2bb,3r] [NUA: Num; SUA: TrC, CrC, Azt, Tep]

778 Hebrew ṭabbuur 'navel'; MHebrew ṭibbuur 'navel'; Aramaic (J) ṭiibbuur 'navel':
Tb(H) šappušt 'belly'; NP sibudu 'navel'; Cr sipu; Hp sipna, combining form Hp sivon-, which vowel agrees with *u. Note Tewa sipu 'navel'. Semitic b > b/p is Sem-p; -r- > Tb -s- next to voiceless t. [NUA: Tb, Tak]

779 Hebrew ṭwɧ 'to over-spread, coat, besmear, over-lay':
Wr cuhca '1 to rub, 2 to hang up, put on clothes'. The cuh- portion fits perfectly, and the two Wr meanings 'to rub' and 'to put clothes on' are reconciled to make sense from 'to coat, over-lay, besmear'. [kw1t2,2w,3h2]

780 Hebrew ṭʕn ‘to load (as beasts of burden)’:
Wr cuhce ‘to place a load on a burro, horse, etc’ if -n- lost in cluster with other morpheme. [kw1t2,kw2w,kw3n]

781 Hebrew ṭwl ‘to cast, throw’ > UA *culi: TO šulig ‘to put, throw away, pl’. [kw1,kw2,kw3]

782 Arabic ṭḫy / ṭaḫaa ‘to hurl, shoot’ > Wr cewa ‘to throw or hit with a missile’. [kw or p?:1t2,2h2,3i]

783 Hebrew ṭpl ‘to smear or plaster over, stick, glue’ (BDB), ‘smear, coat, cover’ (KB):
Hopi cakwani ‘plaster’; Hopi cakwan-ta ‘be plastering, smearing on’ if from an unattested -ṭappel, which doubles the middle consonant: *-pp- > -kw-. [kw1t2,kw2p,kw3l]

784 Hebrew **ʕᵃṭallep** ‘bat’; Aramaic(J) **ʕᵃṭallep-aa** ‘bat-the’:
UACV-126 ***ho’napi** ‘bat’: I.Num33 *ho(’)nopi ‘bat’; M88-ho4: Mn ho’nóbi; NP pita-hana’a; Sh honopittsihï. TSh honnopi-cci 'bat' and the first part of Cm hïnïbi pokaa' 'bat’. The Mn, TSh, and 2nd NP forms suggest a consonant cluster ’n/nn. NP is a compound, and the latter part (-hana'a) shows three consonants in common with *ho’napi. In regard to the Hebrew form and UA ***ho’na(pi)**, the initial h is definite article prefix hV- or a delay in voicing onset, the round vowel showing the pharyngeal; and *l > n in Num is usual, especially a doubled -ll-. And loss of the second vowel would cluster -ṭl- > -’n-, which is natural. So it all actually fits well. Cm ï < u/o. Both the Mn and TSh forms suggest a consonant cluster 'n/nn. For another example of t > ø as first element in a cluster, note 749 Hebrew *CV-tmahV > UA *maha ‘fear.’ [p?1’2,2t2,3l,4p] [NUA: WNum, CNum]

785 Hebrew **ha-ṭṭob** ‘the good (thing/one), good (abstract)’:
UACV-522a *ayu 'good' (< ***acu**): Sapir; M67-201 *’ay 'good'; M88-a17 'good'; KH.NUA; KH/M06-a17: SP ’ayu/ayï ‘be good’; Gb ’ayó’in 'much', pl: ’ayó’im 'many'; Sr ’a ’ai/’a’ayu 'good’. *-ṭṭ- > UA *-c- > NUA -y-. [1t2,2b]

786 Hebrew **ṭoob** ‘good’ < verb ṭwb, pfv: ṭaab ‘be good’: These are not all a set, but each may fit a form:
UACV-522b UA ***topi** ‘good’: CN copeek 's.th. sweet'; CN copeeliaa 'sweeten s.th., v.t.'; Ls lóóvi ‘be good’; Ls pu-lóóv, pl: po-pliv ‘good’ ; LP sapua 'good, pretty’ (LP s < *c); perhaps Tb tïwï ‘good, well, rightly’; Tb(H) tïwwïppil ‘pretty’.

787 Hebrew qṭp ‘break off, pluck’; Syriac qəṭap ‘pick, gather, harvest’; Arabic qaṭafa ‘pick, gather, glean, tear off’ (< *qṭp); less likely is Egyptian qdf ‘abplücken [pluck off], lesen [glean, gather]’:
UACV-1001 ***kïtta** ‘harvest, v’: Mn kïta ‘reap’; NP kïta ‘harvest, v’. [p:1q,2t2,3p] [NUA: WNum]

788 Hebrew qṭp, impfv: -qṭop ‘break off, pluck’; Arabic qaṭafa, impfv: ya-qṭifu ‘pick, gather, glean, tear off’ (< *qṭp); Syriac qəṭap, impfv: -qṭup ‘pick, gather, harvest’; loss of the first consonant (q) in a cluster is usual, so this UA set matches the vowel of the imperfect plural of both Hebrew and Syriac *-qṭupu:
UACV-996 ***tupu** ‘pick, gather’: CU tuvú-**’**na-y ‘pull out, pluck out’; ST tuvu’ya’ ‘harvest, gather things in container’; AYq tovokta ‘pick up (sg obj) with hand, vt, harvest, n’. maybe Ktn puk ‘take off’.
[NUA: Num; SUA: Tep, TrC]

789 Hebrew **ṭhr / ṭaahar** ‘be clean (dietarily, of animals/food)’:
UACV-964 ***cahar** ‘fork(ed)’: TO ša’aḍk/ša’alk ‘(be) forked, cleft, divided’; PYp sa’ara ‘crevice, partly open; PYp sa’arek ‘fork, branching’; NT sááraka ‘be forked’; Cr ïcari ‘horcón [fork]’; perhaps -šal- morpheme borrowed from Tep in CN mašal-li ‘earwig, s.th. forked’; CN mašal-tik ‘s.th.divided like a road or crotch of a tree’. I reconstruct *-h- as *h > ’ in Tep. The Mosaic law’s dietarily clean animals were those of cleft or divided hoof—a semantic shift indeed, but plausible enough to include. [iddddua] [*h > ’ in Tep; > ø in Cr?; liq; c/s] [kw1t2,2h,3r] [SUA: Tep, CrC]

790 Hebrew **mooṭ** ‘pole, carrying frame’; Hebrew mooṭaa ‘pole, bar of yoke’:
UACV-796 ***mu(C)ti** ‘point (of s.th.)’: M67-368 *muk / *muc ‘sharp’; M88-mu15; KH/M06-mu15: Ls múčvi 'point, tip, summit’; Hp mooci ‘awl, long pointed stick used in weaving’; TSh muci 'point'; Sh muci 'sharp'; Cm mucipï ‘sharp pointed’. Cm (< *-pp-) shows potential for a final consonant. [iddddua] [1m,2t2] [NUA: Hp, Tak, CNum]

791 Hebrew maṭṭɛ ‘staff, rod, branch’
Hopi komaci ‘kindling, small sticks or chips of wood’ (if ko- ‘fire’ < UA *kut ‘fire’) [1m,2t2t2]

792 Hebrew **ṭap** ‘little children’; Arabic ṭifl- < *ṭipl- ‘infant, child, baby, boy’:
UACV-1361 ***cupi** ‘small’: Eu čúpi ‘chico’; Tr čúpu(ri) ‘of small size’; the -jubi- of Tb(V) ku’uujubil ‘little’; Tb(M) kuujubit ‘little’; Tb(M) kuujubil ‘little,little bit’; Ktn cipk ‘a little’.[iddddua][1t2,2p,3l] [SUA: TrC; NUA: Tb, Tak]

793 Semitic plṭ ‘escape’; Hebrew plṭ / paalaṭ ‘to escape’, pl participle: poolṭiim:
UA *puCti ‘escape’: Ca púti ‘escape’; Ca -t- < *-Ct-/*-tt-. [1p,2l,3t2]

794 MHebrew ’eber ‘member, penis, part, arm’; Jewish Aramaic targumic tradition **’ebr-aa** ‘pinion, member’; Aramaic(J) ’eebaar-aa / ’eebr-aa ‘limb, arm, wing, membrum genital-the’;
Jewish Aramaic Babylonian tradition **’iibraa’** ‘penis’:
UACV-1619 ***wï’aC** ‘penis’: M67-315 *we ‘penis’; I.Num284 *wï’ah/*wï’aN ‘penis’; Munro.Cup90 *wəə’i-la; M88-wï8 ‘penis’; KHM/06-wï8: NP wïa; TSh wïaC-ppï; Sh wïan; Kw wa’a-pi; SP wï’aC-pi; CU wa’á-pi; Cp wé’e-l; Ca wé’i; Ls wó’-la. The cluster *-br- > -’-; loss of b as first element in a cluster and liquid to glottal stop in a cluster (sml, gml) both have many examples. TSh and SP gemination, and Kw and CU -p- (vs. -v-) all suggest a final consonant. [V assim] [p1’,p2b,p3r] [NUA: Num, Tak]

Note the lack of rounding or entire lack of the glottal stop for the following Sem-kw terms (584-599), in contrast to Sem-p (566-583). This lack of rounding or lack of glottal stop in Sem-kw terms, may also explain its absence in initial position in contrasting sets like ‘sister’ and ‘ephod-like clothing’:
UA *wakati ‘younger sister (< Semitic *’axaat, Sem-p) vs. UA *koti ‘older sister’ (< Hebrew *’axoot, Sem-kw); and UA *wipul ‘belt, sash’ (Sem-p) vs UA *ipul/d ‘shirt’ (Sem-kw) both from Hebrew *’epod.

795 Hebrew **’abiib** ‘ears (of corn/grain) already ripe, but still soft, the month when ears come on’; Ethiopic ’bb ‘bloom’; Arabic ’abb ‘meadow’; Hebrew ’ibb- ‘shoot, plants still growing in the ground’; These terms are from a root ’bb meaning s.th. like ‘bloom or put on ears’, but the UA term better fits a feminine noun ’abbat-V, which feminine noun would signify the singular of a collective noun:
UACV-547 ***apari** 'elote, new/fresh ear of corn': Yq’ába’i 'elote'; My ábari/ábarim ‘elotes, mazorca’; AYq avae 'fresh corn’. [liquids: *-r- > -’- > -ø-] [SUA: TrC]

Various forms and conjugations of the Hebrew verb ’kl appear in UA: Hebrew ’akal ‘(he) ate (perfect), *to’kal ‘she/it eats’; *yo’kal ‘he/it eats’; ’akol (inf):

796 Hebrew ’akal ‘(he) ate (perfect), ***to’kal** ‘she/it eats’; *yo’kal ‘he/it eats’; ’akol (inf):
UACV-782 ***tïkkaC** 'eat': VVH163 *tï$_u$ka to eat; I.Num238 *tïhka 'to eat'; M88-tï27; AMR 1993c *tïkka; KH/M06-tï27 *tïkka: Mn tïka; NP tïka; TSh tïkka; Sh tïkka, tïkïC-; Cm tïhka-; Ch tüká-; SP tïkka; CU tïkáy; Tb tïka-t~’ïtïk; Tb(H) tïkkat ‘eat, vi/vt’. A good example of medial geminated -kk-, showing k vs. g in WNum and -kk- in the other two branches of Num and Tb, as well as a final -C. This also matches Hebrew *to’kal ‘she/it eats’ since the glottal stop creates a cluster and Hebrew o > UA *u, then UA *u > ï often in Num. [*-kk-] [p1t,p2’,p3k,p4l] [NUA: Num, Tb]
UACV-286 ***tïkkaC-pï** ‘bread, food’: NP tïkaba tomïca ‘bread dough’; Sh tïkka-ppïh ‘food, bread’; WMU t*üh*kká-pp*ü* ‘food, n’; Num tïkkaC- ‘eat’ + nominalizer = 'food, bread’ in other Num languages as well. This is of Sem-p while ***yï’ïki** below is of Semitic-kw. [NUA: Num]
797 Hebrew ’kl / ’aakal ‘eat, feed, savour, have sense of taste, enjoy love’; these sets reflect the Hebrew impfv: ***yo’kal** ‘he/it eats’:
UACV-783a ***yï’ïki** 'swallow': VVH168 *yï$_u$’ï 'to swallow'; M67-425 *ye 'swallow'; M88-yï9 'swallow'; I.Num299 *yï(h)wi; KH/M06-yï9: Mn yïkwï (<*yïkkwï) ‘swallow’; NP yïggwi’hu/yïkwi; Sh yïmiC; Cm yïwi 'swallow s.th., go out of sight'; Kw yï’ïgi-; Ch yï’ïki; SP yï’ï-ġi/qqi; WMU yü’ű́ġi-y / yü’úġi-y ‘swallow, v’; CU yï’ï-k*i*; Cr ra-yé’e 'he's drinking it’ (also at drink). As for SNum *yï’ïki, WNum *yïkkwi, and CNum *yïwi, rounding developing after a previous ï is common in UA, and the following is not atypical: *yï’ki > yïkkwi > *yïwi. [medial C] [NUA: Num; SUA: CrC]
UACV-783b ***yïkï** ‘taste, finish’: VVH170 *yïkï; M88-yï16; KH/M06-yï16: Hp yïkï ‘make, fix, finish, taste, copulate’; TO jïïk ‘taste, vt’. Add Nv duka (dïka) ‘probar [taste]’; NT dïdïïkai ‘probar (comida), vt’; ST dïïka’ ‘probar, saborear (alimento) [savor (food)], vt’. Kartunnen did, but Molina did not distinguish the CN forms CN yekoaa ‘taste, sample (food/drink), copulate’ and CN yeekoaa ‘finish, conclude’. Sapir and most since tie the former to Numic *yoko ‘copulate’, which is sound, but the semantic range of the Hp term envelops both CN terms, and is enough to make one wonder if both sets are not connected. Following Ken Hill, who is smarter than I am and who continues Miller’s separation of yï9 and yï16, I’ll concede while we think awhile more, though the complementary sets of branches (ie, no contradicting forms in the same language or branch), and nearly initial *yïk in common, with the major difference being a few glottal stops scattered about (*yï’(ï)k) in one of the groups, all combine to make one seriously consider their union. My mistake including this set twice in UACV, at ‘eat’ and also at UACV-2273 ‘taste’. [iddddua] [kw1y,2’,2k,3l] [NUA: Hp; SUA: Tep, Azt]

798 Hebrew **'akal** '(he) ate (pfv), *to'kal 'she/it eats'; *yo'kal 'he/it eats'; 'akol (inf):
UACV-784 ***'aki** 'open mouth, eat, take/put into one's mouth': M67-294 *hak 'open the mouth'; M88-ha4 'open the mouth'; M88-'a36 'eat pinole'; KH/M06-'a36 rightly combines M88-ha4 and 'a36: Cp áxine 'eat pinole'; Gb 'áx 'comer pinole'; Sr 'aak(u) 'eat flour-like object or mush, throw it in the mouth'; SP agi 'take into one's mouth'; Tb aagït 'open the mouth, yawn'. Jane Hill (p.c.) also adds the following: Kw agi 'lick or eat mealy substance'; Ca 'áqi 'to open'; Sh akïC 'to open up'. [kw1',kw2k,kw3l] [NUA: Tak, Num, Tb]

Note how consistently Sem-kw final -l yields gemination in Numic: 798 'kl, 4 bšl, 796 to'kal, 647 naxal. Next are examples of Hebrew y > y:

799 Hebrew **yə'or** 'river':
UACV-364a ***yaway** 'river, canyon': Ch(L) yïwaa-vi 'valley'; Cp yáwe 'to flood'; Ca yáwaywet 'canyon'; Tbr yawá-n / yavá-n 'river'. Kw pa-rii-yawi-dï / Kw pa-rayïwïi-dï 'wash, arroyo' is analyzed as pa- 'water', tii- 'up', yawi- 'hold'. Yet Cp yáwe 'to flood' and Cp yáwe 'bring, carry' show two similar forms, but of different meaning. And note the other Kw term with Kw -yïwïi-, which may align with the 'river/flood/canyon' terms. Even excluding Kw, we still have Ch, Cp, Ca, and Tbr supporting a lexeme something like *yaway or *yawi 'canyon, river'. [p1y,p2',p3r] [NUA: Num, Tak; SUA: TrC]
800 Hebrew **Yahwe** 'Yehovah, God of the Israelites':
UACV-1803 ***ya'u / *ya'wV** 'leader, deity': Yq ya'ut 'jefe [boss]'; Yq yá'ura 'gobierno [government], ley [law], autoridad [authority]'; AYq ya'ut 'chief, leader'; AYq ya'učim 'leaders, big beads in rosary'; AYq ya'učiwa 'leader, God'; My yá'ut 'autoridad, jefe, magistrado'; Cr taya'u 'God'; Cp yawe 'god' after subtracting temá-l / temat- 'earth' from temáyawe-t 'earth-god'; Kw yaahwe'era 'a supernatural being usually thought of as in bird form'. Though the vowels are reversed from Cp yawe, note also Cp yeváywe 'pray'. Note h > ' as first consonant in a cluster, both here and in Egyptian *nhp > UA *na'pa. [1y,2h,2w] [NUA: Tak, Num; SUA: TrC, CrC]
801 Hebrew **yamiin** 'right hand/side': Hebrew **ha-yyamiin-aa** 'to the right, lit: the-right-toward':
UA *(h)**ayamin-** 'right': Wr ahamína 'right side'; various transcriptions of Sr -ayuno'/ aiïnu'/ayïnu' 'right, right side' end like Semitic yamin-o 'right (hand/side)-his' though the between the y- and -n is reduced. The stronger correlation is with Wr ahamína < Semitic hayaminá, as consonant transpositions are typical in Tr and Wr, and only one such transposition would have Wr ahamína < Hebrew hayaminá. Note also *-aya- > -a- with loss of intervocalic -y- at *bayyame 'year' (823) also. Egyptian imn 'right' is cognate with Semitic. [1y,2m,3n] [SUA: TrC; NUA: Tak]
802 Hebrew **yaabaal / yuubal** 'watercourse, stream':
UACV-365 ***yïppa** 'valley': NP yïpï (< *yïppï) 'valley'; Cp yïpá-š (< *yïppa) 'valley'; Tb yï-t 'valley'. Tb absolutive suffix -t instead of -l and Cp -p- instead of -v- suggest consonant clusters. UA *-pp- does cause pause, but these two are worth noting for contemplation. [Tb *-t; l/r] [NUA: Num, Tb, Tak; SUA: Tep]
UACV-755 ***yïpïla** 'earth, dirt': B.Tep32 *dïvïrai 'earth, dirt'; M88-yï14; KH/M06-yï14 'canyon': TO jïwïd 'soil, earth, world'; PB dïvar (B); NT dïvïrai; ST dïvïïr; PYp dever 'earth, land'; Nv duburha [dïvïra] 'tierra'. Ken unites these with *yïppa 'valley', perhaps, but geminated Cp *-pp- and slightly different meanings cause pause. [SUA: Tep]
803 Hebrew kəfiir (< *kapiir) 'young lion';
UACV-1353 ***kap** 'bobcat': PYp **kaper** 'wildcat'; Wc kapuvi 'bobcat'. k- is Sem-p [p:1k,2p,3r] [SUA: Tep, CrC]
804 Arabic ***saʕapat** 'palm leaves':
UACV-1608 ***caupali** 'palm sp': PYp sahvali / sahavali 'palm tree'; NT sáúvali 'palmilla'; ST soovoly 'palma'. Semitic ṣ > UA c, vs. s, suggests Sem-kw. Is Tr sawéara a loan? [kw1s,kw2'2,kw2p,kw3t] [SUA: Tep]
805 Hebrew **hebii'/hebaa'** 'bring':
UACV-1324a ***hï'ïpï / *hapa** 'get up, vi; lift/pick up, vt': Kw hïveezï 'get up, arise, vi'; Kw hïveezï-tii 'pick up, vt'; PYp e'evnia 'lift'. Add Tb(H) aapa'iwït 'to show, vi'. These show medial *-p-, and the following with medial *-kw- are of Sem-kw. [p1h,p2b,p3'] [NUA: Num, Tb; SUA: Tep]
806 Hebrew pfv: **hebii' / hebaa'** 'bring', imperative **habee'** 'bring!':
UACV-1324b ***hakwa / *hakwi** 'lift': Tb(V) he'ewiin(-ït) 'lift it'; Tb(M) he'winat~'ehe'win 'lift, carry in the arms, hold on the lap'; Eu háhba 'lift pl. obj's'; Eu háhbe-me 'levantarse, pl'. To bring, one must first

lift/pick up, and Tb also has the carrying dimension. Eu matches the imperative very well, and Tb the pfv. [kw1h,kw2b,kw3'] [NUA: Tb; SUA: TrC]

807 Hebrew **śaameħ** 'happy, filled with joy'; Hebrew **śimħaa / śimħat** 'joy, gladness';
Ugaritic šmx 'rejoice'; Arabic šmx 'be high, proud'; Akkadian šamaaxu 'be stately, flourish':
UACV-1284 ***sïm** 'laugh, smile': M67-252 *sem 'laugh'; ; M88-sï19 'laugh'; KH/M06- sï19: Cp šeme; Ca sém;
TO hïhïm; ST h(ï)mpa, h(ï)mia. Let's add LP hïhïmï 'smile'; Ca sém- 'laugh'; Ca sém-yaw 'smile'; Ca séŋi 'grin, smile.' Again m + laryngeal > ŋ in Tak (also 771, 281, 283, 284), m > ŋ as cluster reductions; otherwise, intervocalic -m- (813). [iddddua] [1s3,2m,3h2] [NUA: Tak; SUA: Tep]

808 Hebrew mwq, pfv ***maaq** 'mock'; Hebrew hiqtiil participle: mamiiq 'mocker/mocking';
Syriac mwq, participle: mayyeq 'deride, mock'; Aramaic -mayyeq 'talk contemptuously, sneer, mock':
UA ***mak** 'laugh, tease': Sr mamq 'laugh'; Mn magïhï 'tease'. [iddddua] [1m,2q] [NUA: Tak, Num]

Examples of Initial h > ø

809 Hebrew qittel impfv stem **-hattel (< *-hattil**) 'to mock':
UACV-1282 ***'atti / *ata / *aCti** 'laugh': VVH39 *'aci-a 'laugh at'; BTep303 *'a'asï/i 'laugh at'; M67-251 *'ac 'laugh'; L.Son1 *'aci 'reírse'; M88-'a1 'laugh'; KH/M06-'a1 *aci: Wr a'ci 'estar riendose'; Tr ačí 'reirse'; My aače 'reírse'; AYq aače; Cr ra-'á'ace 'he is laughing at him'; TO a'as; LP 'a'aši; PYp a'asi; NT ááši-/ásyi; ST 'aas/ašia. Miller also includes Ca 'ála' 'mock, echo s.o.' and Ca 'ála' has l, which is the Cupan reflex for intervocalic *-t-. Tr has Tr ačí and Tr kačí with initial k, which puts it with qty (see 1386, UACV-1287).
[*-t- > -l- in Ca, *-t- > -c- > -s- in Tep] [1h,2tt,3l] [NUA: Tak; SUA: Tep, TrC, CrC]

810 Hebrew **hikkiir** 'recognize, know, know how to' (hiqtiil of nkr):
Tr **iki-** 'know, be aware of.' [1h,2kk,3r]

811 Hebrew **-biin** / he-**biin** / yV-biin / tV-biin 'understand':
UACV-1273 ***pïnï** 'learn, become familiar with': L.Son204 *pïnï 'aprender'; M88-pï10; KH/M06- pï10: Op veni 'acostumbrar [tame]'; Eu viné 'aquerenciarse [(of animals) become fond of (a place)]' (i.e., become familiar or know and like the place); Tr biní-mea 'aprender [learn], estudiar [study]'; Tr bene- 'know, acquire habit or custom'; Wr peni 'aprender'; Wr pené 'saber hacer una cosa'. Note b in Tr. [p:1b,2y,3n] [SUA: TrC]

812 Aramaic **pty** 'be wide'; Aramaic (J) pətee(y) 'be wide, open'; Syriac **pətaa / pəta' / pətiy** 'be enlarged, increased, wide, broad, ample': Semitic explains both the y and the ' alternations in UA, because the same pair of options exists in the Syriac root pt' / pty:
UACV-1168 ***pïttiya / *pït(t)ï'a** '(be) heavy': VVH3 *pï$_u$tï 'heavy'; B.Tep294 *vïïtï 'heavy'; KH.NUA; M67-223 *pete 'heavy'; CL.Azt84 *ətiik 'heavy'; M88-pï1 'be heavy'; KH/M06-pï1: TSh pïtti(tïn); Sh pïttïn; Cm pïhtï; Kw pita'a; Ch pïtïya; WMU p*ïh*ttiye; CU pïtíyay; Hp pïtï; Tb pïlïï'ït~'ïpïlïï'; Sr pïṭï'; Ktn pïčï'; Ca péle-ma; Eu bete'e-; Yq béte'a 'pesar'; AYq vette; My bette; Wr pehté-ni; Tr be'té-re; TO weeč; Nv vïtï; PYp veete; NT vïïtï; ST vïït; Cr tíhete 'pesa [to weigh]' (Cr & Wc h < PUA *p); Wc hée.té / hee.té; CN etiya 'become heavy' (PUA *p > CN ø); CN etik 's.th. heavy'. This is one of the few proto-stems that has survived through nearly the whole language family, except WNum and half of Takic. All of Num show *-tt- while Tb and Ca show lenition of *-tt- > *-t- > -l-. WMU, CU, and CN all point to *pïttiya, perhaps a fuller form; on the other hand, Sr (but not Sr pïṭïït 'heavy thing'), Tb, Kw, Yq, Tr, and Eu all show glottal stop for a third consonant, as *pïttï'a. [iddddua] [y/'; *p > h/ø in Azt/CrC; *-tt- > -l-] [p:1p,2t,3',3y] [NUA: Num, Tak, Tb, Hp; SUA: Tep, TrC, CrC, Azt]

813 Hebrew **ṣmħ / ṣaamaħ** 'sprout, grow' (< Semitic *ḍamaxa), impfv: ***yi-ṣmaħ (< *ya-ḍmax)**:
UACV-1101 ***yama / *yami** 'sprout(ing), grow (thick)': M88-ya23; Munro.Cup47 *yamii-ča 'forest'; KH/M06-ya23: Cp yemí-š 'forest, dense'; Ca yámily 'leaves'; Sr yaamava' 'spring(time)'; Gb yáma-mwár 'March, month of germinating'; Ls yamíi-ča 'forest, thick brush'; Ls yamáqa/i 'be soft, tender, vi, soften, vt'; Hp yama(k-) 'go or come out, emerge, come into view, rise (of sun, moon)'. Add Ktn yamava' 'April'. These tie to Tep *dama (< *yama) 'up'. [NUA: Tak, Hp]
UACV-2443 ***yama** 'up, over, above': B.Tep12 *dama 'over, above'; M88-ya14; KH/M06-ya14: TO ðaam 'above, over, on top of'; PYp daam; NT daáma; ST daam. These are cognate with *yama 'come up, spring forth (vegetation)' in KH/M06-ya23 at 'grow'. These are Sem-p. [p1y,p2s4,p3m,p4h2] [SUA: Tep]

814 Hebrew **ṣmħ / ṣaamaħ** 'sprout, grow' (< Semitic *ḍamaxa), impfv: *yi-ṣmaħ (< *ya-ḍmax):
CN camawa 'to grow, become big' and Cr samwa 'hoja [leaf]'. [kw1s4,kw2m,kw3h2]

For comparison, we include an earlier item (84) of the same root:

84 Hebrew **ṣmḫ**, impfv: **yi-ṣmaḫ** (<*ya-ḍmax) ‘sprout’ > UA ***icmo** ‘sprout’: CN icmo-liini ‘sprout, grow’.

The above three items from the same root tell us five things: one, as Sem-p preserves Proto-Semitic *x, without pharyngeal rounding, UA *yama is likely of Sem-p; two, as Sem-kw has *x > ḫ with pharyngeal rounding, we must surmise that CN camawa is of Sem-kw because of the -w- and also initial c-, as Sem-p would yield *samak/xa; three, we see that Sem-kw retained the final short vowel of the 3rd sg perfect CaCaCa vs. Biblical Hebrew CaaCaC; four, UA *yama (< *ya-ṣmax) and CN icmo- (*yi-ṣmaḫ) reflect Sem-p and Sem-kw (round o) respectively, suggesting the verbal prefixes of *ya- for Sem-p (like Arabic and Proto-Semitic) and *yi- for Sem-kw (like Masoretic Hebrew and probably Phoenician); five, CN icmo of Sem-kw is another instance of Sem-kw preserving the first consonant of a cluster better than Sem-p does (as the 1st C disappeared in UA *yama < *ya-ṣmax).

815 Hebrew ptt, impfv stem: **-pott**, impfv with prefixes: yV/tV-pott ‘smash, make crumble’:
Hebrew ptt ‘crumble’; MHebrew ptt ‘break up, smash’; Hebrew pat ‘scrap, piece’:
UACV-1079 ***pot** ‘pound, grind’: M67- 331 *po; I.Num153 *potV ‘pound (with a stone)’; M88-po7 ‘pound’; KH/M06-po7: NP pota ‘pound acorns’; TSh potto ‘grinding stone’; Sh potton ‘grinding stone’; SP tapporu’ ‘pound with a stone’ (probably with instr prefix *ta- ‘with a stone’ says Sapir). Add Mn poda ‘grind with a metate’; Mn podánu ‘pestle’; NP podanu ‘grinding stone’. [1p,2t,3t] [NUA: Num]

816 Hebrew saalʕaam ‘locust’:
UACV-1066 ***coho / *co’o** ‘grasshopper’: B.Tep203 *soo’oi ‘grasshopper’; Fowler83; M88-co19 ‘grasshopper’; KH/M06-co19: TO šoo’o ‘grasshopper’; LP šoo’o; NT sóói; ST sooi. Ken Hill adds Tbr soo ‘chapulin’. [c/s] [1s3,2l,3’2,4m] [SUA: Tep, TrC]

817 Hebrew **tə’unaa / tə’unat** ‘fig’:
UACV-868 ***cuna** ‘fig/higo’: L.Son47 *cuna ‘higo’; Fowler83; M88-cu12; KH/M06-cu12: TO suuna ‘fig’; TO suuna-je’e ‘fig-tree’; Op cuna; Eu čúna ‘higuera [fig tree], higo [fig]’; Yq čúúna; My cúúna ‘higo’; Tr čuná ‘higo’. Initial t- > c-, palatalizing before the high vowel -u-. [1t,2’,3n] [SUA: Tep, TrC]

818 Hebrew **ṣuuṣ** ‘bud, blossom, bloom’:
UACV-865 ***coya** or *coca ‘feather headdress’: Munro.Cup40 *čééya-t ‘feather headdress’; KH/M06-co22: Ls čééya-t; Cp číya-t; Ca číya-t ‘bundle of feathers’. All the Cupan vowels correspond to *o, probably lowered from *u by the following a; but interesting is that *coya can be from *cuca, because non-initial *c > y in NUA. This is Sem-kw because ṣwṣ > Sem-kw *cuya. [iddddua] [kw1s4,kw2w,kw3s4] [NUA: Tak]

819 Hebrew **tmm** ‘be completed, finished, come to an end’:
UACV-876 ***tama/i** ‘finish’: CL.Azt53 *tami ‘end, run out’; M88-ta38; KH/M06-ta38: CN tlami ‘come to an end, to finish, to bring an activity to an end’; CN tlamiaa ‘to end, conclude, to conclude something, to finish something’. To the Azt forms, let’s add ST tïïmo’ ‘terminar (de hacer) [finish (doing)]’; Kw tïrïmaa ‘to finish, be finished’. [p1t,p2m] [SUA: Azt, Tep; NUA: Num]

820 Hebrew **tmm** ‘be completed, finished, come to an end’ of an unattested quttal: *tumma:
UACV-877 ***cu’ma** ‘be gone, disappear from sight’: M88-cu1 ‘finish’; KH/M06-cu1: Cm cu’ma ‘use up, finish, vt’; WSh cumah ‘run out of, be out of’; Miller includes Sh cuna ‘run out of, disappear’. [NUA: CNum]

821 Hebrew me-rəḫoq / me-rḫoq ‘far, from afar’:
UACV-842a ***mïCka / *mïhka** ‘far’: M67-165 *meka; B.Tep161 *mïïka ‘far’; L.Son146 mïka; CL.Azt58 *wəhka ‘far’, 306 **mï(h)ka (Proto-Aztecan *w < lenited **m); M88-mï2 ‘far’; KH/M06-mï2: TO mïïkoḍam; LP mïïk; PYp meeka; NT mïïka; ST mïïk; Eu mekú(r); Yq mékka; My mekka; Wr mehká; Tr meká. Cr ïmï ‘lejos’ may belong. Campbell, Langacker, and Miller include CN *we’ka, if *wəhka ‘far’ is a lenited *m, but how many cases have we of Azt w < *m?
UACV-842b ***miyho** ‘far’: Kw miho; Ch miyó(to); SP mio ‘far off, at a distance’; CU miya. These two sets are of differing reductions, this from *mïyho(ka), in light of h in Kw and some SUA forms; *mïCka stressed a final adverbial -ka to cause reduction of -rḫəq- into one cluster. [1m,2r,2h2,3q] [SUA: Tep, TrC; NUA: SNum]

822 Hebrew *ta-npiil > *teppil: ‘cause to fall’:
UACV-838b ***tïppin** ‘trip’: KH.NUA: Sr tïpiñi’k ‘stumble, trip, catch one’s foot’; Ca če-tépin ‘trip, cause to stumble (of wood, stone), vt’. [NUA: Tak]
UACV-838a ***(tïN)pah(a)iC** ‘fall off/down’: TSh paheC / tïmpaheC ‘fall off/out of/down, come down’;

Sh pahaiC ‘fall off’; Cm pahitï ‘fall off, be born, drop off (as leaves from tree)’; Cm tïpïherï ‘fall (off or down from)’; Cm tïpehemi’arï ‘fall off’. [NUA: CNum]
UACV-1234 ***tïppi** ‘hunt, follow, track’: BH.Cup *təpi ‘to track’; M88-tï25; KH.NUA; KH/M06-tï25 ‘hunt, cazar’: Cp tepíne ‘follow, track’; Ca tépin ‘track, vt’; Ca tépin-če ‘trip, cause to stumble’; Ls tópi ‘to track’. Note underlying *-pp- (vs. *-p- > -v-) in all UA terms. [1t,2n,3p,4l] [NUA: Tak]

823 Hebrew **ba-yyamee^{y}** ‘in the year of, lit: days of’ > ***payami** > UA ***pami** 'year':
UACV-2603 ***pami** 'year': Wr pamíbame ‘years’; Wr pamíbari ‘year’; Tr bamí; bamíbari ‘year’; also Wr pamí(ni) 'summer’. The loss of intervocalic -y- also happens in Wr from Hebrew **ha-yyamiin-aa** ‘to the right’ > Wr ahamína ‘right side’—loss of -y- in 801, 823, 824. [p1b,p2y,p3m,p4y] [SUA: TrC]

Like the two above (801, 823), 824 below is a third example of loss of intervocalic -y- in most languages.

824 Hebrew **hayyownaa** / hayyoonat ‘dove’: UA ***hayowi** ‘dove’.
Note loss of -n- also in Ktn payo’ ‘handkerchief’ < Spanish paño; similarly, Sapir claims that single *-n- disappears and only geminated *-nn- survived in SP:
UACV-696 ***hayowi** 'dove': M88-ho3; KH.NUA; KH/M06-ho3: Two languages (Hp, Tb) agree with *howi: Hp höwi, pl: höwìit 'dove, mourning dove, white-winged dove'; Tb ’owii-t 'dove’. In contrast, three Numic languages show hewi: Mn heewi’ 'mourning dove’; TSh heewi-cci 'dove’; Sh heewi ‘dove’. Numic forms showing hewi (Mn, TSh,Sh) leveled the V’s from -ai- / -ay- in *hayowi > heewi, o shortened to be perceived as part of -w-; so as CU ’ayövi and Wc haïmï suggest the first vowel was *a*. Kw hoyo-vi ‘mourning dove’; CU ’ayö-vi ‘dove’; Ch(L) hiyovi; and Sapir’s SP iyovi- ‘mourning dove’ with the final syllable as part of the stem, as in CNum, all show -y-. Kw and CU seem to have reinterpreted the final -vi as an absolutive suffix, but Ch, SP, and CNum suggest otherwise, and we again see -w- > -v- in Num. Most of NUA suggest *hayowi. NP ihobi ‘dove’ transposed the h.

*hayowi > hewi (Sh, Mn, TSh)
> hayo > ’ayö- (CU), iyovi (SP)
> hoyo- (Kw), hiyo(vi) (Ch) > ihobi (NP)
> *howi > höwi (Hp)
> ’owii-t (Tb)

Only the -n- is missing. Wc háïmï/’áïmï 'dove' and the -howa- of Tr čohówari / čohóbari 'turtle dove' are probably related as well. Wc ï could be a leveling of -yow- (*hayow > haï). TO hoohi 'mourning dove' is probably related in some way, perhaps with preservative consonant harmony (*howi > hoohi), and TO does keep PUA *h sometimes.
[TO keeps *h; wN > m in Wc?, -n- > ø] [1h,2y,3w,4n] [NUA: Num, Hp, Tb; SUA: Tep, TrC, CrC]

825 Hebrew paʕal ‘make, perform’; Arabic faʕala ‘do, make’; Syriac **pəʕal** ‘work, v’
UACV-680 ***pu’ay/pu’al** ‘do’: B.Tep283 *vuai 'is doing'; KH/M06-po29: TO/UP wu’a/wua/wui 'do'; PYp vuihim; NT vueí/weí/vuééyi; ST vua; ST vuidya 'do, happen’. Is Cr baïre ‘help’ a loan from ST palvuidya ‘help’ like badger? [p1p,p2’2,p3l] [Tep]

826 Hebrew **maaħool** ‘dance in a ring, n’; Hebrew **məħolaa** ‘dance in a ring, n’ from the verb Hebrew ħwl / ħuul ‘go round, turn upon, dance (round) dances’; Arabic ħwl ‘turn, v’; Aramaic ħwl ‘dance, v’; Aramaic(CAL) mħwl’t’ ‘dance, n.m.’:
UACV-638 ***mulawa / *mulawi** 'dance, v': TO mualig '(of a person) to spin or dance'; Tb muuluwat 'dance, v’; Tb muuluwii-l 'dance, n’. Three consonants agree and a vowel-line transposition in TO. If the Tb vowels assimilated between the initial syllable’s u and the third C w, not to mention Tb’s tendency toward preservative vowel assimilation, then TO's vowels may be closer to the proto-vocalization (u-a), and were later transposed relative to consonants (p. 63); regardless, three consonants agree, and ***məħolaa > mula** with pharyngeal rounding influence, plus some suffix. [Tep V anticipation] [1m,2h2,3l] [NUA: Tb; SUA: Tep]

827 Hebrew **dqr / daqar** ‘pierce’; Syriac dəqar ‘dig, break, pierce through’; Aramaic(J) dɛqɛr ‘mattock’; Semitic dqr is at 70, but here it appears in a compound forming another UA term appearing to derive from Hebrew daqar paney ha’áreś ‘till the surface of the earth’ or daqar panaa-w ‘till its surface (surface-its):
UACV-2587a ***tïkir-panawa** 'work, cut': CL.Azt193 *təkïtï 'work, cut’; as M88-tï23 and KH/M06-tï23 note, this ties to *tïki ‘cut’ though here that morpheme is compounded with *panawa: CN teki-panoaa ‘work, v’ (as well as CN teki-ti ‘work, pay tribute, v’; CN teki-tl ‘work, tribute, n’); Tbr tekipa-(na)- ‘trabajar’. Note Yq tékil ‘trabajo, n’ and Eu tékirwa ‘trabajo, n’ without *panawa. Though possibly borrowed from CN, note

*tïki-panawa in Yq tékipanóa ‘trabajar’; My tekipanoa; TO čikpan ‘work (on), vt’; TO čikpana ‘work, n’; PYp tekpana ‘work, vi’. As for *tïkipanoa < *tïki ‘cut’ + *panawa, note Eu panava / panawa ‘trabajar’.
UACV-2587b *tïk... ‘work, cut’: KH.NUA: Sr tïhtï(i) ‘work, vi, vt’; Sr tïhtïyič 'work, n’; Hp tïkï 'cut’. I like Hill's tying these two together, for ‘cut’ (cut earth, cultivate) and ‘work’ pair themselves more than once in UA, and of course, initial *tïk in these and the above set makes the two groups likely related as well. Ktn cïk ‘stick, stab, vt’ may belong also.
UACV-2587c *tï’ai 'work': TSh tïtïai ‘work, v & n’; Cm tïrï’aitï ‘do work, v’. [k > ø as in deer] [iddddua]
[SUA: Tep, TrC, Azt; NUA: Hp, Tak, CNum]

828 Hebrew **šibbólet** ‘ear of grain’; Arabic **sunbul** ‘ear, spike (of grain); the nasal in a cluster (apparent in Arabic), with *kw + u = ku results in *suNkwul > *suŋul > *suŋu:
UACV-535 ***suŋu** 'corn': VVH93 *sunu 'corn, corn cob'; B.Tep81 *huunui 'corn'; M67-102 *sunu corn; L.Son263 *sunu; CL.Azt50 *sən 'dried corn, ear of corn'; M88-su5; KH/M06-su5; Jane Hill 2007: PUA *suŋu > SUA sunu > Tep (h)unu: TO huuni 'corn, ear of corn'; LP huun; NT úúnui; ST huun; ST hun vaa 'elote'; Op sunu-t; Eu súnu- 'caña de maíz'; Wr sunú 'corn'; Tr su*nu/suunú 'corn'; My sunu 'milpa'; CN sin-tli 'dried ears of maiz’. Ken (KH/M06-su5) and Jane Hill (2005, 2007) add Hp soŋowï ‘sand grass’ as the first 4 segments are as expected and a stand of seed-bearing plant is semantically similar. Jane Hill (2005, 2007) also notes the first morpheme of Gb ṣoŋ-áxey ‘tortilla’.. [nasals] [kw1s,2n,3b,4l] [NUA: Tak, Hp; SUA: Tep, TrC, Azt]

829 Hebrew kns ‘gather, wrap’:
UACV-473 ***kïna** 'cover': Sh kïnah 'cover, vt'; Cm nïï/hïh-kïnarï ‘cover s.th. over with s.th.’ We must consider a possible relationship to *kïna ‘cloud’. [1k,2n,3s1] [NUA: CNum]
UACV-498 ***pit-kanas** ‘loincloth, rear-cover’: Hp pitkïna 'kilt, breechclout' and Tb pigiiniš-t 'shirt'; the latter portion of these related to *kïna 'cover' above, and the *kanas of Cr ra’ankanasiin ‘lo cierra (en un bote) [cover it], lo tapa [put top on]’; Cr te’itáhnasi ‘lo cierra’; Cr ra’abá’anasiin ‘lo cubre [cover it], lo entierra [bury it], lo sepulta’. Cr appears to match the three consonants of Tb. [NUA: Hp, Tb; SUA: CrC]

830 Arabic ḍmm **ʿ**draw together, close, compress (as lips)’, Arabic impfv: ya-**ḍummu**; or Hebrew **ʕṣm** ‘to shut one’s eyes’; the impfv is unattested in the biblical Hebrew text, but is attested in later Hebrew ya-ʕṣom (< *ya- **ʕṣum**); the UA stem reflects the impfv stem, which usually starts with the 2nd C or the cluster of 1st and 2nd, yet Sh and Ca show an initial ïC- which fits the Semitic prefix *yV(C)-:
UACV-470a ***cu’ma/i** / ***cumma/i** ‘close eyes’: M67-92 *cum; I.Num259 *cu(’)(h)ma/*cu(’)(h)mi; M88-cu5; KH/M06-cu5: Sh ïccïmih 'to close the eyes'; SP čum’maa/-čum’mi ‘close one’s eyes’; CU w*ə*cu’mi ‘close the eyes’; Ca ïhcuma/i ‘to close the eyes (sg.)’; Ktn cu’m-ïk ‘close eyes, vi’; Ktn cu’m-k ‘close eyes, vt’; Kw cuma ‘bury, cover up’; Ch(L) čum’makatï ‘anything covered with earth’ at ‘bury’; WMU *hwi*čú’mi-kye / k*uh*čú’m*i*-(kye) ‘close the eyes’. Note initial V in Sh, Ca, CU. [kw1’2,kw2s4,kw3m] [NUA: CNum, WNum, Tak]

831 Syriac ʕmṣ / ʕammeṣ (< *ʕammiṣ) ‘close, shut (eyes)’; Hebrew **ʕṣm** ‘shut one’s eyes’ is thought by many Semiticists to relate to Northwest Semitic ʕmṣ, impfv *- **ʕmuṣu** of MHebrew, Aramaic(J) , Syriac; and to Arabic ġmḍ ‘close (eyes)’, impfv: ya-ġmuḍu, which corresponds to Northwest Semitic *- **ʕmuṣu**:
UACV-470b ***mucu(C)-ka** ‘close eyes’: Mn mucuqqa-t ‘have one's eyes closed’; NP mucoga 'close eyes’. [kw1g2,kw2m,kw3s4] [NUA: WNum]

832 Syriac srṭ ‘scratch, make a line or stroke, indent, draw or write a line’; Aramaic(J) sarṭaan ‘scratcher, crab, Cancer (sign of Zodiac)’; Syriac sarṭaan-aa ‘crab-the’; Arabic saraṭaan ‘crayfish, Cancer’; Arabic šrṭ ‘tear, scratch, impose as a condition’:
CU sïčú-či ‘crab’ and CU sïčú-ppï ‘fingernail’ obviously involve the same stem of CU sïčúC- with different suffixes. The fingernail set means ‘claw, nail’ and both are ‘scratchers’ and then the CU stem also means ‘crab’—a good match for the Semitic verb meaning ‘scratch’ with a noun meaning ‘crab’, especially when the noun matches the Aramaic/Syriac noun. The final -aan of Aramaic/Syriac corresponds to Canaanite / Hebrew -oon, so Aramaic/Syriac sarṭaan ‘crab’ would equate to **sarṭoon** (> UA *saCtuN, Hebrew o > UA u). Gesenius (1910, 48) explains that both *-aan* and *-oon* appear in Hebrew: e.g., širyaan / širyoon ‘coat of mail’. Furthermore, UA medial -c- and -t- and -l- are a nice array for the cluster -rṭ-. So a form like Ca sálu-l ‘claw, nail’ shows the exact vowels expected from sarṭoon, while the voweling *sutu means an assimilation of the 1st vowel to the 2nd, and the vowelings *situ / *sïtu are also understandable as both consonants of the -rṭ- cluster tend to raise and front vowels. Then to top it all off, both Tb(H) šullun-t and TSh -situn(cci) show the final -n, and other languages reflect a final consonant. Note also the UA verbs meaning ‘scratch, tear’ like Arabic šrṭ ‘tear, scratch’. An impressive array of correlations:
UACV-458 ***saCtun > siCtun / *suCtun** 'claw, nail': Sapir; VVH26 *su_utu/*si_utu 'fingernail, claw'; B.Tep82 *huutu 'fingernail'; M67-298 *sut; I.Num193 *situN 'claw, nail'; L.Son265 *sutu 'uña'; CL.Azt59 *ïstə; M88-su1; Munro.Cup77 *ṣulá-t 'nail,

hoof, claw'; KH/M06-su2 *sutïn (AMR): Mn ma/ta-sído 'finger/toe-nail'; NP cidu; maccidu 'claw, nail'; TSh -situn(cci) 'nail, claw'; TSh situhi 'to scratch'; Sh ma/ta-situn 'claws, finger/toe nails'; Cm ta-siito; ma-siito; Kw ta-šito'o-bï; Ch tasíco'o, masico'o; SP šïču, ma-šši(n)čo'-N; Tb(H) šullun-t 'fingernail, hoof'; Eu sutút; Tbr ala-pé-r; Yq sútu; AYq sutumi; Ca sálu-l 'claw, nail'; Ca saluki 'scratch'; Ca sáli 'tear, rip (clothes, body parts, etc); My sutu kócho'oria; Ls ṣulá-t 'claw, hoof, finger or toenail'; Ls ṣúla/i- 'be in an enclosure (of animals), vi, put in (pl objs), vt'; Wr suhtú; Cp ṣul'a; Tr sutú-ra; TO huč / huuč 'claw, hoof, fingernail'; Nv 'utu; PYp huhut; NT úútu; ST huut; Wc šïïté; Cr (sïté)kucape'e; CN iste-tl; Gb čúr 'hoof, nail'; Ken and Jane Hill add Tbr sutu-r 'mano'—an oversight by the rest of us. Tbr often has *-t- > -r-/-l-, so Tbr -t- suggests a cluster as well. Num medial -t- and -c- (vs. -r-) suggest a medial cluster *-Ct-, though Tb and Tak lost the evidence for a cluster, softening to -l- as do most intervocalic *-t-. Yes to Iannucci, Ken Hill, and AMR's reconstructions with final nasal, as Tb and CNum show it, Kw (-b) suggests it, and others of SNum and Tak show a final -C. An original first vowel of -a- is suggested by Ca and CU, which assimilated to point of articulation for *siCtun forms and assimilated to the 2nd vowel for the *suCtun forms.
UACV-957 ***taC-situ** 'hoof, i.e., foot-nail': TSh tasitun; Sh ta-sittun; Cm tasiito. [1s,2r,3t2] [NUA: CNum] [*t > c in SNum, *t > l in Tak, V > i/_t] [1s,2r,3t2] [NUA: Num, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

833 Hebrew **ṣbr** 'pour, heap up'; Akkadian ṣabaaru 'bend'; Syriac ṣbr 'condense (contain/restrict)'; Arabic ṣabara 'to tie, bind, be patient':
Tepiman soobidai (≈ UA ***cokwiya)** 'head off, stop, prevent': B.Tep200 *soobidai 'to head off'; M88-co18; KH/M06-co18: TO ṣoob|iđ 'stop, prevent obj from doing s.th., vt'; NT soobídyai 'head off, v'; NT soóbi 'he headed off'; ST soobidy 'head off'; ST soob 'he headed off'. [iddddua] [1s4,2b,3r] [Tep]

834 Hebrew 'ḫz / 'aḫaz **(< 'xđ)** 'take, grasp'; Syriac 'eḫad 'take, hold';
Arabic 'axađa 'take', impfv: ya'xuđu 'take':
UACV-392 ***u'**... / ***uNwa** 'take, carry': M67-431 'take'; M88-'u1 'carry'; KH/M06-'u1: Gb 'ú' 'take'; Sr 'uu' 'take, pick up, marry (woman)'; Sr na'uu' 'marry (either a man or a woman)'; TO u'u/ui 'accept, get, take pl objs'; TO u'a/u'apa 'bring, arrive carrying'; Eu úu 'traer, coger'; Wr u'i 'bring'; Wr(MM) u'u / u'i 'agarrar, coger'; Cr ï'ï 'carry (flat sg obj)'. Miller also lists Hp oya 'put pl objs'. Add Ca 'ú' 'put s.th. on the head, carry' and SP uŋwara 'catch (?)'; the 2nd consonants of both Hp and SP differ from the glottal stop of other forms, but we do see glottal stop alternations with w/ŋw and due to clusters. Note that both here and below, SP shows -ŋ- where most show -'-.
[*' = ' in Tep] [1',2h2,2x,3d] [NUA: Tak, Hp, Num; SUA: Tep, TrC, CrC]

835 Syriac 'eḫad 'take, hold'; Arabic 'axađa 'take', impfv ya'xuđu 'take'; Hebrew 'ḫz / 'aaḫaz **(< *'xđ)** 'take, grasp'; Hebrew impfv ye'eḫoz (< *ya'xuđ), also impfv yooḫez, but *ya'ḫez seems this proto-form**:**
UACV-386 ***yawi / *ya'wi / *yaŋwi** 'carry, grasp': BH.Cup *yaw 'bring'; M67-79 *ya 'carry'; I.Num289 *yaa 'take, fetch'; M88ya4 'carry'; KH.NUA; KH/M06-ya4: Mn ya 'put on, wear'; NP yahita 'carry'; NP(B) yakwi 'come with, bring, hold' (vs. hitá 'carry'); Sh yaaC 'get, carry, pick up'; Cm yaa 'take'; Kw yaa 'carry sg. obj'; Kw yaa-ki 'bring'; Kw yawi 'hold'; SP yaa 'carry one obj'; SP yaŋwi 'carry'; CU yáa'way 'carry, take by hand'; Cp yawiči 'carry'; Cp yáwe 'bring, carry'; Ca yáw 'to catch, touch, have, hold, take care of'; Ls yááw 'have, hold, take'; Sr yaa' 'take, carry'; Sr yaa(i) 'take, seize, catch'; Gb yáw 'tener'; Gb yá'a 'carry it!'; Hp yaaw- 'carry in/by hand'. Add Ch(L) yawi- 'carry in hand or arms'; TO đagi 'action with hands'; TO đagi-mun 'to massage, knead'; TO đagio'iđ 'take care of, support'; Ktn yaw 'grasp, grab, catch'; Ktn ya' 'carry, bring, vt'; and Tb yïïw 'hold, keep it' (Tb(H) yïïwut / yïwwut 'hold, keep, preserve') a small vowel change. Semitic-p has the prefix *ya- (vs. kw: yi-) and *-'x- (vs. kw: *-'ḫ-). A cluster *-'ḫ- in Sem-p would surely show -ŋ-, as SP does, but the fact that most do not makes me think -w- may reflect the Sem-p glottal stop *-'x-, and the UA glottal's rare appearance may be the -x- reduced to glottal stop and anticipated. Note similar semantic ranges of the TO terms and Ca yáw 'catch, touch, have, hold, take care of', and the segmental identity to *yawi. Miller also lists Aztecan forms like HN yawa'/yawi 'to go', which might be related with a semantic change from 'take, go get' to 'go', but support for such would be nice. And V > i before alveolars. ['/w, medial cluster?] [p:1',2h2,2x,3d] [NUA: Num, Hp, Tb, Tak; SUA: Tep; maybe Azt]

836 p'-šikur 'the-drink':
UA ***packo'or** 'sp. of prickly pear': PYp pasko'or 'type of prickly pear, durasnilla'; Tr péčuri 'nopal o tuna de conejo, Opuntia.' The Tr c and Tep s correspond, and a cluster being reduced in Tr is expectable, as is the raising and fronting of the first vowel in anticipation of the alveolar consonant; we must assume, however, that we are dealing with a compound. [iddddua] [cluster, vowel assimilations] [1p,2s1,3k,4r] [Tep, TrC]

837 Hebrew pɛṭɛr 'firstborn'; Semitic *paṭr- fits UA well:
UACV-305 ***pa'ti / *paCti'i / *pa-ci** (AMR) 'older sibling': Sapir; M67-489b *paci 'older sister'; BH.Cup *paṣ? 'older brother'; I.Num143 *paci('i) 'older sister'; L.Son183 *paci 'hermano mayor [older brother]'; AMR *pa'-ci 'older brother'; KH.NUA; M88-pa1 'older brother'; KH/M06-pa1 *pa'-ci: the following mean 'older brother': Ca pas; Cp páşma; Ls páá'aş;

Sr paar, pl: paaham; Tb paadzi; Eu bácwa/vácwa; Tbr wací-r; AYq avači (of a woman); My ábači (of a woman); Wr pa'čí; Tr ba'či; Cr haaci'i; CN aač-tli 'older brother of younger sister'; note CN ačto 'first'. The Num forms mean 'older sister': TSh paci; Sh paci; Cm paci'; Kw pazi; SP paci-; CU pací-ci. Kenneth Hill adds Ktn -par 'older brother', pl: paham. This etymon *pa'ti means 'older brother' in SUA and Takic, but 'older sister' in Numic; thus simply 'older sibling' or 'oldest' or 'first'. Add Op vapaci 'older brothers' (Shaul 1990, 565). Note CN showing nearly the same morpheme in both 'older brother' and 'first' except for differing vowel length. Also note the prevalence of the glottal stop (Wr, Tr, Cr, Ls, and Num); Iannucci's reconstruction (*paci'i) may work here for all of UA since the glottal stop hop is a frequent phenomenon in UA, especially in SUA, where Tr and Wr show that pattern in this set also. [']; cluster] 1p,2t2,3r [NUA: Num, Tak, Tb; SUA: TrC, Azt]

838 Hebrew npš 'to breathe'; Hebrew nɛpɛš 'breath, life, soul'; and unattested Hebrew ***hippiiš**:
UACV-302 ***hikwis** 'breathe, spirit, heart': VVH55 *hikwï(sï) 'breathe'; B.Tep308 *'iibïdaga 'soul, heart'; M67-60 *hik/*hikw; BH.Cup *hikwVsa; M88-hi3; KH.NUA; KH/M06-hi3: Hp hìikwis-ta 'breathe'; Tb 'ihk-(ït) / 'i'ixk / 'iihk; Sr hiik 'breathe, be alive, come to life, get/be well'; Ca híkus 'breathe, take a rest'; Cp hiqsá'e 'rest'; qusá'e 'breathe'; Ls hakwís 'to breathe, be alive, take a rest'; Gb híkin 'wind, spirit'; Eu híbes 'heart'; Wr iwí; Tr iwí/ew. Ken Hill adds Ktn hikaw 'breath, to breathe'; CN ikwšoaa 'sneeze, vi'; and queries whether Wc iweme 'vía respiratoria' is cognate. Perhaps borrowed from Tr, as Wc kw is the usual reflex for PUA *kw, while *kw > Tr w. Note medial *-kw- > -w- in Tr/Wr. Eu b < *kw and Tr, Tak, Hp, and Azt also show medial *kw, from an unattested hiqtiil: *hinpiiš > hikwis. [kw] [NUA: Hp, Tak; SUA: TrC, Azt]

839 Semitic napš 'spirit' prepounded with paa 'water'; that is, water-spirit > fog/mist:
Hp panéwsi 'mist, fog' (Voegelin 1957, 15). [iddddua]

840 Hebrew **pwṣ** 'spread, disperse, overflow'; scatter is what a wind does when it blows:
UACV-261a ***puca** 'blow' (AMR): B.Tep286 *vusitai-i 'blow'; M67-49a *puc, 49b *puhi; CL.Azt17 *piica 'blow', 43 *aapiica 'defecate, have diarrhea'; L.Son219 *puca; KH.NUA; M88-pu12; AMR 1992b; KH/M06-pu12 *puca (AMR): TO wus 'exhalation'; TO wuso(t) 'blow on obj'; Nv bustana; busiota 'soplar'; NT vúšt^{y}ai / vúštïai; ST vušt^{y}a; Eu pupúca; Wr pupúce; Tr pučá; Wc hïcie; CN piica 'blow on s.th., huff and puff with anger, play wind instrument'; CN tlal-piica 'blow, huff, v.'; CN il-piica 'inflate, blow s.th. up'; Yq púhta; My puhtía(k); Sr poihkin; Gb pú'i; Cp puwe; púwine 'blow on, into'; Ca pú'an / púwan. Hp poya(kna) 'puff at' shows AMR's law *-c- > -y- (AMR 1992b). SUA is quite consistently *c, and Hp shows expected y (< *-c-). Tb(H) puuyut, pfv: uupuy 'be full, get full' corresponds to Hp and the others, and aligns with another meaning of Semitic pwṣ, that is, 'overflow'. Maybe Tb(H) puškat, impv uppušk 'blow'; Tb(M) puskat/'upusk; Tb(V) pušk. [iddddua] [NUA: Hp, Tb, Tak; SUA: Tep, TrC, Azt]

841 Semitic *pṣl; Hebrew piṣṣel, impfv: -paṣṣel 'skin, peel away (bark from sticks), decorticate';
Hebrew **pəṣaalaa**, pl: pəṣaaloot 'stripped sections (of sticks)'; Arabic faṣala, impfv: -pṣilu 'separate, part, detach'; Arabic bṣl II 'peel off skin, strip layers (as from onion)'; whether from unattested impfv *-pṣal with loss of -p- in a cluster or from the denominalized noun **pəṣaalaa**:
UACV-2020 ***cala/i** 'bark, shell': Cp čála-l 'bark'; Cp čále 'husk, shell, vt'; Ca čáli 'to hatch (eggs as a bunch)'; Ls čáála/i 'break off pieces from a surface, as bark from a tree, flakes from a rock, vt; lose shingles in a windstorm (of a house)'. [1p,2s4,3l] [NUA: Tak]

842 Hebrew piṣṣel, impfv: -paṣṣel 'skin, peel away (bark from sticks), decorticate'; Arabic faṣala 'separate, part, detach'; the UA vowel in ***ci**la aligns with Semitic, as in the Arabic impfv stem -f**ṣilV**, which vowel (i) is rare; a verb of similar meaning, which also matches the correspondences is Arabic bṣl II 'peel off skin':
UACV-144 ***cila** 'to shell, hatch out, be born': M88-ci22; KH.NUA; KH/M06-ci22: Sr čilykam 'small children'; Ca čílyay 'to shell (nuts, etc.)'; Ls čiila/i 'hatch out (of chicks), remove shell'. These may relate to *cali 'shell, hatch' and *cala 'bark'. These match the impfv stem which would lose p as first element of a cluster. [loss of p in cluster; V's i-a/a-i] [1p,2s4,3l] [NUA: Tak]

843 Hebrew piṣṣel, impfv: -**paṣṣel** 'skin, peel away (bark from sticks), decorticate';
Arabic faṣala 'separate, part, detach'; Arabic **baṣṣala** II 'peel off skin':
UA *pacca 'to shell': Tb(H) paccaah 'to shell, vt'; Tb pacaahil 'shelled pine nuts'. This is problematic in that we would expect c > y or ṣ > s, unless ṣṣ > cc after the productivity of c > y. [kw1p,2s4,3l]

844 Hebrew **piṣṣel**, impfv: -paṣṣel 'skin, peel away (bark from sticks), decorticate';
Arabic faṣala 'separate, part, detach'; Arabic baṣṣala II 'peel off skin':
UACV-1582 ***pisa** 'out, go out': M67-199 *pis 'go out'; M88-pi11 'go out'; KH/M06-pi11: Tb piššat~'ipiš 'exit, go / come out, be born, emerge from'; Ls pisá-t 'outdoors, outside'; Ls pisá-ŋa 'go outdoors, urinate'; Ls pisa-y

‘go outdoors’. *pisa ‘urinate’ (Ls pisá-ŋa-, Ca pis) is maybe same stem as *pisa ‘go/come out’ since identical stems ‘go out’ and ‘urinate’ were custom before indoor plumbing. [iddddua] [p1p,p2s4,p3l] [NUA:Tb, Tak]

845 Hebrew piṣṣel, impfv: -paṣṣel ‘skin, peel away (bark from sticks), decorticate’; Arabic faṣala ‘separate, part, detach’; Arabic bṣl II ‘peel off skin’; the Tb form below fits the Semitic impfv pattern: yi-pṣal: Tb(H) ii’šat ‘shell, vt’. [p1p,p2s4,p3l]

846 Hebrew piṣṣel, impfv: -paṣṣel ‘skin, peel away (bark from sticks), decorticate’; Arabic faṣala ‘separate, part, detach’; UA aligns with Semitic/Arabic impfv stem ta-f**ṣil**V:
UACV-2018 ***taCca** / ***ta’ci** 'bark, shell': Ca táča-l 'bark of a tree'; Ls tááci 'bark, shell (as of turtle, nuts)'; perhaps also related are Cp táče 'hatch' in the sense of 'shelling oneself' and Ca táča 'lie down on back' since 'back' and 'bark' show semantic ties elsewhere (B.Tep105a *komi 'back, bark of tree'). Tr ŕa’čí ‘concha’. Perhaps CN tapač-tli ‘sea shell, cora’. [reduction; *-c- in NUA < -CC-?] [SUA: TrC, Azt; NUA: Tak]

847 Hebrew pol ‘bean(s)’:
UACV-132 ***(tï-)pol** 'bean': a case for *-pol- (or *tï-pol) in Ca tévil- of Ca tévilmalem / tévinmalem 'beans, pink beans' (since Ca i < *o), the -wol/pol portion of TO hawol/hawpol 'lima bean’ if a different morpheme before -wol/pol, Eu tépar 'kind of bean' if vowel changed. Maybe Tbr tolom 'pochote, frijol pinto’ (tï-wol > twol > tol...). [1p,2l] [NUA: Tak; SUA: Tep, TrC]

848 Hebrew/Aramaic **ba** ‘in/at it (fem sg obj)’:
UACV-78 ***-pa** ‘at, in’: Hp -pa/-va ‘diffusive suffix, distributed along, in, or on an area, on surface of’; Ch -va / -vah /-vaa 'at, future’; Ch upa’a ‘in, locative’; CU -vaa(-tï) 'at'; CU -vá-(tï) 'on'; CU -vaa-tux 'to, toward'; SP -pa 'at'; Nv ba; aba; ubai hubana; Tr -mo-ba ‘on’. Also the final *-pa in Tr ŕepó-pa 'espalda'; Tr ŕepo-gá 'dorso, espalda'; Tr ŕepo-mina 'de espaldas, sobre la espalda'; Wr tehpóba ‘back’; Tbr ha-vá-n, ho-vá-n ‘dentro de’; Wc -pa ‘en, dentro de’. [p1b] [NUA: Num, Hp, Tak; SUA: Tep, TrC, CrC]

849 Aramaic be ‘in/at it (masc sg obj):
UACV-79 ***-pï** 'at': KH/M06-ns10: Kw -pi/-vi 'at, on'; Hp -pe, -ve ‘punctive suffix: at, in, or on’, -ep ‘there, at, in, on’; Gb -ve; Cp -eve'aw 'on, over, in'; Ca pé-tuk ‘under, inside’; Ktn -pea, -vea ‘locational/derivational suffix = ‘at’ etc; Eu vepé 'encima, sobre'; Eu vepévai; Yq béas ‘a dentro’ and the first parts of *pï-pan in Yq béppa; AYq vepa; My beppa; Tbr we-pán 'sobre, encima de’. [p1b] [NUA: Tak, Hp, Num; SUA: TrC]

850 Hebrew(KB) **mə’od** ‘strength, very, very greatly, exceedingly, adv (< ‘strength, n’); Ugaritic mad / mid / mud; Hebrew(BDB) **mə’od** ‘muchness, force, abundance, exceedingly’; Akkadian ma’du ‘much’:
UACV-15 ***mu’i** ‘many, much’: B.Tep157a *mu'i 'many'; 157b *mu’idu 'there are many'; M67-276 *mui ‘many’; L.Son154 *mui ‘muchos’; CL.Azt112 *məyak 'much' < 256 PUA**mï(’)i 'much': TO mu'i; LP mu'i; NT mui; ST mui’; Eu múi 'mucho'; Wr muáe-na 'haber mucho'; Tr mu/mo 'varios, muchos, aumentativo'; Tbr mui/mui-á-r 'muchos'; Cr mwí’i 'many'; Wc mïiré ‘muchos, numeroso, plural’; Wc mïiṣa 'mucho tiempo'; CN miyak 'much, many’. Sapir cites Ls muyuk 'much’, which reflects CN miyak ‘much’. The *y* of some forms may be a reduction of *mu’i... > muy... after loss of ’ or excrescent as adjacent to i. Likely from Sem-kw with fronting of *o > i/_d, as is typical of Sem-kw before r, d, and such alveolars. Also Wc mïiré and Tbr and others may reflect the final -d. [kw1m,2’,3d] [NUA: Tak; SUA: Tep, TrC, CrC, Azt]

851 Akkadian paanu ‘front, pl: face’; Hebrew ***paanɛ** ‘front, face, surface’, pl: ***paniim**, pl construct **panee^{y}-** ‘face, surface of’: Hebrew **panaa-w** ‘face-his, surface-its’ (panaa- ‘face’ with the m.sg. suffix):
UACV-829 ***pana** ‘cheek’: Tr baná ‘mejilla [cheek], carrillo, cachete, cara [face], rostro’; Wr paná ‘cheek, face’. [p: 1p,2n,3y] [SUA: TrC]

852 Akkadian paanu ‘front, pl: face’; Hebrew ***paanɛ** ‘front, face, surface’, pl: ***paniim**, pl construct **panee^{y}-** ‘face, surface of’:
UACV-77 ***pani/pana** 'on, on surface of’: CN pani 'on top, on the outside or surface'; CN -pan 'on the surface, for or at a particular time, postp.'; Tb taŋaaban 'on top'; Tb wataaban 'on top'; Tr paní 'arriba en la falda [up on the ridge]'; Tbr -pá(-n) 'locativo: en, dentro de, sobre'; Cr an 'on top'; Cr hapwaán 'encima, sobre'; SP -paa-N 'at'; TSh pa’an/pan 'on, above, at, about, by (means of transport)'; Sh(M) panai 'up, high'; Sh(M) pan 'on'; Sh(M) pa’a ‘up, high’; Sh(Cr) pan, panaiC, pa’ai, pai, pankaiC 'up, high, above’. Many *pani/pana forms suggest a meaning of ‘surface, flat surface.’ Note TSh pana(pin) 'chest, front of body' and CN eelpan 'chest (lit. organ-surface)' relative to *pana/pani 'surface, on'; and Sh(M) pana ‘front of the body’; Sh(M) mappana ‘palm of hand’; Sh(M) tappana ‘sole of foot’; Sh(M) panapuih ‘mirror’; and Tr and Wr pana 'cheek' (at ‘face’) also relate, as chest, cheek, palm, and sole are all body parts with a surface. Sh shows pan ‘on’ and pa'a 'up, high' and panai 'up, high.' [p1p,2n,3y] [NUA: Num, Tb; SUA: Azt]

853 Aramaic(S) ħippušit-aa ‘beetle-the, n.f.’; Arabic *xunpusaa’ / xunpus ‘beetle’; Aramaic(J) ħippuušiit ‘scarabee, beetle, n.f.’:
UACV-317 ***wippusi > *pippusi** ‘stink beetle’: Ch wiposat ‘13-line beetle’ (Harrington noun list); Mn pipóísi/piboisi ‘stink beetle’; NP pipuzi ‘stink beetle’; Sh pippusi 'stink beetle’. This is in all 3 Numic branches, and Ch may reflect an original form, from which the others harmonized consonants. This is a most interesting parallel in that a cluster in Arabic showing first consonant as -n- always doubles the 2nd consonant in Hebrew and Aramaic : Proto-Semitic/Arabic *-nC- > -CC-; thus, *xunpusaa’ > ħippušit > UA *wippusa / *pippusi, a lengthy (6-segment) match. The -p- in Ch (vs. -v-) and the other languages show *-pp- in UA as well. And the vowels are identical to Aramaic *-i-u-i. [kw1x>h2,kw2pp,kw3s1,kw3t] [NUA: WNum, CNum, SNum]

854 Hebrew **saas** ‘clothes moth’ (< *sws); Akkadian saasu ‘moth’; Arabic sawisa ‘be worm-eaten, moth-eaten’, impfv: ya-swasu; Arabic **suus** ‘woodworm, mothworm’; Aramaic(J) **saas-aa** ‘moth, worm-the’; because UA *s > Tepiman h, TO and ST show *soso- in compounds for ‘butterfly’:
UACV-328 ***soso-kimara** 'butterfly': B.Tep71 *hohokimara 'butterfly'; M88so13; KH/M06-so13: TO hohokimal; NT totóókimara ‘butterfly’ (different 1st morpheme); ST hookmar/hokmar. Remember that Tepiman h < UA *s. NT has a different prefix, while both TO and ST reflect *soso- or *so(s)- with *-kimar ‘butterfly’; because long aa (as in Aramaic long aa) corresponds to Hebrew long oo, or sometimes changes to long oo, then enough round vowels are potential or seen (Arabic suus) in the Semitic data above that UA *soso or *so(s) ‘moth’ is a compelling match. [medial C, vowels, L/liquids] [s3,2s3] [SUA: Tep]

855 Hebrew **yħm** ‘be in heat’ (alternate form of ħmm ‘feel warm, get warm’); Arabic waħam ‘rut, heat’ (Arabic initial w corresponds to Hebrew initial y); Aramaic(J) yaħem ‘to heat, vt’ (paʕel):
UACV-528 ***yuma > *yoma** ‘copulate’: VVH111 *yoma ‘copulate’; M67-99 *yo; M88-yo3; KH/M06-yo3: VVH list TO doom and Tb yoom; Ca yím ‘have intercourse’ also corresponds to TO and Tb, because Ca i < *o. Add Hp yomi(-k-) ‘give a pelvic thrust, simulate copulation’; Yq nau yuuma-k ‘unir’, both of which may display the original vowel—*yuma > *yoma—TO, Tb, and Ca possibly subject to lowering of *u > o/_a. [1y,2h2,3m] [NUA: Tb, Tak; SUA: Tep, TrC]

856 Hebrew **yħm** ‘be in heat’ (alternate form of ħmm ‘feel warm, get warm’); Arabic waħam ‘rut, heat’ (Arabic initial w corresponds to Hebrew initial y); Aramaic(J) yaħem ‘to heat, vt’ (paʕel):
UACV-1210 ***yu’mi / *yuwmi** ‘warm’: M67-453 *yu ‘warm’; I.Num293 *yu’a/*yu’i ‘warm’; M88-yu9 ‘warm’; KH/M06-yu9: Mn yuwi ‘be warm, v’; NP yui; Sh yuai ‘warm’; Cm yu’a ‘warm (of weather)’; SP yuuttui ‘warm’; SP yu’mi ‘warm (of water)’; yu’ata (of weather); Hp yoŋi ‘be warm’. Hp and SP suggest a medial cluster rather than a single consonant. [cluster] [1y,2h2,3m] [NUA: Num, Hp]

857 Hebrew ħlp ‘come by turns, pass on, pass over, fade away’ > Wr yuipa ‘be worn out’. [iddddua] [1h2,2l,3p]

The following two sets for ‘ankle’ are successive sets in the Uto-Aztecan Comparative Vocabulary, and both match Semitic qrsl ‘ankle’ but each matches a different voweling of those four consonants: Semitic qarsol ‘ankle’ > UA *kwinco ‘ankle’; and Semitic qursil / qursin ‘ankle’ > UA *koci ‘ankle’:

858 Hebrew qarsol ‘ankle’; Middle Hebrew qarsol/ qarṣol ‘ankle’; Aramaic(J) qarsool / qarsull-aa ‘ankle’; Assyrian kiṣallu:
UACV-40 ***-kwinco-** in UA ***ta-(k)wi(n)co-ko** 'ankle’: Mn ta’wizógo; NP daggwiddzogo; TSh tawincoko. *ta-(k)wi(n)co-ko is a compound: ta- ‘leg, foot’; -ko ‘at’; and remaining *-kwinco- matches with rounding of Sem-p’s q, a > i from either unstressed centralization or assimilating to the alveolar C, liquid r > n, and affricativization of s in a cluster. [kw1q,2r,3s3,4l] [NUA: Num]

859 Syriac **qursəl-aa** ‘ankle bone’; Akkadian **kursinnu** ‘region of the ankle-bone’:
UACV-41 ***koci** 'ankle(bone)’ Kaufman1981; Manaster-Ramer(1992b) cites this set in "A Northern UA sound law: *-c- > -y-": he lists Hp qöyi {Hp sìiqöyi 'anklebone' (Hill); Hp(V) síyiqöyi 'ankle’}and Tr baca-koci {Tr baca-go(a)-ra 'tobillo'; Tr baca-koči 'en el tobillo' (locative of Tr baca-goa-ra)}. If the UA equivalent of the Tr locative suffix Tr -či 'at, in' is fossilized in the Hp cognate, then they match. The -koš- of TO čïkoš-da 'ankle rattle’ (*-koc > Tep -kos) fits *koci. Add Azt *koc ‘heel’ with slightly shifted semantics: CN(RJC) in-koc-titeč ‘on their ankles’ and ikooc 'heel' in Nahuatl de Sierra de Zacapoaxtla.
[*-c- > NUA y; *c > Tep s] [p1q,p2r,p3s3,p4l] [NUA: Hp; SUA: Tep, TrC, Azt]

860 Hebrew qaaṭaan ‘small, young’; Hebrew qaaṭoon ‘small, young’:
UACV-145 ***kuci** 'child, girl': Tr ku*či 'girls'; Tr kuči 'little ones'; Tr kúčiwa 'son(s), duaghter(s), i.e., offspring of either gender'; Wr kuh-tewé 'girl'; Wr kucitá, ku’-kucí (reduplicated form) 'son, daughter'; CN kokocin 'girl, servant girl'; note how similar are CN kokocin and Wr ku’kucí ‘children’. [p1q,p2t2,p3n] [SUA: Azt, TrC]

861 Hebrew qšy / qaašay ‘be heavy, hard, difficult’; Aramaic(J) qəša’ ‘be hard, difficult’; (qš’ lib-e ‘hard-hearted’); Aramaic(S) qəše ‘hard, severe, difficult, harmful’; Arabic qsw ‘be harsh, cruel, treat severely without mercy’; Syriac qš’ / qšy / qəša’ / **qəšaa** ‘difficult, severe, strong (of smell), **harsh (of taste)**’:
UACV-239 ***kïsa** 'sour': Ls kóṣa/i 'be sweet or salty'; Ls kuṣ-úla 'be sour' (listed with koṣa/i); Cp keševelvekéševelva'a-š 'too sour, adj’. [iddddua] [*ï > Ls o > u] [NUA: Tak]
UACV-2090 ***kïsa** 'harm(ed), bad': M88-kï16; KH/M06-kï16: Cp kéše/ kəṣ- 'to injure, hurt'; Sr kï^{r}ṣaa’ 'bad'; Sr kï^{r}ṣaa’ik / kiṣaa’t 'badly’; Ktn kïša’ ‘no good, bad’. Notice that Semitic meanings include ‘harmful’ as Cp, and ‘cruel, harsh’ for Sr and Ktn; and ‘harsh of taste’ for ‘sour’ in UACV-239 above. [p1q,p2s1,p3’] [NUA: Tak]

862 Hebrew **qbṣ**, niqṭal 3rd impfv: **yiqqabeṣ** ‘assemble, be assembled, gather, meet’ (that is, ‘come, arrive’; stress on 1st and 3rd syllables causing loss of stress on 2nd syllable and loss of the -q- syllable); Arabic qbḍ (i) ‘seize, grasp, collect’, impfv **ya-qbiḍ**(V); Hebrew qittel 3rd impfv: yəqabbeṣ ‘gather together’; Hebrew 3rd yit-qattel impfv: yitqabbeṣ ‘gather, meet’:
UACV-58 ***yïpisa (> *yïpsa / *yipisa)** ‘come’: B.Tep20a *divia ‘he comes’; M67-97 *ye 'come (sg.)’; M88-yï7; KH/M06-yï7: TO jiwa; UP jiwia; LP divia; PYp devia; NT dyidyíívai/dïidïíívai 'venir, regresar, llegar'; Yq yépsa sg.; My yépsa- sg. B.Tep20b *dïvi agai 'he is going to come' is also related. The three consonants—y, p, s—are evident, though in the Tep languages, where *s > h, the resulting h in a cluster would hardly last long, leaving Tep *diva (< *yipsa), as in NT, or *yipisa > Tep *divi(h)a as expected in UP, LP, and PYp. I do not find B.Tep20a *divia 'he comes' nor B.Tep20b *dïvi agai ‘he is going to come’ listed in M88; however, Kenneth Hill includes B.Tep20 in KH/M06-yï7. Tep *diva / *divia fits Cah *yepsa quite well, with a slight vowel change, which occurs in Tep itself, since PYp and B.Tep20b *dïvi agai both show the first vowel to be ï also. Of the two Yq forms—Yq háse 'alcanzar' and Yq yépsa 'viene, llega'—it seems the latter belongs here (likewise for My yépsa) and the former belongs with *hapsi/ha’si below. A *yïpisa/*yipisa vs. *hapsi division is preferable, since both the initial C and first V are different. [p1y,p2q,p3b,4s4] [SUA: Tep, TrC]

863 Arabic qbḍ (i) ‘seize, grasp, collect’, impfv: ya-**qbiḍ**(V); Hebrew qittel infinitive: qabbeṣ ‘gather together’, **qabbəṣ-i** (with a suffix); or Hebrew qbṣ (in hitqattel pl) (hit/yit)**-qabbəṣu** ‘gather, meet’ (> *qabsu > UA *hapsV);
UACV-57 ***ha’si / *hapsi** 'arrive, reach, catch up to': Sapir; VVH59 *’asï/*’asi 'arrive'; B.Tep298 *’ai(himi); CL.Azt3 *ahsi; L.Son53 *hasï/*has-i; M88-ha9 'arrive'; AMR1993; KH/M06-ha9: Eu hasé/hási; Tbr así/hasé; Wr asi-néa ‘arrive’; Tr sí 'llegar o nacer varios'; CN a’si 'reach, arrive'; HN ’asi’ 'arrive'; Pl ahsi 'arrive, find, encounter, reach, catch up with, fit’; TO aha/a’ahe/aa’i ‘overtake, reach’; NT ááhyi ‘arrive, reach, be enough’. Sapir includes Wc aše 'llegar varias veces’ which was left out of later cognate collections, but belongs. Add Yq háse 'alcanzar, perseguir’ and Cp háşi/háşe ‘go’. This set is discussed in Manaster-Ramer 1993, where he brings evidence to bear that we are dealing with a medial cluster. There he introduces Tb apsV 'arrive' from the Harrington materials. The final -i vowel could be UA’s default schwa when speakers tend not to end words with consonants. [cluster; Sem ṣ > ’ in Num ? not in Tb, Hp] [p1q,p2bb,p3s4] [NUA: Tb, Tak; SUA: Tep, TrC, CrC, Azt]

864 Arabic **quppat** ‘large basket’; Aramaic(J) **quupp-aa** ‘basket, large vessel’ and **quupt-aa**; Later Hebrew quuppaa ‘basket, tub, ball’ (Jastrow 1337); Later Hebrew quuppaa ‘basket’ (Klein 586). The Hebrew plural would be ***quuppoot**:
UACV-119 ***koppot** ‘basket’: Ls qéépiš ‘baby basket’; Sr qöpöt ‘round kind of basket’ (note also Sr qöpöt-t ‘turtle’). The -p- vs. -v- in the above languages derives from a doubled consonant, as we see in Aramaic. Of interest is the Sr form, which aligns well with the Aramaic pl of a f. noun: quppoot [p1q,p2pp,p3t]

The next three items relate to Semitic ṭmn > ṭmr ‘hide, bury’ (Aramaic) with reference to ‘cooking underground or under ashes’; see 866 Nahuatl tamal-li also originally cooked underground with coals/ashes’.

865 From Semitic ṭmn > Aramaic ṭmr ‘hide, bury’ with references to ‘cooking underground or under ashes’ is Hebrew ṭmn ‘hide’ which in Post-Biblical Hebrew also meant ‘put in an oven’ (Klein 245) besides ‘hide under the earth, cover with earth’; Aramaic changed n > r, as it often does (ben ‘son’ > bar ‘son’); Aramaic ṭmr was then borrowed into other Semitic languages, such as Arabic ṭamara ‘bury, cover with earth’ as both

KB and Klein note; Akkadian ṭamaaru; Aramaic(S) ṭmr ‘hide, conceal’; Aramaic(S) ṭəmiir ‘hidden’; Syriac ṭmr / ṭəmar ‘hide or bury under the earth, cover with earth’; especially note Syriac **ṭəmiir-taa ‘a loaf baked in ashes’** and Akkadian **tumru ‘ash(es), cinder, bread baked over coals’:**

UACV-527 ***tï’ma / *tï’ama’a ‘roast, bake (under ashes, under ground), bury’**: M67-353a; KH.NUA; M88-tï54 'roast'; KH/M06- tï54 'roast, bake’: Sr tïï’ 'roast, bake, vi’; Sapir lists the identical SP terms separately: SP tï’ma ‘to roast under ashes’ and SP tï’ma ‘bury’ but then wonders aloud whether they are not the same item. Indeed they are as the rest of UA shows, though with the clustered -r- anticipated: ṭumra > tï’ma. Add Hp tïï’ami ‘grave’; Eu témo ‘enterrar [bury, inter]’; and Wr(MM) we-temáhi ‘enterrar [inter]’. Several other SNum forms are consistent with SP: WMU tm̈’má-y ‘bake (usually underground)’; Ch tïm’á ‘bake, v’; SP tï’ma- ‘roast under ashes, bury’; CU tu’máy ‘bake, roast’. Some terms point to *tï’ama ‘bury, grave': SP tï’ma ‘roast under ashes, bury’. Tb(M) tï’ma’at ‘gasp for breath, for instance, while drowning, choking, or suffocating’ [or while covered] is nearly identical to SP phonologically, but varies semantically. Sapir also lists SP tocci-rï’ma-ppi ‘roasted bread’. [V’s] [NUA: Num, Hp, Tb, Tak; SUA: TrC]

866 From Semitic ṭmn > ṭmr ‘hide, bury’ (explained above) are several Semitic forms but note especially Syriac ṭmr / ṭəmar ‘hide or bury under the earth, cover with earth’; and Syriac **ṭəmiir-taa ‘a loaf baked in ashes’** and Akkadian **tumru ‘ash(es), cinder, bread baked over coals’:**

UACV-284 ***tïmal-** ‘tortilla, tamale’: M88-tï8 'tortilla'; KH/M06-tï8: TO cïmait; Wr temei; Tr ŕemé 'tamale, hacer tamales’; CN tamal-li ‘bread made of steamed cornmeal, tamale’. “Is Hp tïma 'stone griddle' cognate?” Miller queries. Yes. Ken Hill adds Cr temwá ‘tamal’. Jane Hill (2007) adds ST tïmaiči ‘tamale’. PB tïmi-ta ‘tortilla’ (Estrada Fernandez 2003, 184) also belongs. Add the latter part of Nv vivak tïmaita ‘pan de piciete’. The SNum forms below may represent the underlying verb as well. I include the liquid l in the reconstruction due to (1) its presence in CN, (2) the general lack of proto-dipthongs in UA, which dipthongs are usually due to loss of an intervening C or assimilation (i.e., ai < *aCi or aiCi < *aCi), (3) the fact that UA liquids often encourage assimilation toward, if not become, high front vowels (*l > i/ï), and (4) the presence of such a high front vowel in other reflexes where CN's liquid is. These tie to *tïm’a / *tï’ma ‘bake under ashes, bake underground’: Ch tïm’a- ‘bake’; SP tï’ma- ‘roast under ashes’; WMU tïm’ma-y ‘bake or roast (usually underground)’ and others found at ‘cook’, including Kw tï’ma at both tï8 ‘tamale’ and tï54 ‘roast, bake’. [Liquids and high front V’s] [NUA: SNum; Hp; SUA: Tep, TrC, Azt]

867 Syriac ṭmr / ṭəmar ‘hide or bury under the earth, cover with earth’; Syriac **ṭəmiir-taa ‘a loaf baked in ashes’;** this stem stems not from the impfv qal, whose vowel is o/u, but is similar to the hi-qṭil—hi-ṭmar—which creates a cluster, in which the first is lost, and the -marV is left. The hi- becomes rather optional in UA, yet note its appearance in Op hima; Eu himá:

UACV-324 ***ma’a / *mahi** 'bury': M67-108 *ma ‘cover’; L.Son129 *ma ‘cocer al horno’; M88-ma10 ‘cover’ and ma24 are correctly combined in KH/M06ma10: My máá’a ‘enterrar’; Wr mahi-ná 'bury, cook in the ground'; Tr má- 'cocer al horno’; TO ma’i ‘cover (food) in a roasting pit’; Op hima; Eu himá;
Yq má’a ‘enterrar’; AYq ma’a/hima’a ‘bury, vt’ (in contrast to Yq hímma’a ‘tejer’); AYq ma’ari ‘buried’; AYq hima’awa ‘burial, funeral’. L.Son129 includes Eu(north) hima and Opata hima. Ken Hill adds SP na-ma’ni or SP na-soko-ma’ni ‘cover self with moist earth’; Cm mana’koroomi ‘cover s.th. over’; TO ma’išp ‘cover, vt’; TO ma’i ‘pit roast’; TO mamma’ikud ‘roasting pit’; Eu meitemon ‘echar a tatemar mescal’. Perhaps also Tbr mwai-rá-n 'asado’. Miller includes Tb masat~’amas ‘cover, vt’; Tb maasat ‘bag’ though the variety of medial consonants (h, ’, s) creates problems beyond initial syllable (which is all Miller reconstructs). [NUA: Num; SUA: Tep, TrC]

868 Aramaic ṭwr- / ṭuur-aa ‘rock, hill, mountain-the’:

UACV-1459 ***toya** ‘mountain’: I.Num221 *toya ‘mountain’; M88-to18 ‘mountain’; KH/M06-to18: Mn toyábi; TSh toyapi(n); Sh toya-pin; Cm toya; SP toya (found only in song, likely borrowed from Sh, say Sapir and Miller). SNum *toyaN: Ch(L) toyompï ‘boulder’; Ch(L) toyoŋkarïrï ‘Boulder Sitting (name of mtn)’; SP toiampï ‘gravel, rocks big and small’ with nasalization. [r > y in Sem-p? Or Sem-kw?] [1t2,2w,3r] [NUA: Num]

869 Syriac ṭaan / ṭa’n ‘body of a shirt’:

UACV-495 ***taa’** ‘shirt, clothing’: SP taa’ü ‘shirt’; CU táa’ ‘shirt, clothes’; WMU taá’*a* / taá’ ‘clothes, shirt, dress, n’; perhaps Ktn tavï-č / taavï-č ‘buckskin’ and Ktn tavï (referring to clothes). Jane Hill notes that these may tie to UACV-256 *tawayi, 148 in this work. [1t2,2’,3n] [NUA: SNum, Tak]

870 Syriac(CAL) bwẖšyn(’) ‘green herbs’; Syriac buuẖšiinaa’ ‘tender grass, herbage in a field’:

UACV-1075 ***puhiC** ‘green’: I.Num157 *puhi ‘green’; M88-pu15; KH/M06-pu15: Mn puhi ‘blue, green’; Mn papuhi ‘grass’; NP puhi ‘blue, green’; TSh puhi/pui ‘blue, green’; Sh pui ‘green’; Sh puiC, pui-ppïh ‘grass’; Kw puhi-gi ‘green’. [iddddua] [NUA: Num]

UACV-1296 ***puhiC** ‘leaf’: NP puuhi-ggwiddaddï; Cm puhi(pï). *puhi in the outer languages (NP, Cm) and *pisi in the inner languages (Mn, TSh) recommends contact holding more influence on these forms than genetics. [p1b,2h2,3s1,4n] [NUA: WNum, CNum]

UACV-1295 ***pisi** ‘leaf’: Stubbs2003-38: Mn pisi ‘leaf’; TSh pisi(cci) ‘leaf’; PYp vihigim ‘have complete leaves’. Unlike the above, this may have kept the s, but assimilated the vowel. [NUA: Num; SUA: Tep]

871 Hebrew ’pl ‘be dark’; Hebrew ’opɛl ‘darkness’; Hebrew ’aapel ‘dark’; Hebrew ’apelaa ‘darkness’; Arabic ’afala (< *’apala) ‘**go down, set** (of stars)’; like ‘set’ and ‘go down’, this Semitic root also means ‘be late, in the day or in the season’; a causative Hebrew form in Jastrow’s Aramaic(J) is later Hebrew hɛ’ɛpiil ‘make dark’ with unattested impfv ya’piil (m.) and ta’piil (f.). The unattested huqtal 3rd sg masc and fem passive of the above root would be Hebrew ***yu’pal** and ***tu’pal** ‘become dark, be gone down (light)’ aligning perfectly with UA *yu’pa(l) and *tu’pa(l) in the sets below; in UA *cuppa, the palatalization t- > c- due to the high vowel u, and the cluster doubles the -pp-: Semitic ***tu’pal > cuppa**:

UACV-891 ***cuppa** ‘fire go out’: M67-171 *cupa ‘fire go out’; 236 *cu ‘go out (of fire)’; M88-cu9; KH/M06-co21: Tb cupat, ’ucup ‘be out (of fire)’; Tb(H) cuppat ‘fire to be out, go out’; Wr co’a ‘put out fire’; Wr co’i ‘be out (of fire)’; Tr čo’á-ri- ‘have another put out fire; Tr čo’wí ‘dark’; Nv tubanu ‘bajar de lo alto [go down from high up]’. [pd: 1t,2’,3p,4l] [SUA: TrC, Tep; NUA: Tb]

In the following, the semantic tie goes from ‘set, go down, end (day)’ to ‘end (of whatever)’:

UACV-871a ***cuCpa/i** / ***cuppa** ‘finish, be end of s.th.’: I.Num258 *cu/*co ‘disappear’; M88-cu1 ‘finish’; KH/M06-cu1: Mn cuppa ‘disappear’; NP coppa ‘s.th. sinking’; My cúppe ‘terminarse, vi’; My cúppa ‘terminar, vt’; AYq čupa ‘finish, complete, fulfill (vow)’; AYq hi(t)čupa ‘completing, fulfilling (vow), harvesting’; AYq čupe ‘get completed, finished, married, ripe’; AYq čupia ‘be complete’; Yq čúpa ‘terminar (bien)’; Wr cu’píba-ni ‘acabar’; Sr ’ičo’kin ‘make, fix, finish’; Wc sïï ‘finish’. Note Mn ‘disappear’ and NP ‘sinking’ reflect ‘sun going down’. The over-lapping semantics (finish/harvest) in Cah (My, AYq) may have us keep in mind *cuppV ‘gather, close eyes’. Does Sr ’ičo’kin ‘make, fix, finish’ have hi- prefix or is it from Hebrew ya-suup ‘come to an end’?

UACV-871b ***copa / *cupa** ‘braid, finish weaving’: Tr čobá/čóba- ‘trenzarse, hacerse la trenza’; Tb tadzuub ‘braid it’; CN copa ‘finish weaving/constructing s.th.’; CN copi ‘piece of weaving or construction to get finished’. [p1t,2’,3p,4l] [NUA: Num, Tak, Tb; SUA: TrC, CrC, Azt]

872 Hebrew ***yu’pal** and ***tu’pal** ‘become dark, be gone down’ (unattested hoqtal 3rd sg masc and fem):

UACV-233 ***yu’pa > *yuppa** ‘go out (of fire), (get) dark, black’: M88-yu27 and yu26 ‘fire go out’; KH.NUA; KH/M06-yu27 and yu26 ‘fire go out’: Ls yúúpa ‘go out (fire), not burn’; Ls yúúva 'be dark'; Ls yuvá/i ‘bec. black’; Ls yuvá-ta/ti ‘bec. black, vi, blacken, vt’; Sr yupq ‘go out (fire)’; Cp yúpi-š ‘(paint) brush’; Ca yúpi ‘be overcast (of sky), cloudy, color term base + yúpi = to turn into a colored appearance’; Gb yuvívkomok ‘be getting dark’; Gb yupíxa’ ‘black’. Hill adds Wc yïvi / yïïvi 'black' (Wc ï < *ü) and Ls yupáqa/i ‘go out (fire), vi; put out (fire), vt’; Gb yupí 'ahogarse'; Ktn yupk ‘extinguish fire or lamp’. Note also Ktn yovo’k ‘dark, dirty, black’; Ktn yo’vok / yo’vïk ‘be dark/black’ (actually has the glottal stop); Ktn yuvitïk ‘get dark’; and with p- prefix, Ktn p-yïvïk ‘dark colored, brown-gray’. Note that Ktn shows the original cluster *-’p- > -pp-, emerging as gemination in other languages, then some forms lost gemination, others did not: e.g., Ls yúúpa ‘go out (fire), not burn’ vs. Ls yúúva ‘be dark’. [p1y,2’,3p,4l] [NUA: Tak; SUA: CrC]

873 Hebrew ***yu’pal** ‘become dark, be gone down (light)’ > UA *yu’pa(l) > Aztecan ***yo’wal** ‘night’:

UACV-1532a ***yo’wal** ‘night’: CL.Azt116 *yowa(l) ‘night’; M88-yo8; KH/M03-yo8: CN yowal-li ‘night, n’; CN yowa ‘become night’; Pl yuwaki ‘overcast, dark’; Po owel; T yowall; Z yowal. Tied to *yuCpa at ‘black’ with *-p- > ø, and to *yu’pa ‘fire go out, get dark’ at ‘black’. [p1y,p2’,p3p,p4l]

UACV-1532b ***ta-yo’wa** ‘be night, dark’: CL.Azt11 *tlayowa ‘be night, be dark’; M88-ta37; KH/M03-ta37: CN tlayo’wa ‘get dark’; CN tlayoa; Pl tayuwa ‘at night, night’; Po tayue; T tlayowa; Z tayowa. [SUA: Azt]

874 The unattested hoqtal 3rd sg masc and fem passive of the above root ’pl would be **Hebrew *yu’pal** and ***tu’pal** ‘become dark, be gone down (light)’ aligning perfectly with UA *yu’pa(l) and *tu’pa(l):

UACV-1996b ***yu’pala** (TrC) 'bend down, go down, move in an up-and-down motion': Yq yúpala 'agachando [bending down, stoop]'; Tr o’pi 'bajar [go down], perder altura [lose altitude]'; Tr o'pira 'balancearse de arriba abajo'; Tr o'pina 'bajar, inclinar, doblegar [bend]’. Tr often loses initial consonants (or is it Hebrew ’opɛl > Tr o’pi?), and Tr o sometimes corresponds to *u, and a final V alternation -a/i is common in UA. Thus, TrC *yu’pa ‘go down’ ties to Tak *yu’pa ‘get dark, black, fire go out’ in the sun’s ‘going down’. [SUA: TrC, Tep]

875 Hebrew boqer ‘morning’; Arabic bukrat ‘early morning’; Arabic bukratan ‘early in the morning, tomorrow, on the following day, next day’; MHebrew pl: **bəqar-iim** ‘mornings’; Egyptian bk’:

UACV-2361 ***pi’ari** ‘tomorrow’: Wr pi’arí ‘tomorrow, morning’; Tr be’arí ‘tomorrow, morning’. [SUA: TrC]

876 Hebrew **dʕk** ‘be extinguished’, impfv: -dʕok (< *-dʕuku); Hebrew *doʕaku (quttal pl form);
UA *tuka / *tuku / *tuki 'fire go out, dark, black, night’ (UACV-240)
Regarding the change from Semitic ‘evening/night’ to UA ‘yesterday/last night’ is like Aramaic rams-aa ‘evening-the’ and Aramaic ramšiit ‘last night’.

Many forms show *tuk > tuhV / cuk/h ‘fire go out, dark, black, night, charcoal’, for when the fire finally goes out at night, it is dark/black, and ‘fire go out’ is likely the original meaning of that group. PUA *yuppa (< Hebrew *yu’pal) has the same semantic array: ‘fire go out, be dark, black.’

UACV-240a ***tuka / *tuku / *tuki** 'fire go out, dark, black, night': Sapir; VVH23 *tu$_u$(ku) 'black'; VVH144 *tu$_ş$ki / *tu$_ş$ka 'night'; BH.Cup *tuk ‘pass the night’; B.Tep231*tukaga-i 'darkness, night'; B.Tep232 *tuku ‘black’; M67-45 *tu, *tuhu ‘black’, *tuk ‘night’, *cuk ‘night’; I.Num228 *tuka 'night'; I.Num224 *tu(h)u(h) 'black'; I.Num230 *tuki ‘fire goes out’; L.Son320 *tuku, 320b *cuku 'obscurecerse';Dakin 1982; let’s combine much of M88-tu2 ‘night’, M88-tu3 'black’, M88-tu12 ‘put fire out’, and M88-cu4 ‘black’; KH/M06-tu2 *tuku ‘black, dark, night’ and tu12 ‘fire, to go out’ and KH/M06-tu25 *tuka ‘night’: Mn toqawano 'night-time'; NP tuka ‘extinguish fire’; NP tokano 'night'; NP toka cïpïa 'dark'; TSh tukwanni / tukwawani / tukwanippïh 'night'; Sh tukani ‘night, be dark’; Sh tukiC ‘put out the fire’; Cm tukani ‘evening, night’; Kw tuku 'be dark, be night'; Kw tukwa 'be dark, be night'; Kw tukwa-nu/no 'night'; SP tukwi- ‘fire go out’; SP tukwa- ‘put out the fire, be dark, night’; SP tukwanu ‘night’; CU tugwa-na-ti 'night-time'; CU tugwami ‘extinguish’; CU túukwari (<*tuukkwati) ‘black, dark’; Tb tuugït~’uduuk 'be dark/black'; Tb tuugit 'night, the dark'; Cp túkmu-t ‘night’; Cp túke 'pass the night'; Cp túku 'yesterday'; Ca túk 'go to bed, stay overnight'; Ca túkmiyat 'night'; Ls túúk 'camp for the night, v’; Ls túúku-mi-t, tuk-va 'night'; Sr tuuk 'night'; Hp tooki ‘last night, to go out (fire)’; Hp tookila 'night-time'; Hp tookiwma ‘for fire to be going out’; Tbr tu-/tukúr/tokúr ‘negro, apagado’. Ken Hill adds WSh tuuC ‘black’; Ch tuga ‘night’; Ch tugarasi’avi ‘big black ant sp’. Relevant to B.Tep232 ‘black’ are TO čuuk 'stop burning or giving out light'; LP tuku; PYp tuk; NT túku ‘black’; ST t^{y}uk (Bascom); ST čuk ‘black’; relevant to B.Tep231 ‘night’ are TO čuhug ‘night’; LP tuahag; NT tukági; ST tukaa’; TrC forms include Eu čuki 'noche'; Wr tugaó 'noche'; Wr togapá-ni 'become dusk'; Tr ŕuká-wa-ri 'noche'; Tr ŕu-/ŕo- ‘be black/dark’; My tukáária 'noche'; Tbr tokú-r; and in CrC (where *u > ï) is Cr wa-tïka’a 'it's night-time’. [*-k- > h in Num, > Tb -g-; *u-a > o-a; V syn]

Note the semantics of AYq tuuka ‘yesterday’, Cp túku 'yesterday’, Hp tooki ‘last night, go out (fire)’, and Ktn tuka / ’atuka ‘at night, last night’ and Ktn tuk ‘yesterday’. In English, ‘the night’ often means ‘last night, the night just finished’: I spent the night in pain; the baby cried through the night. Note the dual semantic in Hp tooki ‘last night, fire went out’: the nearest or most recent ‘fire-going-out’ was last night. I also like Dakin’s (1982-104) tie of CN tooka ‘plant, bury, v’ with the above, since the sun’s disappearance seemingly into earth at dark/night resembles the disappearance into earth when s.th. is planted or buried.

Many forms show a -wa- suffix: in *tuka-wa-: Mn toqawano; Tr ŕuká-wa-ri, and Tepiman *tukV-gV. Num forms are either reduced by a vowel syncopation (*tukawa to *tukwa) or the u vowel is carried past the-k- (*tuka > tukwa) or in some, perhaps both, e.g., TSh tukwawani. Four forms show *-nu / *-no: NP tokano, Mn toqawano, Kw tukwa-nu/no, SP tukwanu.

UA *tuku 'black' and *tuka 'night, dark' are likely related even though VVH, Miller, and Bascom separate them, and some Num, Tep, and other UA languages show separate forms for the two. An original *tuku > *tuhu, then tuu, may then have become a widespread recycled stem, some taking other suffixes, like Mn tummu 'black'; TSh tuppa 'black'; NP tokasïpïaga’a 'sun goes down.’

UACV-240b ***cukV (<*tukV)**: M67-45c *cuk ‘black’; L.Son320 *cuku ‘obscurecerse’ and *cuk-i ‘oscuro’; M88-cu4: Yq čukui; My cukúri/cukuli; Tr čóka; TO cuk ‘negro’; TO s-čuk ‘black, be black, in darkness’; TO čuku ‘become black’; Op cuki-gwa ‘causar obscuridad’; Eu cukí-en 'obscurecerse'; Yq cukú-i; My cukú-ri 'negro'; Wr o-hcó-na-; Tr co-. TO čuuk 'stop burning or giving out light'; ST t^{y}uk (Bascom); ST čuk ‘black’. The second syllable of Cr wačuíhsa ‘está oscuro’ may be borrowed from TrC, because Cr watïka’a corresponds to the other UA languages. As Miller (M67-45c), Hill (in combining M88-cu4 and tu2), and Lionnet (L.Son320) all suggest, *cuk is a palatalization of the rather pervasive *tuk, which *cuk may have then exhibited considerable mobility recycling through the dialect chains of SUA; for many of those languages also have *tuk forms.

UACV-240c *tuhu / *tuu (< ***tuku)**: Mn tuhutïpi ‘black rock’; NP tu / tuhu ‘black’; Cm tu /tuh / tuhupi 'black'; Kw tuhu- ‘black’; SP tuuC 'black'; Sh tuuC/tuun 'black'; Sh(M) tukiC 'put out a fire'; Sh(Cr) tukwiC/tuiC 'go out (fire)'; Sh(SV) tukwih/tuih 'put out a fire'; Sh(SV) tuuC 'black'; Cm tu/tuh/ tuhupi 'black'; Kw tuhu- 'black'; Ch tuupï ‘black paint’; WMU tuu-kwa; CU túu-kwa-rï 'black, dark'; Hp toho 'blackish pigment' may be an early loan from Num *tuhu (< *tuku), in light of Hp tooki existing as well. Sh’s variant forms—tukwi and tui—above show how easily/quickly an intervocalic -k- can be lost, likely passing through an -h- phase, which is likely for the *tuhu forms: *tuku > *tuhu > tuu (in some cases). In fact, Shaul (1994, 289) shows in PYp tuhu and redupl PYp tutuk that -h- is intervocalic and that k is found in the same stem, and *-k- > -h- is common in ‘deer’ and elsewhere. Ken Hill lists, but queries whether CN tekol-li 'charcoal' and Pl tekunal ‘live coal’ are cognate; it’s a good question. Could CN tekol-li be a recycled loan from Cah *tukuri > *tVkol-li? [*-k- > -h-, *tu > cu] [1d,2’2,3k] [NUA: Num, Hp, Tb, Tak; SUA:Tep, TrC, CrC, Azt]

877 Syriac sammem ‘to poison, vt’; Arabic smm ‘to poison’; Arabic smm II = sammama ‘to poison’: The semantic tie is that poison numbs. Being a connoisseur of edible plants, I once nibbled a slightly poisonous root that numbed my tongue and lips. So Semitic sammem ‘poison’ is a decent match for UA samïm ‘be numb’, though in many UA languages the semantics extend to numbing rain or cold:
UACV-2521 ***samïm / *samiC** ‘be wet, numb(ing), drizzly’: L.Son231 *samï ‘mojarse’; KH.NUA; M88-sa18; KH/M06-sa18: Sr ṣamïm-q ‘become numb, vi’; Sr ṣamïm-kin ‘make numb’; Sr ṣamïïmï’n(a) ‘be drizzling’; Ca sámam

‘be seized with a chill, become numb, drizzle’; Cp sáme 'be dewy'; NP samipï (< *samippï) 'wet'; Wr sami 'be wet'; Tr samí-mea 'be wet’. I find Ken Hill’s addition (to M88) of Hp sámakna ‘speak or sing out with a hoarse voice’ very includable. Also add Op sahm and Eu samí ‘mojado [wet], verde [green]’. Noteworthy among these is the lack of compounding with the morpheme *pa- 'water'; that means *sami really does mean 'wet' all by itself, without help from water. Consider also Hp halasami ‘moist soil’. Could these relate to SUA *sami 'adobe or mud brick’? [1s3,2mm] [iddddua] [NUA: Num, Hp, Tak; SUA: TrC]

878 Hebrew ʕayṭ / ʕeeṭ ‘bird of prey’; Aramaic(J) ʕayiṭ-aa’ ‘bird of prey-the, n.m.’:
UACV-209a ***wiCtiki** ‘bird’: Sapir; M67-40 *wici/*wiki; Fowler83; M88-wi7; KH/M06-wi7: Sr wičit; SNumic *wiciki: Kw wižiki-ži; Ch wicí’ici; SP wici’-ci; CU wicí-ci; and Yq wíčik 'owl’. Note the lenition of the third consonant, depicted in the SNum languages from west to east: -iki- > -i'i- > -i'- > -i-. Manaster-Ramer's law suggests a medial cluster such as *-Ct- or *wittik. Sapir ties CN wiicil-in 'hummingbird' with Sr and Num wici..., only possible if < *-Ct; Tb čikii-t 'bird’. [1’2,2y,3t2]

879 Arabic **šwy / šawaa** ‘broil, grill, roast’; **Arabic šawiy** ‘broiled, grilled, roasted’; check other Sem
UACV-266a ***sawa** ‘boil, apply heat, cause to melt': Mn sawa/saawa 'boil, cook by boiling’; Mn pasawa ‘heat a liquid’ (probably contains *pa- 'water'); TSh saawah 'boil, vt'; TSh tïsaawah 'boil, vi' This is related to *sawi 'melt’ below. TSh has both sawa ‘boil, vt’ and TSh sawi 'melt, vi’, fitting the UA pattern of CVCa 'transitive, active' vs. CVCi 'intransitive, stative’.
UACV-266b ***sawi(y)** ‘melt’: TSh sawi 'melt, vi'; TO haagid 'melt, thaw'; TO hagito ‘burn up, melt away’; PYp haag 'melt'; NT aágyi. [-a/i alternation] [1s2,2w,3y] [NUA: Num, Tak; SUA: Tep]

880 Hebrew ’aɧ (< *’ax) ‘brother’; Aramaic(J) ’aɧ-aa’ ‘brother-the’; Arabic ’ax ‘brother’:
UACV-307 ***waŋa’a** ‘younger brother': NP waŋŋa’a; Mn waná’ / qwaná’. Of Sem-p in that ’ > w and Proto-Semitic x > k-like vs. Sem-kw ɧ. [*w > kw in Mn as in *wita ‘wrap’ at blanket, n vs. ŋ] [p1’,p2x] [NUA: WNum]

881 Arabic xašiya ‘to fear, dread, be afraid’; Arabic maxšaat ‘fear’; Semitic *ma-xašiy:
UACV-854 ***makasi** ‘fear’: Hp maqasi ‘fear, fright’; Wc maakaše ‘tener mieda, temer’; CN iimakas(i) ‘hold in awe, fear, respect, vt’; the -mq- portion of Sr tiïmq ‘fear, be afraid, scared (of)’ with prefix; perhaps Mn masito-t ‘have one’s hair stand on end (as in fright), bristle’ if *makasi > ma’si > masi-. [p1m,2x,3s2] [NUA: Hp, Tak; SUA: CrC, Azt]

882 Hebrew šə’er ‘flesh, meat’; Puni š’r ‘flesh’; Ugaritic šir ‘flesh’; Akkadian šiiru ‘flesh, body’ (as meat is red or blood-colored) > Cr suúre’e ‘blood’; Wc šuuríya ‘blood’; Wc šuure ‘red, blood-colored’. [iddddua]

883 Hebrew lappiid ‘torch, lightning’; Aramaic(J) lappiid-aa ‘torch-the, light pot-the, pot in which light is carried-the’; the UA forms lost initial la-:
UACV-889 ***pita** ‘fire > be a fire’: M67-63 ‘burn’: Mn pida ‘build a fire’; NP pidapi ‘fire’. Add My beete ‘burn, vi’; Yq beete ‘burn, vi’; perhaps TO iiwiđ ‘make fire with a stick’, though a prefix and 2nd consonant must be explained, unless *piyta; however, for t = TO đ, see TO wađađ (< *ptt) at ‘flat’. [V leveling] [NUA: WNum; SUA: TrC, Tep]

884 Hebrew lappiid ‘torch, lightning’; Aramaic(J) lappiid-aa ‘torch-the, light pot-the, pot in which light is carried-the’; in other UA forms d > š:
Tb(H) taalapiišït ‘to get light, become daylight’ (Tb(H) taa-l ‘sun’). [1l,2pp,3d]

885 Arabic **naar ‘fire**, f’ but written **na’r / na’ar** < Arabic nwr II nawwar ‘to light, furnish light’;
Syriac nwr / nuur ‘fire, f’; nuur-aa ‘fire-the’; Syriac nayyar ‘to kindle fire’ (qattel of nwr); as to Aramaic and Hebrew nwr, Semiticists relate it to nhr ‘to shine’ which would correspond to UA *na’ay also:
UACV-878 ***na’ay** ‘fire’; ***na’aya** ‘build/light a fire’: VVH95 ‘to light a fire’; VVH95b *na_u’a ‘to burn’; B.Tep162a *naada ‘build fire’; B.Tep162b *nai ‘he built a fire’; M67-62a *na/*nai; BH.Cup *na ‘burn, vi’; I.Num106 *na’i ‘burn, vi’; L.Son171 *naya ‘prender lumbre [light a fire]’; L.Son172 *na’i ‘lumbre [fire]’; M88-na7 and M88-na8 and M88-na9; KH/M06-na7 ‘fire’ and KH/M06-na8 ‘make a fire’ (Lionnet, Miller, and Hill distinguish ‘fire’ and ‘make a fire’ as many languages have a reflex of both forms, yet being derivations built on the same stem, let’s combine them, to compare the comparable forms: Wr na’í ‘flame’; Wr na’yá-ni / na’i-ma ‘make a fire’; Tr na’í / na’y- / na- ‘fire’ and Tr na’yá- ‘make a fire’; My na’- ‘burn, v’ and My náyya ‘hacer lumbre’; AYq naya’i ‘fire’; Mn ani ‘burn, vi’; NP nai ‘fire, burn vi’; NP na’i’yu ‘burn, vi’; Sh nakaya ‘burn out of control’; Kw ne’e ‘burn’; SP na’ai ‘burn’; CU na’ay ‘burn, vi’; CU na’ay-ttï ‘fire, light’; Ca ná’ ‘burn’; Ls ná’ ‘burn’; TO naađa ‘fire, n’ (TO đ < *y) and TO naađ (pret: nai) ‘make fire’; UP naadï ‘build fire’ (B.Tep); ST naada’ ‘make a fire’ (prêt: nai; pres: naanda); NT naadá ‘build a fire’; Nv nadda ‘hacer fuego, encender lumbre [light a fire]’; Cr á-úu-na’ara ‘go build a fire’; Wc náiwame ‘combustible’. Note that CU na’ay-, WMU na’áy-y ‘be a fire, burn, vi’; TO naada, Wr na’í / na’yá-, and Tr na’í / na’yá-, represent three widespread branches of UA and all show a 3rd consonant -y- in s.th. akin to *na’ay(a). [y/r] [kw:1n,2’,3r] [NUA: Num, Tak; SUA: Tep, TrC, CrC]

886 Hebrew y-’rk ‘be long (verb is usually of time, adj and noun for both time and space/length)
UACV-1390 ***yïŋï** ‘be/pass a long time’: M88-yï18; KH.NUA; KH/M06-yï18: Cp yénge ‘to last a long time, endure’; Ca yéŋ ‘pass a while (of time), stay a while’; Sr yïïŋï’k ‘be a long time, be later’. [1’,2r,3k] [NUA: Tak]

We repeat 99 from earlier as it relates to ‘prairie dog’ below:

99 Hebrew **rakb-uu** ‘they mounted, climbed’ or rokb-im/-in ‘mount, climb up’ (pl participle); Hebrew rkb-o ‘mount it’; K&B note that “the most prominent meaning of the root rkb in other Semitic languages (Ugaritic and Akkadian) is to mount, to climb up” though in the Hebrew OT it is more often ‘mount, ride’; Syriac pl participle: raakb-iin ‘climbing/ers, pl’; Syria rakb-uu-hi ‘they climbed it’; Syriac rakbaa ‘upper milltone’; Aramaic(J) rikbaa’ ‘upper millstone’ (or what rides or is upon the lower grinding stone):
UACV-461a ***tï’pu*** ‘climb up’: NP tïbbu’ya ‘climb up’; Wr mo’tepú-na ‘climb up s.th.’.
UACV-461b ***ciCpuhi*** 'climb’: Mn cibuhi 'climb with arms and legs'; NP cibui 'climb up on s.th.’ These WNum forms align with Semitic rakb-u-hi/ha ‘climb up on it’ (rakb-u-ha/hi ‘ride-pl-it), initial r > t, then t > c with palatalization before the high-front vowel: *tï’pu > ciCpu. NP having a term in each may only mean previously active dialect chains/contact.
UACV-461c ***ciCpiN / *cippiN*** ‘climb or come out / onto’: Stubbs(2011) reconstructs PSNum *cippiN from: Kw čipii- ‘climb’; Ch cipí- ‘come out’; SP cippiN ‘come out, appear, ride’; WMU č*ih*ppí-y ‘come out, bubble out (like a spring), climb into (car), onto (horse)’; CU čipí ‘mount, climb on, get on top’. Also related are Ca čípi ‘get covered (hole), vi’ and Ca čípi-n ‘cover, vt (causative)’ both showing geminated *-pp-, and covering (a hole) is causing s.th. to get on top of it, and a hole getting covered is as a spring bubbling out, its hole being covered by water’ or ‘surfacing to the top’ like a prairie dog ‘surfacing to the top, at the top of a hole’: Sh(M) cippih ‘prairie dog’. [SNum -p- vs. -v-; redtn] [1r,2k,3b] [NUA: Num, Tak; SUA: TrC]

887 Semitic rkb ‘mount, climb up on’ > CN tlakpa-k ‘above, on top’ (CN tl < *t)

888 Semitic rkb ‘mount, climb up on’:
Sh(M) cippih ‘prairie dog’ (as that which comes up, surfaces onto the surface). See explanation two above at 99. Initial r > t > c before a high front vowel: rVkbi > tikpi > tippi > cippi. [iddddua]

889 Hebrew rikbaa ‘riding, verbal noun’ (< Hebrew rkb ‘to mount, climb up, ride’);
Aramaic(J) rikb-aa ‘upper millstone-the’; Syriac rakb-aa ‘upper millstone-the’:
UACV-1083 ***tïppa*** ‘mortar (and/or) pestle’: B.Tep242 *tïpa ‘mano de metate’; M88-tï41; Ken Hill disperses tï41 to KH/M06-tï12 and KH/M06-pa30: Wr(MM) te’pá ‘arriba [above]’; TO čïpa ‘a hole in bedrock for mashing mesquite bean’; TO čïïpo’o ‘a mortar hole in a rock for grinding’; LP tïpa; NT tïpai; ST topaa ‘mortar’; Ls tóópa-l ‘mortar for grinding’ which fits well since Ls o < *ï. Add Mn tabi ‘pound, strike’ and Mn *tabaha ‘grinding rock’, which may tie the above to Tb paha-l ‘rock mortar’and the forms at *paha or to *tïkpa. [all p, no w/v] [NUA: Ls; SUA: Tep]

890 Arabic kann ‘shelter, house, place where one is sheltered, nest’ < Arabic knn ‘to hide, cover, shelter’; Semitic roots of the form same 2nd and 3rd consonants ($C_1C_2C_2$) are often associated with a parallel palpel or reduplicated form $C_1C_2C_1C_2$; thus also existing is Arabic knkn / kankana ‘stay at home, settle down, nestle’:
UACV-1213 ***kanni*** (NUA) > *kali (SUA) ‘house’: Sapir; VVH141 *kali; M67-239 *kali; I.Num53 *kahni; L.Son74 *kari; M88-ka6 ‘house’; KH/M06-ka6: NP kani (archaic form); Tb hanii-l; TSh kahni; Sh kahni; Cm kahni; Kw kahni; Ch kaní; SP kanni, kaní; WMU kaní; CU káni; My káari; Yq kári; Wr karí; Tr garí; Tbr kalí; kalí-n ‘pueblo’; CN kal-li; perhaps Ca qáankiš ‘desert willow (possibly as housing material plant)’; Hp qeni ‘place, room, space’; and the last part of Wc kíekári ‘pueblo’. [*-nn- > l in SUA; *k > h in Tb] [1k,2nn] [NUA: Num, Tb, Hp; SUA: TrC, Azt]

891 Syriac s’b ‘to age’; Syriac saa’ib (m.) ‘old one, old man’; Syriac saa’ibaa (f.) ‘old woman’; possibly relevant is that Syriac long aa corresponds to Hebrew long oo, and what we see in Tb has identical meaning: Tb(H) šo’ibit / šoobit / šoobišt ‘old woman’. [1s3,2’,3b]

892 Arabic **ṣanawbar** ‘stone pine’ (type of pine) > (note Sh **sanawap**-pin ‘pine tree’):
UACV-1634 ***sanawaC*** ‘pitch, gum’: Sapir; VVH147 *sala ‘pitch’; M67-322 *sala ‘pitch’; I.Num178 *sanah ‘pitch, gum, sap, sticky’; BH.Cup *sánat ‘gum’; Munro.Cup57 *ṣáána-t ‘gum’; M88-sa11; KH.NUA; KH/M06-sa11: Sh **sanawap**pin ‘pine tree’; Washo šála’ ‘pitch’; Mn sanápi (< *sanaC-); NP sanapi; TSh sanappin; Sh sanaC-pin ‘pitch, sap’; Sh sanakkooC ‘chewing gum, rubber’; Cm sana ‘sticky’; Cm sanahkena ‘sap’; Kw sana-pï; Ch sana-pi; SP sannaC-(ppi); CU saná-pi; Tb šaano-t; Ls ṣáánu-t; Ca sáán-a-t ‘gum’; Cp saana-t ‘pitch, gum’; Sr haana-t ‘tar’; Ktn hana-t ‘tar’; Hp saana ‘pitch, gum of tree’; CN saaloaa ‘to glue, make s.th. stick to s.th. else’; CN saaliwi ‘stick to s.th.’; Pl saaluaa ‘to stick, glue’; sasaalik ‘sticky’. Most of NUA suggest a final C. Note Sh -wa-, Tb -o-, and Ls -u- < -aw-. [Sr h < *s; NUA n: SUA l] [NUA: Num, Hp, Tb, Tak; SUA: TrC, Azt]

893 Arabic daqqa ‘be thin, fine, crush, knock, rap, beat, strum, play (instrument), to sound (of instruments): Hp rïkï- / rïkïkï-ta ‘make grating noise, make rasping sounds, make rasping sounds of a rïkïnpi’;
Hp rïkïnpi ‘percussion instrument that includes a notched stick and gourd, to accompany certain songs and dances’. [d > r] [1d,2q,3q]

894 Arabic raqqa ‘be thin, fine, delicate’: Arabic rakiik ‘weak, thin’:
UACV-2279 ***takki** 'thin': Mn tagi’acicí ‘be extremely thin’; Mn tïgíbï ‘skinny one’; NP tïgïya’i ‘skinny’; Cm tahi ‘flat, thin, lightweight’; Kw takena-pii-či ‘slim’. [*-k- > -h- in Cm] [NUA: Num]

895 Hebrew he’asep < ***hi’asep** ‘be gathered (to one’s people), i.e., die, be put in the family cemetary’:
UACV-323 ***hi’acapa** 'bury, cover, grave’ (> Tep *hi’asapa): B.Tep60 *hiasapai 'bury, cover'; KH/M06-si24; TO hiašp(a) / hia; NT yáásapai 'bury, cover'; ST yaasəp. I reconstructed *hi’acapa > Tep *hi(’)asapa, in doubts of PUA dipthongs, then later found the same in PYp hi’asa ‘bury, vt’; PYp hi’aspa ‘grave, n’; also add Nv i’aina / i’asa ‘enterrar [bury]’; Nv isa’akarhami ‘sepultura’; Nv i’aspi ‘casa enterrada’. Eu héca ‘tapar [put top on], cerrar [close]’, with vowel leveling (*hi’aca > heca), resembles the PYp and Nv forms and points to initial h (vs. s). [1h,2’,3s3,4p] [SUA: Tep, TrC]

896 Hebrew ’sp, impfv: *ya-’sop > ye-’esop ‘to gather’, aligning with the prefix conjugation without the prefix is SP soopp… : SP sooppaaġai ‘to be assembled’; SP sooppaar’ui ‘to gather’ [1h,2’,3s3,4p]

897 Hebrew ’sp ‘to gather (harvest), collect, gather in (one’s legs)’:
UACV-992 ***cupa / *cuppa** ‘gather, close eyes’: M67-194 *cupa ‘gather’; M88-cu6 ‘gather’; KH/M06-cu6: Mn coba / copa ‘gather, pick up’; Ls čúpa ‘be gathered, bundled together’; Ls čupú-’a/i ‘close eyes’; Ls čúúpa ‘be closed, of eyes’; Cp čúpe ‘shut eyes’; Hp covala ‘gather, vt’; coval-ti ‘assemble, vi’; My cuppa ‘finish, harvest, vt’; My hícupa ‘harvest, vi’; Yq hicupawa ‘harvest, v’; Miller includes NP coppa ‘close eyes’ and Ls’s two meanings (gather/close eyes) do frequently tie together’. Perhaps NP cobbawa ‘gather’; NP tïcopa ‘pick up’. Miller also lists Cp čívi ‘gather, vt’ citing it as having the wrong vowel in corresponding to *o instead of *u; however, many of the forms show o, and *u-a > o-a is common in UA. [*u-a > o-a] [2’,3s3,4p] [iddddua] [NUA: Num, Tak, Hp; SUA: TrC]

898 Hebrew spd ‘mourn for, sing the lament for the dead, bewail’
UACV-586a ***osp/ops**... 'tear, n’: BH.Cup *’es 'teardrop'; M88-’o6 'tears': AMR1997; KH/M06-’o6: Cp -is; Ca -’is; Ls -’és; Sr -’oosp; Eu opét 'lágrima'; My ópwa-m 'lágrimas'; Pl iiš-aayu 'tear.' Manaster-Ramer (1993) adds Tb opsi-, which fits Tak, Eu, Pl, and the above My form nicely, two of which (Tb and Sr) show a medial cluster. Note also the gemination in Sh oppai-ppïh ‘tears’. Also cognate with My ópwa-m 'lágrimas' are Yq ’opóawam 'tears' and AYq oppoa 'to cry’, all of which relate well with Tak and the suggestion of *osp..., since s in a cluster goes to h/ø in Cah and would hardly be visible in the Tep forms below whether clustered or between vowels. Not entirely clear yet and only two consonants.
UACV-586b ***oowa** 'tear(s)': TO oo’og 'tear'; NT óógai 'tears'; LP ooga 'tear.' These tie to Cahitan *opowa/opwa, because in Tep, UA *opowa/opwa > Tep *owoga/owga, or ooga. [1s3,2p,3d] [NUA: Tb, Tak, Num; SUA: Tep, TrC, Azt]

899 Arabic ṣinw-, pl aṣnaa’ ‘twin, one twin’:
UACV-2428 ***cono’o** 'twin(s)': Kw cono’o-vi-mï 'twins'; Tb čono’ ‘twins’. [kw1s4,2n,3w,3’] [NUA: Num, Tb]

900 Hebrew **nʕm** ‘be lovely, pleasant, delightful’; Phoenician nʕm ‘good, beautiful’; ESArabic nʕm ‘be good, happy’:
UACV-157 ***numa > *noma** ‘good, good-looking’: Ktn numua-c / noma / nomo ‘good, well, pretty’; Hp nööma ‘wife, mistress’; AYq nuhmeela ‘youth, young man’. Hp nööma matches Ktn noma, so wife (Hp) and pretty (Ktn) and youth (AYq) as ‘good-looking’ are reasonable. The UA round vowel (o/u) aligns with the rounding of the Semitic ʕ, and *u-a > o-a is frequent in UA as well. [1n,2’2,3m] [NUA: Tak, Hp; SUA: TrC]

901 Syriac ṣb’ ‘be willing, wish, prefer, seek, have pleasure in, be pleased with, delight in’; Aramaic(J) ṣb’ / ṣəbee ‘find pleasure in, choose, desire’; Aramaic(S) ṣby ‘want, desire’:
UACV-2478 ***supiC** ‘like, want’: NP subidda ‘like, v’; Eu sovíce ‘desire’ or Eu suba ‘love’ (Shaul 2008/9); Kw sïbi ‘want, need’; Kw ku’u-sïbi ‘want, desire, need’; Kw šïbi ‘irrealis’ (sometimes actually translated ‘want/wish’; Zigmund, Booth, and Munro, p. 94). PUA *supi > Kw sïbi ‘desire, want to’. Add Tb šuubu’šuuba ‘copulate’ in light of *naka/i sharing ‘want/like’ and copulative semantics. Tep should have h < *s, but let’s mention Nv saptua ‘love s.o.’ [p1s4,p2b,p3’] [NUA: Num, Tb; SUA: TrC]

902 Hebrew pʕm ‘step, pace, foot’; Phoenician pʕm ‘foot’, pʕm pʕm ‘step by step’; Mehri fa’am ‘leg’: The puma of Kw pumake’e ‘stomp in a regular beat, beat (of the heart)’. [1p,2’2,3m]

903 Hebrew khh, (qittel) kehah ‘be inexpressive, dim, dull, colorless, disheartened’:
Ktn ’a-kïhahïk ‘sad’. This match is compelling, as the final -k is likely another morpheme, and so Hebrew kehah ‘disheartened’ and Ktn -kïhahï- ‘sad’ are striking. [1k,2h,3h]

Before launching into another large section (Sem-kw’s g/q > UA *ŋ), let’s look at three more grammatical morphemes. The first item in this work was the Hebrew masculine pl suffix -iim from an earlier *-iima, which aligns well with UA *-ima ‘plural suffix’. The Hebrew feminine plural suffix -oot / -ootee^{y} is also in UA, usually with the first vowel -oo- lost, as also the first vowel is often loss in the masculine suffix too.

904 Hebrew feminine plural suffix -oot / -ootee^{y}; while the primary suffix is -oot, the masculine plural construct -ee(y) is often added to the Hebrew feminine plural, a sort of analogized inaccuracy, resulting in -ootee^{y}, which many Semiticists have noted (Gesenius 1910, 258; Blau 2010, 273):
UACV-2674 ***-tï** 'plural suffix': KH/M06-ns6: Hp -t/-tï- 'dual/plural suffix'; CN -tin 'absolutive plural suffix'; CrC pl suffix *-te (Cora and Huichol); Op -te 'pl possessive suffix' (Shaul 1990); Op -t 'plural verb ending' (Shaul 2003, 27). [NUA: Hp; SUA: TrC, CrC, Azt]

905 Hebrew -ayim / -aym 'dual suffix' > NU and WMU -ïm/-yïm/-əyəm 'dual suffix'

906 Hebrew -w 'his/its'
UACV-1647 ***-wa/*-wV** 'possessed suffix': Ca -w'a; Cp -w; Ls -w; CN -w/-wi/-wa:- (-kone:-w 'child'; -o'-wi 'road'; -kone:-wa:-n 'children'); Pl –w (-o:mi-w 'bone (poss.)'); Eu -wa; Op -wa (Shaul 1990, 565; Shaul 2003, 26); Ch(L) wïn'napi 'flint'; Ch(L) huu wïn'na-wa 'arrow's flint.' [SUA: Azt, TrC; NUA: Tak, Num]

5.13 Uto-Aztecan Velar Nasal ŋ < g/q of Semitic-kw and '/ʕ of Semitic-p

Hopi and the Takic languages (Sr, Ktn, Ca, Cp, Ls) have sets of words that begin with ŋ. The initial velar nasal does not occur in any of the other UA languages, though medial -ŋ- does occur in the other NUA languages—Tb and the Numic languages—but not initially. NUA ŋ often corresponds to (has changed to) n in the SUA languages. Initial ŋ (in Hopi and Takic) derives from the Semitic Sem-kw's initial g and q, as Sem-p has g/q > k in Takic as apparent for Semitic bgd, bqr, etc. Arabic baqiya 'stay, be left behind' > Hp kwayŋya- 'behind' is one example of Semitic q > UA ŋ and Semitic b > kw, both being of Sem-kw. With stress on 1st and 3rd syllables, the 2nd vowel collapses to cluster the 2nd and 3rd consonants with slight anticipation: baqiya > *kwaŋya > kwayŋya. From Semitic **ʾagap** 'wing, pinion, arm, shoulder' are Sem-kw SP aŋavu-vi 'arm' (*' > ø, *g > ŋ; at 925 UACV-861 *aŋapu with its several related terms) and Sem-p SP wiġivï-vi 'eagle tail-feather' (*' > w, *g > UA *k; at 926 UACV-866 *wakapu with its several related terms). The Sem-kw g/q > ŋ is exemplified by 47 examples: 907-912, 914-950, 952-956, 1034:

Semitic-kw g > ŋ in Uto-Aztecan

907 Arabic ğassa (< *gassa) 'touch, feel'; Syriac gwš / gaš 'touch' or Hebrew gšš 'touch'; pfv qittel: gišše̊š 'grope'; Hebrew qittel impfv: *-gaššiš:
UACV-2388 ***ŋisi** 'touch, feel cautiously': Ls ŋési 'touch lightly (as a missile), graze, vt'; Cp ŋíse 'scratch, vt'; Sr ŋiđi'-kin 'touch, vt'; and Ca -ŋísan- 'move slowly' as feeling/touching in the dark would have one moving slowly. [kw1g,kw2s1,kw3s1] [NUA: Tak]

908 Hebrew gabal (II) 'to forge'; Arabic ğabala 'mold, form, shape, fashion, knead, create';
Syriac gbl 'forge, form'; Syriac gəbiil 'that which is formed or molded, formation, creation':
UACV-800 ***ŋapaC** 'sharp(en)': Ca ŋavay 'sharpen'; Cp ŋave 'sharpen'; Ls ŋáva/i 'be ground/sharpened, vi, grind (as a tool), sharpen, vt'; Gb ŋava'aa 'sharpen'; Ls(E) ŋávili-š 'whetstone' (note -l-). [kw1g,2b,3l] [NUA: Tak]

909 Hebrew ghh 'depart, be cured, healed'; MHebrew ghh 'lean, bend'; Syriac gh' / gha 'be freed (from guilt, pain, disease)'; Syriac ghh 'become free':
Sr ŋöhääh(q) 'turn, go around a bend, change direction'; Hp ŋaaha/ŋàaya 'untie, unravel, vt';
Hp ŋaahi/ŋayya 'get/come untied'; Hp ŋahï 'medicine, remedy'. Notice that in both Hebrew ghh and khh (903), the often fragile h's are preserved in Sr ŋöhääh and Ktn -kïhahï- (at 903), Sr and Ktn being the most conservative UA languages phonologically. Sem-kw preserves h surprisingly well: cf. Hebrew *bahamat 'back > UA kwaham 'back' (7). Also note that in Semitic are 3 meanings 'to bend, be freed, cure' and a very similar 3 in UA 'go around a bend, untie, remedy'. [kw-S keeps h] [kw1g,kw2h,kw3h]

910 Hebrew gab 'back'; MHebrew gab 'elevation, back'; Syriac gəbiib-aa 'hunchbacked';
Hebrew(BDB) gab 'anything convex, curved, gibbous, e.g., back':
Ls ŋavá-ŋva-š 'stooped, as an old man'. [kw1g,kw2b]

911 Hebrew gadiiš 'heap of sheaves'; Syriac gdš 'heap up';
UACV-601***ŋattas** 'tight(en)': Ca ŋátaš 'be too tight (screws, doorknob, drawer), vi'; Hp ŋù̈ütsü(k-) / ŋïïcï(k-) 'for weaving to get tightened down, become a tighter weave, as from the addition of sticks in the basketry'.

Syncope of the 2nd V would create the cluster seen in Hp, and with vowels relaxing (a > ï), this is easily plausible, and very specific semantically, and Hp falling tone often signifies a cluster. In fact, the Semitic feminine sg perfect would be *gadša(t). While Hopi and Cahuilla have a very specific semantic match, the tie with Semitic is that heaps and sheaves consist of tightly piled or compactly/tightly bound groups of whatever is heaped or sheaved. [iddddua] [kw1g,kw2d,kw3s1] [NUA: Tak, Hp]

912 Hbr ħwg / ħuug 'circle, horizon' often used in the sense of 'atmosphere, firmament, heaven' over earth or sea (Job 22:14; Proverbs 8:27); Syriac ħuug 'circle or halo (around sun or moon)' and used in phrases like 'encircling air' and 'the circle of the firmament' (i.e., atmosphere):
Ls huŋ-la 'the wind'; Tbr honá-/hone-/honi- 'hacer viento [be windy] , v'; Tbr honí-t 'viento [wind]'. NUA ŋ corresponds to SUA n. [iddddua] [kw1h2,kw2w,kw3g]

913 Aramaic 'yt / 'iit '(there) is/are':
Yq kaita 'no hay [there is not]' (< ka-ita, ka = 'no'; so -ita = 'there is'); Wr(MM) ka'ité 'no haber, no estar [not be/exist]'; Tbr ka-té 'check'. Wr(MM) has Wr as a compound of ka'i + tee 'appear, see'; or ka'i could be a reduced ka'ita as few other UA forms show glottal stop, though Hp qa'e and Ca ki'i do.

914 Hebrew **grr** 'to ruminate, to saw, to drag'; Hebrew məgera(t) 'saw, n'; Arabic *grr 'to pull, drag along, IV to ruminate, VIII to ruminate, repeat constantly'; Aramaic(J) grr 'to make a grating, scraping sound, to scratch, scrape, pull, move without lifting, drag'; Hebrew geraa 'cud'; Arabic ğirrat 'cud'; from Syriac grr derives et-gawrar 'to chew the cud'; Syriac bəʕiiraa də-met-gawrar 'ruminants, animals of cud-chewing'; Syriac guuraar-aa 'rumination, chewing the cud'; Hebrew, Arabic, and Syriac, all three, show grr 'ruminate, chew cud', and as one watches ruminants chew cud, it is both a circular and side-to-side motion; Ls includes the circular motion, and all the UA languages emphasize the side to side, and sawing is back and forth:
UACV-1936 ***ŋaya** 'to move side to side': Hp ŋayaya-ta 'be swaying, rocking from side to side';
Hp ŋayayàykï 'start shaking or swaying from side to side, sway from side to side repeatedly'; Ca ŋáya 'shake head saying 'no'; Cp ŋáye 'shake head'; Ls ŋáya/i 'be winnowed with a rotary motion, vi, winnow, vt'. They all involve side-to-side motion, Ls adding circular to the side-to-side motion. Sawing involves side-to-side motion, and ruminate is a side-to-side as well as a circular motion, like Ls. [iddddua] [kw1g,2r,3r] [NUA: Tak, Hp]

915 Hebrew **gnn** 'enclose, surround, protect', perfective: ganno-(ti):
Hp **ŋön**-ta 'wear s.th. around the neck'; Hp ŋöŋönpi 'necktie, harness'. Hebrew pfv ganno- and final o could assimilate the first: *ganno > ŋono > Hp ŋön. [iddddua] [kw1g,2n,3n]

916 Arabic *gadiir 'walled place'; Aramaic(J) gdr 'to construct wall, to fence in'; Hebrew gdr 'build up a wall with stones', unattested hiqtil would be *ya-gdiir 'cause a wall to go up':
UACV-2465 ***yaŋi** 'fence, enclosure, roofless wall(s)': M88-ya24; KH.NUA; KH/M06-ya24: Sr yaaŋič 'enclosure with walls but no roof'; Ca yaŋi'a-t / yaŋi-š, né-yaŋi'a 'encircling fence, roofless shed as windbreak'; Ca yaŋi 'build encircling fence, roofless shed as windbreak for people or for gathering animals'; Gb yáŋe 'windbreak'; Gb yáŋ'ar 'Los Angeles'; Ktn yaŋeki(-)n-i-c / yuŋ-e-kin'-ic 'brush wikiup' (-ki < 986 UA *kiC 'house'). [dominant 1st C of Sem-kw cluster] [kw1y,g,3d,4r] [NUA: Tak]

917 Arabic **gʕl** 'make, put, place, lay':
Ls **ŋáw'la**-š 'mattress, mat, bed'; Ls ŋáwa 'be spread, for a bed to be made'; SP qora 'to spread out'. Note that Ls preserves 3rd C -l- here and at 908. [kw-S g > SP q] [kw1g,kw2'2,kw3l]

21 Semitic/Arabic ganaba 'set aside, keep away, steal'; Arabic ***ganb-** 'side, n';
Arabic ***ganba** 'beside, next to, near, at, preposition'; Arabic *baina ganbaihi 'inside (it), within':
UACV-1980b ***-ŋakwa / *-ŋako** 'side, from/at side of': M67-376 *nakw 'side'; I.Num110 *naŋkwVh 'direction,side'; I.Num89 *ma(a)na(a)ŋkwa(h) 'far'; M88-na16 'side'; KH/M06-na16: Hp **-ŋaqw**, -ŋaqö (pausal) 'from, away from, inside of'; Ls -ŋax 'from, because'; Cp -ŋax 'from, because'; Cp -ŋa 'at, in'; Ca ŋa 'location'; Gb ŋa 'locative suffix'; but Ca -ŋa-x 'from' (Seiler 1977, 201-2).
UACV-1980a ***(mana)-ŋakwa** 'side': Sh maanankwah 'far'; Cm na-nakwi 'far'; Ca máŋax 'on/by the side of, near'; SP naŋkwaC 'direction' with loss of initial syllable in *mana-ŋakwa > naŋkwa; Mn qwena'a 'far (from)'; NP nakkwai 'beside'; ŋ > n may underlie CN naawak 'near, adjacent to'. [*ŋ > SNum ŋ, > C/WNum n] [kw1g,2n,3b] [NUA: Tak, Hp, Num]

918 Hebrew ʕeśeb 'herbage, weed'; SamP ʕešəb; Arabic ʕušb- 'grass, herbage, plants, pasture':
SNum *(h)ukwi 'grass': Kw hugwi-vï 'speargrass'; SP ukwi-vï; CU 'ugwí-vï. Medial -kw- < -Cb-, and they all match the Arabic voweling.

919 Hebrew gm' 'swallow'; Ethiopic **gemʕe** '**vessel**':
Hp ŋamòo-hoya / **ŋamo'**-hoya 'little pumpkin or melon (not matured yet)'. In both the Near East and the Americas, gourds or pumpkin shells were used for containers (as Ethiopic vessel), and the 2nd Hopi variant even shows the glottal stop. [kw1g,kw2m,kw3']

920 Hebrew grš 'drive out': Hp ŋööŋöya 'pursue, chase after'; Hp ŋöy-ta 'pursuing, chasing after'. [kw1g,2r]

921 Hebrew **grm** 'gnaw or break (bones), crush (bones)', infinitive **garom**:
Hp ŋaro- 'crunch down on' (infinitive garom); SP qayu 'grind up (like a dog crushing bones)'; Ls ŋooli 'gnaw'. Another Num k with Hp and Tak ŋ, and also Hp and SP match each other (Hp o < *u), but puzzling are Ls's vowels and Hp -r- instead of -y-. [1g,2r,3m] [NUA: Hp, Tak, Num]

922 Arabic gđb 'pull, attract, pull out' would correspond to Hebrew gzb, and UA ŋ-s < g-z of Sem-kw:
Ls ŋisi- 'pull hair'; probably not SP ova 'pull out hair'. [*đ > s in Sem-kw] [kw1g,kw2z2,kw3b]

923 Hebrew/Aramaic(J) gbb 'pick up, collect'; Arabic gby 'collect':
Hp ŋaava 'pick material from its natural source to use it to make object'; Cp ŋépepi 'drag' [kw1g,kw2b,kw3y,kw3b]

924 In contrast to Hebrew gdl I 'grow, become strong, great', **Hebrew gdl II,** in the cognate languages basically means to plait, weave, twist; Arabic gdl / gadala 'twist, tighten, stretch (rope), braid, plait'; Arabic ğadiila 'a braid, plait'; Aramaic(J) gaddelet / godelet 'hair dresser'; Aramaic(J) gaadiil 'twisted threads'; Arabic ğadiil 'stretched rope, plait'; Hebrew gadil 'tassel, **wreaths of chainwork**'; Akkadian gidlu '**bundle**'; Aramaic(J) gdl / gədal 'plait (hair), twine (threads), **weave (nets**)'; Aramaic(J) gadlay 'weaver':
UACV-2517 ***ŋara** / ***ŋatCi / *ŋataC** 'weave, fasten, tie': Ls ŋára/i 'be fastened, vi; fasten, as in lacing shoes or tying a horse, vt'; Ls(E) ŋáára/i 'be fastened, woven, crocheted, take hold (a root)'; Ls(E) ŋááray-ni 's.th. crocheted or woven'; Hp ŋat'a 'tumpline, headstrap or shoulder strap for carrying a burden on the back' (combining form ŋata') and it also parallels Akkadian gidlu 'bundle' with differing vowels; Ktn ŋorkï' 'tumpline' (-kï likely a different morpheme); Sr ŋur-kin 'lasso, rope, vt'; Ls(E) ŋáároyta 'spider web (archaic word)' as s.th. woven ties in as well. Considering Semitic gdl 'plait, weave wreath-like works' with UA/Hopi ŋat'a 'tumpline as s.th. woven like wreath work' reflecting a consonant cluster, -dl- > -t'-, and Ls ŋááray-ni 's.th. crocheted or woven'—they are all worthwhile considerations. The only weakness is the 3rd consonant: Ls y < l is rather reasonable for so late in the word, though more examples would be good, and l > ' in Hopi as 2nd consonant in a cluster is plausible, but again, more examples would be good. [kw1g,kw2d,kw3l] [NUA: Tak, Hp]

Note that from Semitic **'agap** 'wing, pinion, arm, shoulder' is Sem-kw SP aŋavu-vi 'arm' (925), which shows the Sem-kw changes of *' > ø, *g > ŋ, at 925 UACV-861 UA *aŋapu with its several related terms; and also from Semitic **'agap** 'wing, pinion' is Sem-p SP wiġivï-vi 'eagle tail-feather' which shows the Sem-p changes of *' > w, *g > UA *k, at 926 UACV-866 UA *wakapu with its several related terms.

925 Aramaic(J) **'agap** 'wing, pinion, arm, shoulder':
UACV-861 ***aŋapu** 'wing, arm': Sapir; VVH58 *'a_uŋa 'wing, feather, arm'; B.Tep302 *'a'ana 'feathers, wing'; M67-465 *ana 'wing'; L.Son4 'ana 'ala'; M88-'a3 'wing'; KH/M06-'a3: NP aŋa 'armpit'; Sh ahna 'armpit'; Cm ahna 'armpit'; Ch aŋávï 'arm'; SP aŋavu-vi 'arm'; WMU aá-v*ü* / aáo-v*ü* 'arm, upper arm, n'; WMU aá-vü-n 'my upper arm'; CU aá-vï 'upper arm'; Tb 'anambïï-l 'feather in band'; TO/UP a'an / 'a'anï 'wing, feather'; LP 'a'an; PYp a'ana 'wing'; NT áána/ánai 'feather, wing'; ST ana / 'aa'na 'feather'; Eu haná-t 'wing'; Wr aná 'wing'; Tr aná/ganá/gané 'wing'; Cr aná / haná / -'ana 'wing'; Wc 'ánaa 'wing'. Though shifting to mean 'upper arm, armpit' in Num, this etymon is quite widespread. SP, Tb, and WMU's possessed forms all suggest an additional *-pu syllable. [ŋ:n] [kw1',kw2g,kw3p] [NUA: Num, Tb; SUA: Tep, TrC, CrC]

926 Hebrew/Aramaic **'agap** 'wing, pinion feather, arm, shoulder'; **Aramaic 'agap 'wing, pinion'**
UACV-866 ***wakapu > *wakaC > *waki / *wiki** 'wing, feather': BH.Cup ***kawi** 'wing'; M88-ka18; Munro.Cup139 *wakí-t 'wing'; KH/M06-wa29: Ca wáka-t 'wing', -wák'a (poss'ed); Ca wiki-ly 'feather'; Ls kawí-t 'wing'; Ls no-wki 'my wing'; Cp wíki-ly / wáki-ly 'feather'. Add SP wiġivï-vi 'eagle tail-feather' and Hp -wïki 'feather' in Hp kwaa-wïki 'primary wing feather of the eagle' (kwaa 'eagle'). I agree with Munro's reconstruction and explanation of metathesis (*waki > kawi): "the Ls possessed form is conservative and the absolute form is metathesized." Ca and Ls absolutive -t suggest a final consonant, and SP shows a 3rd consonant *-p-. (Sem-p) [p1',p2g,p3p] [NUA: Tak, Num; Hp]

927 Aramaic(J) ʕgm ‘be bent, weighed down, grieve’; this root has two variants in Semitic, one with ʕ, which the UA form must be based on; so also related are Aramaic(J) ’agm- ‘a depression, stagnant water, lake’; Aramaic(S) ’agm- ‘marsh, swamp’; Syriac(Sm) ʕgm / ʕgn ‘cast down, lie prostrate, be low’; Hebrew ’agam ‘reed pool’; Arabic ’agamat ‘thicket, reed swamp’:
UACV-705 ***wakam / *waŋam** ‘down, deep’: Ca wáŋam ‘deep (of water, ditch, etc.)’; Tb(V) wahaminaš 'downward’; Tb(M) wahominas ‘down at an angle’. Ca and Tb show 4 of 5 identical segments, and as velar *k > h in Tb and the velar nasal in Ca, a relationship between these two seems probable. In fact, Munro’s definition (of Tb(M)) ‘down at an angle’ fits ‘be bent, weighed down’. [ŋ/k] [kw1’2,kw2g,kw3m] [NUA: Tb, Tak]

928 Hebrew gwʕ / gaawaʕ ‘pass away, perish’; essentially ‘to gasp for breath’ (Driver, Journal of Semitic Studies 7:15 ff); Arabic ğwʕ ‘be empty, hungry’:
Ktn ŋïhw-ïk ‘get worn out, vi’; Ktn ŋïhw-k ‘wear out, vt’. [iddddua] [kw1g,2w,3’2]

929 The Semitic root **gyl** (variant gwl) in the Semitic languages generally means ‘rejoice, dance, do circles’; Tigrina goolaa ‘dance and sing’; Hebrew(BDB) gyl / giil ‘circle, age’; Arabic ğwl ‘be circulated, go the rounds’; Arabic ğawla(t) ‘circuit, round, patrol’ > Cp **ŋáylʸa** ‘spin, twirl, vi’. [kw1g,kw2y,kw3l]

930 Hebrew **gll / galal** ‘roll, roll away’; Hebrew **galiilaa** ‘district (that is, surrounding area), circuit (that one travels)’; Arabic ğwl ‘be circulated, go the rounds, roam, move freely’; Syriac gəlaal ‘round’;
Syriac gll ‘be in motion’; Syriac et-galgal ‘be made round, be wreathed or twirled about as vapor’;
Syriac gəliiluu-t-aa ‘sphericity, roundness’; Aramaic(J) gaaliil-aa ‘district, circuit’:
UACV-455b ***ŋVlil / *ŋalila** ‘circle around, curve, head off, catch up to’: Ktn ŋilil-k ‘catch up with, overtake, vt’; Cp ŋelele ‘be surrounding, be all around’; Cp ŋelele-ŋiye ‘go around visiting’; Ca -ŋélel- ‘go along the edge (of mountains, waters), vi’; Ls ŋéli ‘go along the side of a hill, vi’; Ls(E) ŋéela/i ‘be turned, curved, vi, go along the side of a curve, vt’; Ls(E) ŋeléŋli-š ‘curvy, curve’; Ls(E) ŋeléela/i ‘be repeatedly curved, vi, repeatedly go along the curve of s.th., vt’. Besides *ŋ-l-l in most forms, semantically Ca and Ls are identical; Cp is nearly so in ‘going around’ approximating ‘go along the edge’ of a round lake or curving mountain; and one way to catch or ‘catch up with’ is to circle around a different route and head off s.th. or s.o. UA vowels e-e, e-i, elela do suggest a reconstruction of either e-i-a or a-i-a. Ktn’s two different forms—Ktn ŋilil-k (930) and Ktn ŋïrïhr-ïk (949)—suggest separate proto-forms; thus, Sr ŋïrïr-q ‘move, move over, vi’ and Ktn ŋïrïhr-ïk ‘edge down over, vi’ are at 949. [kw1g,2l,3l] [NUA: Hp, Tb, Tak; SUA: Tep, TrC]

931 Hebrew **gulla(t)** ‘basin, bowl’; Hebrew galgal ‘wheel, whirl(wind)’; Arabic ğulla ‘ball, bowl’:
Hopi ŋöla ‘hoop, ring, wheel’; Hopi ŋölöla ‘bend, crook, vt’; Hp ŋölö(kna) ‘bend, make crooked’. [kw1g,2l,3l]

932 The general meaning of the Semitic root gwr is ‘to travel away from home, to be a stranger in other lands, or to be in process of a circuit out and about then back home; a common secondary meaning is to go about to commit adultery: Hebrew gwr ‘to dwell as alien and dependent’; Hebrew(BDB) gwr ‘to sojourn’; Aramaic(J) gwr ‘move around, sojourn, dwell’; Aramaic(S) goor-aa ‘fornication, adultery’;
Aramaic(S) gwr ‘to commit adultery’; Syriac gwr ‘to commit adultery’; Syriac gaur-aa ‘adultery’:
UACV-456 ***ŋoya** ‘leave, go away, go home’: Uto-Aztecanists have combined these with (931) above, yet they are a separate set (VVH152 *ŋola/*(ŋo) ŋowa/i ‘return, bend, coil’; BH.Cup *ŋé ‘go away’; B.Tep173 *; Kaufman1981 *ŋoyV; L.Son178; M88-no2; KH/M06-no2): Ls ŋéya/i ‘to meander’; Ls ŋéé ‘leave, go away, go home’; Ls(E) ŋée ‘leave, go away, run off (unfaithful spouse), go around (commit adultery), go home, get back, be gone’; Ca ŋíi/ŋíy ‘go home, go away’; Cp ŋíye ‘go away, leave’. As Ken Hill notes, Hp ŋöya- ‘surround, form a circle around’ fits these (vs. Hopi ŋöla above 931). Most tie these with *ŋola above (931), but a case for separation from the above exists in that (1) these show medial -y- vs. medial -r/l- of the above and (2) Hp and the Tak languages have separate forms, such as Ls ŋée ‘leave, go away’ vs. Ls(E) ŋéela/i ‘be turned, curved, vi, go along the side of a curve, vt’ and Ls(E) ŋeléŋli-š ‘curvy, curve’. Now Ls(E) ŋéya/i ‘meander, vi, make meander, vt’ does belong; whether a variant or other dialect infusion, it corresponds with Hopi. Yet most convincing of all is Ls having both ‘unfaithful/adultery’ and ‘go away/out/around’ in Ls(E) ŋée ‘leave, go away, run off (unfaithful spouse), go around (commit adultery), go home, get back, be gone’. [kw1g,2w,3e] [NUA: Tak, Hp]

933 Syriac gwr / gaar ‘to commit adultery’; Syriac (qattel) gayyar ‘to commit adultery’ would have a prefix conjugation of ***yə-gayyar** ‘to commit adultery’ whose four consonants all fit Hopi yoŋyày as expected, yet the first Hopi vowel (o) may be anticipating velar ŋ in an originally unstressed syllable:
Hopi **yoŋyày**-ti ‘be adulterous, have an affair (with)’. [kw1y,2g,3r]

Just as initial g- > ŋ-, so also medial -g- > -ŋ-:

At (698) already is Arabic *lahgat ‘tongue’ > **UA *laŋi / *laŋu** 'tongue': Hp leŋyi / leŋi ‘tongue’; Cp naŋ; Ca náŋ-il^{y}; Sr naŋ|ač; Ktn nïŋi-č; etc.

More examples of -l- > -l-

934 Hebrew **glm** ‘wrap up, fold, fold together’ (BDB); Hebrew gəloom ‘wrapping, garment’ (BDB); Aramaic(S) gəliimaa ‘garment, cloak, n.f.’; the Hebrew infinitive is Hebrew gəloom ‘wrapping up’; Hebrew yi-glom (< *ya-glum) ‘he/it wraps’; Hebrew ti-glom (< *ta-glum) ‘she/it wraps’, etcetera:
UACV-472 ***kolom** 'cover': -koroomi- of Cm mana’**koroomi**tï ‘cover s.th. over, cover head (as with cloth)’ aligns well with both the Hebrew prefixed stem **-glom** and the Hebrew infinitive **-glom**/**gəloom**; AYq lomti patti 'covered (with tarp or blanket)'; My lomti 'covered’. The prefixed conjugation CV-glom would easily lose the g as first element of a cluster, leaving -lom, as in AYq and My. Also aligning with Hebrew ti-glom (< *ta-glum) ‘she/it wraps’ is Tb(H) tulum’tuluumat ‘be tangled’ with loss of -g- and a vowel assimilation: *tV-glum > tulum. [NUA: Num, Tb; SUA: TrC]

935 Hebrew **glm** / **gaalam** ‘wrap up, fold, fold together’ (BDB); because Hebrew g > ŋ of Sem-kw, these forms or UA ***ŋalam** reflects Sem-kw’s 3rd person singular pfv:
UACV-2333 ***ŋalam / *ŋalim / *ŋaliC** ‘entangle(d)’: Ca ŋáli- ‘throw a lasso, get entangled, be out of place’, distributive: pe-**ŋáŋlami**; Ca pe-**ŋálam**ni-l^{y} ‘roping (of the cows), n’; Cp ŋále ‘fasten, get into, vt’; Ls ŋalípa ‘become entangled’. Ls -p- suggests a final consonant, and -m- appears twice in Ca. Does Sr ŋur-kin ‘lasso, rope, vt’ belong here? Or at 924 gdl > *ŋatCa ‘weave, tie’? [kw1g,kw2l,kw3m] [NUA: Tak]

936 Hebrew gml / gaamal ‘complete’ (KB), ‘deal fully with, deal adequately with’ (BDB); Arabic ğml / ğamula ‘be beautiful/handsome, be proper, suitable, appropriate, befit’; Arabic II ğammala ‘adorn’ V tağammala ‘adorn self’; Arabic ğamiil ‘beautiful’; note 3 Semitic and 3 UA meanings: Semitic: ‘complete’ and ‘beautiful’ and ‘be proper, befit’ > UA ‘quit/stop (when complete)’ and ‘look good’ and ‘be proper, fit’. Tr gamea ‘1 to be able, 2 to look good to, like, 3 to fit, be enough’ (intervocalic liquids r/l often lost in Tr); Kw kagamïniyaa-sïbïhï ‘look pleasant’ (sïbïhï ‘appear’), so redplc’d Kw kagamïniyaa ‘pleasant’ (l > NUA n) Tb(V) kam’-(ut) ~ ’aŋgam’ ‘it fits’; Tb(H) kam’mut, pfv aŋkam’ ‘to fit, be proper’ (l > ’ in Tb cluster); Ca qami (before C), qamñ (before V) ‘to leave, quit, stop’. This Ca form is of Sem-p, as Sem-kw (935) has Semitic g > Ca ŋ. Loss of intervocalic -r- in Tr, like Tr -mea < *mïra. [p1g,2m,3l]

937 Hebrew gml / gaamal ‘complete’ (KB), ‘deal fully with, deal adequately with’ (BDB); Arabic ğml / ğamula ‘be beautiful/handsome, be proper, suitable, appropriate, befit’, II ğammala ‘adorn, V tağammala ‘adorn self’; Arabic ğamiil ‘beautiful’ ; semantic extension ‘fit, adorn’ to ‘put on, wear, wrap (blanket)’ underlies the UA set below , as ‘adorn’ and ‘fit’ both imply ‘putting on’:
UACV-246 ***kïmal / *kamal (> kimil)** 'blanket, wrap (in blanket)': L.Son82 *kïma 'cobija'; M88-kï8; KH/M06- kï8: Wr kemá; Tr gemá; Tr komabi/gemabi 'wrap oneself in a blanket'; Tr gimí-mea 'wrap oneself (as with a blanket)'; CN keemi 'put on, wear (clothes)'; CN keemi-tl 'garment'; Pl kimilua ‘wrap, cover, vt’; CN kimil-li 'bundle of clothes, blankets'; CN kimiloaa 'wrap in a blanket, vt'; CN tlakeemi-tl, -tlakeen 'garment, wrap'; CN tlakeen-tia 'get dressed, dress s.o., vt, vrefl'; CN tlakin-tli 'garment’. Add Ca kámiš 'surround, vt'. [iddddua] [SUA: TrC, Azt; NUA: Tak]

938 Hebrew gml / gaamal ‘complete’ (KB), ‘deal fully / adequately with’ (BDB), tie, load (with good or evil) (Jastrow) thus Semitic gamal ‘camel’; Arabic ğml / ğamula ‘be beautiful/handsome, be proper, suitable, befit’, II ğammala ‘adorn, V tağammala ‘adorn self’; Arabic ğamiil ‘beautiful’; this has the same semantic extension ‘fit, adorn’ to ‘put on, wear, wrap (blanket)’ as above, but with waw-consecutive prefix: Hebrew **wayyigammel** > wïkam’mi; for same SNum languages with m 2nd & liquid 3rd C, see ṭmr > tïm’ma ‘bury’:
UACV-477 *wVkka’mi ‘cover, put blanket over, vt’: SP wüqqam’mi ‘put a cover over, cover, vt’; WMU ká’mi / qá’mi / ga’mwi / gám’mi / *hwi*kka’mi ‘cover, put blanket on, vt’; CU w*h*ká’mi ‘cover, vt’. Note also the verbal noun Hebrew gaaml- in 1 Samuel 1:23. [p1g,2m,3l] [NUA: SNum]

939 Hebrew **gml** / gaamal ‘complete’ (KB), ‘deal fully with, deal adequately with’ (BDB); Arabic ğml / ğamula ‘be beautiful/handsome, be proper, suitable, appropriate, befit’; Semitic ‘deal fully with or complete’ to UA ‘grind fine’ or ‘deal fully with or do fully (grinding)’ in UA:

UACV-1095 ***k/ŋamal/n** ‘crush, grind’: Hp ŋïman- ‘to grind fine corn meal’[as s.th. done fully];
Hp ŋïmni ‘flour, finely ground corn or wheat’ (of Sem-kw). AYq kam-ta ‘crush’ may be Sem-p. As for initial ŋ- in Hp and Tak vs. k in other branches, note ***ŋani** / **kani** ‘look for’ at ‘see’ and *ŋüha / kühü ‘grasp, catch’ at carry.
Hp ŋeemin ‘invite along’ is also worth noting, but not yet claimable. [ŋ/k] [iddddua] [NUA: Hp; SUA: TrC] [kw1g,2m,3l]

Below are two cases of a cluster of -Nʕ- (nasal+pharyngeal ʕ) reducing to ŋ, a rather natural result:

940 Semitic impfv: ***-mʕak** < Hebrew mʕk ‘squeeze, squash’; Middle Hebrew and Aramaic(J) ‘crush’;
Arabic maʕaka, impfv: -mʕaku ‘rub s.th.’; the cluster -mʕ- > ŋ:
UACV-1096 ***ŋaka/i** ‘grind, scrape, rub against’: Gb ŋooxa ‘muelalo!’; Gb ŋooxa-t ‘cosa molida’;
Ls ŋééxa/i ‘rub against’; Ls ŋóóxi ‘grind on metate’; Ls ŋááxa/i ‘scratch, scrape, brush against’. Such vowel versatility in Ls may be disconcerting, though a relaxing of *a > ï explains most vowels, since all correspond with *a or ï. [kw1m,kw2’2,kw3k] [NUA: Tak]
941 Hebrew nʕr ‘shake off/out, shake self’; Arabic impfv: **-nʕar** ‘grunt, roar’; the cluster -nʕ- > ŋ:
UACV-677 ***ŋïy** ‘shake, be dizzy’: Ca ŋéy / ŋéye / ŋéŋey ‘shake (of trees), vi, shake, rock (as a baby)’;
Ca če-ŋéy-’an ‘give a shake or a tap (to wake s.o.)’; Ca puš-ŋéy ‘feel dizzy (literally: eyes-shake)’; Cp ŋéye ‘be dizzy’; Cp ŋéye-yaxe ‘turn over, quake (of earth)’; Sr ŋïïy-k ‘get dizzy (as when drunk). Hebrew impfv (’i- / ti- / yi)-qeṣ ‘wake up’ would also yield UA *ŋïy and Ls ŋóya/i ‘wake up, vi/vt’ and Cp ŋéye-yaxe ‘turn over, quake (of earth)’ as in a person or earth ‘waking up’. Or is the semantic change ‘shake’ > ‘wake’. In the Comparative Vocabulary, I included Cp ŋéle 'faint'; Ls ŋóla ‘be dizzy’; Ls ŋóóla ‘be drunk’; Sr yooyk ‘get dizzy (generally)’ as possibilities, since Uto-Aztecanists have often mentioned the two sets together in that both mean ‘dizzy’ and similarly begin ŋï…, yet the differing 2nd C has puzzled all. However, staying with *ŋïy aligns well with -nʕar, as the cluster -nʕ- would likely reduce to UA *-ŋ-.
SP aaŋwaya ‘be dizzy’ is most interesting in showing ŋ with rounding where the ʕ is. [kw1n,2’2,3r] [NUA: Tak]

Semitic uvular q also appears as ŋ in the same languages as g > ŋ, that is, in Takic and Hopi:

942 Hebrew **qiinaa** ‘funeral song, dirge, fem n.’, pl: qiinoot; Hebrew ha-qqiinoot ‘lamentations’;
Syriac **qiinaa** ‘singing, wailing, song, chant, hymn, lament’; denominalization or verbalization of the Semitic noun to a UA verb once again, as is often the case:
Ls(E) ŋináŋna ‘feel sorry for, feel compassion towards, be broken hearted, v.t.’; Ls(E) ŋináŋna/i ‘be sad, sorry, be bad, spoiled’; Ls(E) ŋiina ‘to fast, refrain from eating’; Ls(E) ŋiná’a ‘to fast, not eat s.th.’ Bright has Ls ŋíína / ŋiná-’a ‘fast, not eat’ and Ls ŋiná ‘be bad, spoiled; (of heart) sad, sorry’. [kw1q,2n,3q,4n] [NUA: Tak]
943 Syriac **qanqen** (< ***qanqin**) ‘to chant, sing’; this is the Semitic reduplicated form of the root underlying qiinaa above, and Syriac’s reduplicated verb *qanqin is exactly what we see in UA *ŋaŋi with assimilation of *-nq- > *-ŋ- and loss of final segment (n):
UACV-591 ***ŋaŋi** 'cry': BH.Cup *ŋa 'weep'; M88-na10 'cry' (also at nï4); KH/M06-na10: Cp ŋaŋa;
Ca -ŋáŋ-; Ls ŋáá- ‘to weep for s.o., cry’; Ls **ŋááŋi** ‘cry about/for’; Ls(E) **ŋaŋii**-ča ‘crying, weeping’;
Tb(H) annaŋat, pfv naŋ ‘to cry, cry out’. Tb has not initial ŋ, thus n. [kw1q,kw2n,kw3q,kw4n] [NUA: Tak, Tb]
944 Hebrew tiqqen ‘make straight, straighten s.th. that is crooked, vt’:
Ktn tïŋen ‘straighten arrows’. [kw1t,kw2qq,kw3n]
945 Hebrew qny / qanaa ‘acquire, buy’; Arabic qny ‘acquire, gain’; the pfv stem with suffixes in both Hebrew and Arabic ***qanii-** ‘acquire, buy’ is part of ‘paying’ s.o. for what one buys/acquires; the intensive (qittel) is unattested, but the proto-form of Hebrew pfv ***qinnaa** and the Hebrew, Arabic, and Aramaic impfv ***-qanni** would mean similarly or ‘paying/trading’ for what one acquires; so UA ŋani / ŋina reflect original vowelings of the impfv and prfv of the qittel, respectively:
UACV-2405 ***ŋani / *ŋina** ‘pay’: Cp náŋani ‘pay, vt’; Ca ŋíñan / ŋíiñan ‘pay s.o., be expensive’. [kw1q,2n,3y]
UACV-1903 ***ŋani / kani** ‘look for’: Sr ŋaan ‘look for’; Ktn ŋan / ŋa’n ‘look for, miss, vt’; SP kanii’ ‘seek’.
Besides this set, ***k/ŋamal** ‘crush, grind’ and other examples have Hp or Tak ŋ corresponding to k of Numic and other UA languages. Possibly from Semitic *galliy ‘uncover, find’ in *-ll- > -n- or -n’n-, like Ktn has. [NUA: Tak, Num]
946 Hebrew **qlʕ** / *qalaʕ ‘to sling, throw out (people from land)’:
UACV-2311 ***ŋalaw** ‘throw out’: Hp iiŋyala ‘reject, exclude’; Hp(S) iiŋala ‘drive away, exclude, throw out, vt'; Ca ŋálaw ‘fall/throw in a hole, vi/vt’. What of Cp xálewe 'fall, sg’? Note the Ca parallel to Ca pálaw ‘be pretty’ < Hebrew *pl’ ‘be unusual, wonderful, miraculous’ with final w for the final rounding element. [kw1q,2l,3’2] [NUA: Hp, Tak]

947 Arabic qalb ‘heart, middle, center, core’ > Cp ŋílveŋílva’a-š ‘nook, corner’. [kw1q,kw2l,kw3b]

948 Hebrew **ʕiqqaar** ‘root’; Syriac ʕeqaar-aa ‘root, remedy-the’; Arabic ʕaqqaar ‘medicament, remedy’:
UACV-1835 ***ŋa-**kaw ‘root’: KH/M06-na6: Sr -ŋaakaw; Ktn -ŋakawi; Hp ŋa’at ‘its root’. As we see in Sem-kw, initial glottal stop is feeble, often dropped, so also initial ʕ. With Sem-kw q > ŋ, then initial ŋa, or Semitic **ʕiqqaar** > ŋa- is expectable, especially since -kaw of Sr and Ktn is considered a separate morpheme of the compound. [NUA: Tak, Hp] [kw1’2,kw2q,kw3r]

A few more examples of Semitic-kw g > ŋ:

949 Semitic gdd II ‘band together, roam about’ (move is substitutable for roam); Hebrew gəduud ‘band, raid’; Aramaic(J) gidduud / giidduud ‘steep or straight embankment’:
UACV-1945 ***ŋïrïr** ‘move, move over’: Sr ŋïrïr|q ‘move, move over’; Ktn ŋïrïhr-ïk ‘edge down over (difficult concept to generalize)’. As the Ktn term differs from Ktn ŋilil-k ‘catch up with, overtake, vt’ at ‘circle’, this set is separated from *ŋVlil ‘circle’ (930). With *-d- > -r-, the phonology matches, and semantically, (1) both Semitic and UA mean ‘move’ in some way, and (2) “edge down over” is how one does “a steep embankment,” and (3) a band of raiders creep/move/edge down over an edge toward victims. [iddddua]

950 Hebrew gerem ‘bone’; Aramaic garm-aa ‘bone, self, essence’; Hebrew gəraamaa-w ‘bones-his’ (possessed pl); Arabic ğirm ‘body’; though a different ‘bone’ word, Hebrew uses ʕɛṣɛm ‘bone’ to indicate blood relative—“you are my bone and flesh” (Genesis 29:14), “bone of my bones” (Genesis 2:23); both the Hopi and Sr suggest an initial cluster of gr- or near it, which approaches a suffixed form with stress shifted to a 3rd syllable like the possessed pl above:
UACV-1738 ***ŋya(m)** ‘clan, relative’: KH.NUA: Hp ŋyam ‘clan members, clan’ (the Hopi dictionary has -m as a pl suffix); Sr ña, ñaa, pl: ñaam ‘relative, relation, kinsman’. The change ŋy > ña (nasal plus palatal to a palatalized nasal) is natural enough. [kw1g,2r,3m] [iddddua] [NUA: Tak, Hp]

As in Sr ña above, another instance of a g- + -liquid cluster is the Semitic prefix stem- glVs:

951 Arabic ğls / ğalasa ‘sit down’; impfv: -ğlisu
Ca ñaš / naš ‘sit down, settle down (live or camp), set in (new moon, young fruit as pumpkin)’. [1g,2l,3s]

952 Hebrew **pgʕ** ‘meet, attack, confront, assault’:
UACV-1200 ***poŋo** ‘hit, pound’: M88-po7; KH.NUA; KH/M06-po7: Cp píŋe ‘knock on, knock around’; Ls péŋa/i ‘throw, be thrown’; Sr pööŋ ‘pound’; Ktn poŋ ‘hit with the fist’; Hp pöŋöŋöta ‘be making knocking or rapping sounds’; Hp pöŋö-k-na ‘knock on, give a knock or sharp peck’; AYq poona ‘knock’; Yq pónne ‘machacar [pound, crush]’; My póona ‘hit, touch’; and My popona ‘martillar [hit/pound with a hammer]’. Note that all of NUA has medial -ŋ- and all of SUA has -n-. Hopi shows final rounding of 3rd C ʕ while others make obvious only first two C’s. [iddddua] [kw1p,kw2g,kw3’2] [NUA: Tak, Hp; SUA: TrC]

953 Arabic **ʕuqaab** ‘eagle’; Arabic ʕuqayyib ‘small eagle, eaglet’:
UACV-344 ***yuŋapi** 'buzzard': BH.Cup *yuŋávic 'buzzard'; HH.Cup *yuŋááviš 'buzzard'; M88-yu12; KH/M06-yu12:
Ca yúŋaviš; Cp yuŋáviš; Ls yuŋáávi-š ‘turkey buzzard, vulture, a star, proabably Arcturus’; Ls yuŋáávay-wu-t ‘condor’. Initial y- is a little strange, but all other segments fit, and another possible initial pharyngeal becoming y may be ħrpan > yïvana ‘autumn’. Or this might tie to Egyptian nxbt ‘vulture goddess’ (Allen 2010, 67) with iw ‘be’ preposed? [NUA: Tak] The following may be a vowel-line shift of *yuŋápi?
UACV-346 ***kupahï** ‘type of buzzard/bird’: Yq kúpahe ‘clase de pájaro, como zopilote, pero diferente en los colores de las alas’; Wr kohiwé / koiwé ‘zopilote, pelícano, quien, con Cuervo, llevó a Coyote al cielo’. With a metathesis of h and p/w, Wr seems probable with Yq and Tak with vowel transposition. I reconstruct the 2nd vowel as *a* so that we can blame it for the lowering *u to o in Wr. Besides, *a > i in Wr is more likely than *i > a in Yq, since i in UA behaves like the schwa in English. The phonological changes and the appearance of the word in mythology suggest a word of some antiquity and not a loan one way or the other, but it is a skewed (not perfect) match. [iddddua] [kw1’2,kw2q,kw3b] [SUA: TrC]

954 Arabic baqiya ‘stay, be left behind’:
Hp kwayŋya- ‘behind’. Good match and again Semitic-kw q > UA ŋ and Semitic b > kw. [kw1b,2q,3y]

955 Arabic ħgg / ħagga ‘overcome, defeat’:
Hp hoŋvi ‘strong, sturdy, durable’. Hopi -vi < Aramaic -be ‘with/in him/it’; that is, ‘overcome him/it’. [iddddua] [kw1h2,kw2g,kw3g]

956 Arabic ħgz ‘hold back, hinder, block, detain’:
Hopi oŋo-(k-) ‘bump into, collide with, reach an impasse, get blocked in one’s plans’. [1h2,2g,3z]

5.14 Initial k-, q-, g- in the Semitic-p and Semitic-kw Data

957 Arabic qarqađaan ‘squirrel’:
UACV-2142 ***koŋi** 'squirrel': BH *qéŋic 'squirrel'; Fowler83; M88-ko22 'squirrel'; KH.NUA; Munro.Cup122 *qééŋi-š 'ground squirrel'; KH/M06-ko22: Cp qíŋi-š ‘squirrel’; Ca qíŋiš ‘ground squirrel’; Ls qééŋi-š ‘ground squirrel’; Gb xoŋít; Sr qööŋt; Ktn koŋit ‘ground squirrel’; Hp koona 'type of tree squirrel' (cognate? Hill queries, and both Miller and Hill note vowel is wrong). Perhaps a loan? All Tak show medial ŋ, though Hp has n, as also Hp coocona ‘kiss’ among *cuŋa ‘suck, kiss’; so a few Hp -n- seem to correspond with Tak -ŋ-. [p1q,2r,3q,4z2] [NUA: Tak]
958 Hebrew qiynaa ‘funeral song, dirge’, qiynoot ‘lamentations’;
Middle Hebrew qonen ‘to begin singing a dirge’ (a denominative verb from qiynaa):
Hopi kïyna ‘begin singing a song, start a song’. [p:1q,2y,3n]
959 Syriac qml ‘suffer from leanness’ (that is, be thin); Syriac quumaal- ‘barley cakes baked in the embers and allowed to grow sour’; Hebrew qml ‘wilt, wither away’:
UACV-902a ***komal** ‘griddle’: CL.Azt74 *komaal; M88-ko25 ‘griddle’; KH/M06-ko25: CN komaal-li ‘griddle’; Pl kumaal ‘comal, tortilla griddle’; Po komal; Z komaal; T komolI; Hp qöma ‘to make qömi’; Hp qömi ‘oblong cake of baked sweet corn flour’. I agree with Ken Hill’s removing Miller’s question mark, for the Hp terms are cognate, as the first 4 segments agree (Hp ö < *o; Hp q < k/_ö), and a > i before liquids or as final V is common in UA, even if no liquid is apparent in Hp.
UACV-902b ***komal** ‘thin’: B.Tep104 *komarika ‘thin’; M88-ko32 ‘thin’; KH/M06-ko32: TO komal; UP komalikï; LP komilk (Bascom); Nv komarika ‘thin (as paper)’; NT komálika; NT komááli ‘delgado’; ST komaalyik. Likely same stem as *komal ‘flat griddle for making flat thin tortillas’. [p1q,p2m,p3l] [NUA: Hp; SUA: Tep, Azt]
960 Arabic **qarqara** ‘rumble, grumble, gargle, coo (pigeon)’ and qahqaha is similar, says Lane:
UACV-1749a ***kakara** ‘quail’: I.Num48 *ka(a)hka(a) ‘quail’; BH *qaxal? ‘quail’; HH *qaxáal ‘quail’; Munro.Cup104 *kaxáá-l; M88-ka15 ‘quail’; KH.NUA; Manaster Ramer 1991; KH/M06-ka15: SP qaqqaraC ‘quail’; CU yúaa-qaqXaarï-ci ‘quail’; Cp qaxá-l ‘valley quail’; Ca qáxa-l ‘quail’; Ls qaxáá-l ‘valley quail’; Gb kakár ‘quail’; Sr kakaata’ ‘quail’; Ktn kaka-č/kakaï-t ‘quail’; Mn qahï ‘grouse’; Sh kahan ‘grouse’; SP ka(h)aN-/ka(h)a-mpïci ‘ruffed grouse’.
UACV-1749b ***takkaka / *kakkata** ‘valley quail’: TSh takkaakacci/kakkaatacci ‘valley quail’; Tb takaah ‘valley quail’; likely a loan since Tb and TSh are geographically proximate. In light of the second alternate form in TSh, takkaaka- is a metathesis of kakkaata-. Add TO kakaiču ‘quail’ (< *kakkatu). Why this qarqara, differs from squirrel above (957) is a good question. [CC; k > h] [1q,2r,3q] [NUA: Num, Tak; SUA: Tep]
961 Hebrew **dɛqɛl** ‘date-tree, palm’; Arabic **daqal** ‘kind of palm tree’:
UACV-1606 ***taku** ‘palm tree’: Fowler83; L.Son271 *taku ‘palma’; M88-ta11; KH/M06-ta11: Eu takú-t; Wr tahkú ‘palmilla’; Tr ŕakú; My takko; Tbr takó-t; Wc taakïï. Add Cr takï ‘palma’ and Yq táko ‘palma’. This is from Sem-p in light of fierce rounding influence of uvular q. [o/u] [p1d,p2q,p3l] [SUA: TrC, CrC]
962 Aramaic(J) qooʕ-aa ‘throat, gullet, windpipe-the’; Aramaic(J) qooʕai-k ‘neck-your’; where did I see Aramaic qooʕêt ‘neck’?:
UACV-1515 ***kuwiC** ‘throat’: TSh kuwi(cci) ‘throat, front of neck’; Sh kuicci ‘throat’; Cm kuici ‘throat’; PYp kuikvor ‘throat’; PYp kuikered ‘Adam’s apple’; ST kui ‘larynx, trachea’; Wc kïipí ‘garganta, buche’; CN kooko’-tli ‘throat, windpipe’; CN kooko’tlan ‘neck, throat’. [Tep w?] [1q,2’2,3t] [NUA: CNum; SUA: Tep, CrC, Azt]
963 Hebrew qaaşiir ‘branch(es)’:
UACV-2412 ***kusi** ‘wood’: M67-170c; M88-ku7; KH/M06-ku7: Mn kussi-woqqopï 'Jeffrey pine';
Wr kusí 'branch, brush, thicket'; Tr kusí/gusí 'stick’. Sem-p’s rounding of q. [p1q,2s4,3r] [NUA: Num; SUA: TrC]
964 Hebrew qɛrɛn / qarn- ‘horn’
CN koyooniaa ‘horadar [perforate], agujerear algo [pierce/perforate s.th.]’. Another denominative verb made from a noun: to horn = to gore, perforate’. Other Semitic verbs also have the dual meaning of both ‘pierce’ and ‘horn’; e.g., Hebrew tqʕ ‘stick in, drive in, thrust in (weapon)’ and ‘blow a horn/trumpet’. [1q,2r,3n]
965 Hebrew qrʕ ‘rip/tear to pieces’, impfv -qraʕ :
UA *kowV ‘to tear’: Cp qíwe ‘tear’; Ca qíwiw ‘tear (clothes, paper)’ (Ca i < *o). [1q,2r,3’2]

966 Cognate with **Hebrew šqp** ‘look down on from above’ (both the ni-qtal & hi-qtiil);
Arabic θqf II / θaqqafa ‘seize, confiscate’; Aramaic(J) tqp ‘seize, overpower, hold firmly’; the Hopi form has the Hebrew sound correspondences (š < θ, *p > Arabic f), but the Arabic and Aramaic meaning:
Hopi sokop-ti ‘1. steal, pilfer, 2 get to the stage (of child development) when one can hold on to things’.
Round vowels could be the influence q if Sem-p, or from infinitive or verbal noun Hebrew **šəqop** [1s1,2q,3p]

All four cognate sets for ‘bow’ found in UACV are listed below and align with Semitic forms:

967 Aramaic(J) **qušṭ-aa** ‘bow-the’; Arabic qaws / qaus, pl: aqwas, qusiy, qisiy:
UACV-278 ***kuCta-pi** ‘bow’: Sapir; M88-ku36 'bow'; KH/M06-ku36: Cp kútapi-š; Gb -kúčap (poss'ed);
Ls kútupi-š ‘ash tree, bow’. Sapir includes Wc tupí/tuupíi 'bow’, which aligns with Ls’s 2nd and 3rd syllables, though CrC u < *o usually. Add AYq kuta wiko’i 'bow’. A reconstruction of *kuCta with a consonant cluster is needed given Takic intervocalic *-tt- (as *-t- > -l-). Retention of and rounding by q is likely Sem-p, and the Aramaic form quuštaa ‘bow’ is identical except for the usual loss of s in a cluster, and final -pi < Egyptian p’y ‘his’. Tak -p- (instead of -v-) is again evidence that the final glottal stop of the Aramaic definite article was originally pronounced in UA. [*t > c in Gb] [p1q,2w,3s1,4t] [NUA: Tak; SUA: TrC, CrC]

968 Egyptian-Hebrew **p’y-qušt** ‘his-bow’**:**
UACV-277 ***pikoti** ‘bow, bowstring’: Stubbs2003-42: Tb pihooli-t 'bowstring' and Tbr wiko-lí-t 'bow' both agree with *pikoli-t, and Cah *wikori 'bow' (Yq wíko’i; My wíko’ori / wíkori) may be borrowed from Tbr, as Cah does not have w < *p like Tbr does. Such a loan would suggest that Tubar was once a larger entity or a more prominent influence than it was later. Eu bákoci/vákoci ‘bow’ and Eu vákota’a-n ‘make a bow’ also agree well, since they share five of six segments, differing only in *a* vs. *i* for the first vowel. Retention of and rounding by q is Sem-p. [*k > h in Tb; *t > c/l/r, then l/r > ’] 1q,2w,3s1,4t [NUA: Tb; SUA: TrC]

The above two appear that they could be the Egyptian possessive pronoun on either side of the noun, as Egyptian could do: p’y-qwšt > pi-koti and qwšt-aa p’y > *kuCtapi. The Egyptian p’y prefix meaning ‘the-his’ can be prefixed (968) or suffixed (967). The 12 forms above (957-968) show Sem-p q > q/k, often with rounding associated with *qo/qu. The next 16 sets below show Sem-kw’s loss of initial q- and initial k- and initial g- (969-984). Notice that nearly all instances of Sem-kw g/q > ŋ are verbs, while the instances of g/q > ’ are nouns. Nouns take the prefix haC- ‘the’, which when removed may have left a glottal stop rather than the original consonant. That may explain why initial q > ŋ for verbs, but q > ’ for nouns.

969 Hebrew qešet, **qašt-** ‘bow, weapon’; Hebrew pl: qəšatoot, qaštoot: Hebrew **qašt-o** ‘bow-his’; Akkadian qaštu(m) ‘bow, archer’; Ugaritic qšt; Aramaic(J) **qaštaa**; Syriac qeštaa:
Note Hebrew qešet, **qašt-** ‘bow, weapon’; Hebrew **qašt-o,** and Aramaic(J) **qašt-aa** with UA loss of initial q-:
UACV-275 ***aCta** ’atlatl, bow’: Sapir; M67-53; I.Num10 *etï; M88a4; KH/M06-’a4: Mn édï; NP adï; TSh huu’etïn, etïn; Sh (huu)’aitïn; Cm eetï; Kw ’edï; Ch acï; Ch(L) ’aci; SP acï; WMU ačá-r*ü* / ačú*r* (some speakers say a voiceless/silent r) ‘bow’; CU ’áa-ci; Tb ’aali-t; Wr atá 'arma'; Wr atapóri 'arco'; Tr (w)ata; CN a’tla-tl ‘spear-thrower, atlatl’. Note *t > c in SNum east of Kw. Both Azt and Num suggest a consonant cluster. The Tr alternate forms ata/wata may be q-rounding after loss of q. The lack of initial q and lack of rounding (except in Tr) suggest Sem-kw. [*-tt- > c in SNum; initial *w in Tr?] [1q,2w,3s1,4t] [NUA: Num, Tb; SUA: TrC, Azt]

970 These Tepiman forms *gaato may be a voicing of Semitic qašt-o ‘bow-his’:
UACV-276 ***watV** 'bow’: B.Tep36 *gaatoi ‘bow’; M67-53; M88-’a4; KH/M06-wa32: TO gaat, gatwua; Nv gato;
Nv gata ‘make a bow, v’; PYp gaato; NT gaátoi; ST gaat. Remember in the preceding Tepiman languages, *s > h in Tep, which would disappear as first consonant in a cluster. Hp awta, combining form: aawat / awat may or may not tie in. Or loss of q in qawšt. [1q,2w,3s1,4t] [kw1q,2s1,3t] [NUA: Hp; SUA: Tep]

971 Syriac qarduun-aa ‘louse-the, nit-the’ (diminuitive of Syriac qard-aa ‘louse-the, nit-the’); perhaps from unattested Hebrew qard-iim ‘lice’:
UACV-1398 ***’aCtïN > *’atï(N)** ‘louse’: VVH24*’atï ‘louse’; B.Tep304 *’a’atïi ‘head lice’; M67-269 *’ate ‘louse’; L.Son6 *’atï ‘piojo de la cabeza’; CL.Azt103 *atïmV ‘louse’; Fowler83; M88-’a10 ‘louse’; KH.NUA; Stubbs 2000a-5; KH/M06-’a10 *atïn (AMR): Kw aci-vi; Hp atï; Cp ála’a-t ‘head louse’; Cp ála’a-š ‘lousy’; Ls ’uláá-t; Sr äṭïm ‘head lice, pl’;
Ktn ’ačïm-č; Gb -ár; TO aa’ač; UP aa’ačï; LP ’a’at; NT áátïi; NT áátï ‘have lice, v’; ST ’a’aat; Eu atét;
Tbr até-t; Yq ’éte; AYq etem; My éttem; Wr ehté; Tr té; Cr áte/até ‘louse/black louse’; Wc ’até; CN atemi-tl;

HN ’atimi-tl; Pl atimet; Po atomt. Tak absolutive -t (vs. -l) shows a final -C, and Sr, Ktn, Cah, and CN show final -m or *atïm. While possible, let’s not assume -m is a fossilized pl suffix, as AMR also reconstructed a final nasal also. Some forms suggest a geminated consonant or cluster, which probably means those that do not, later weakened or lost the gemination. Add Ktn ’atucit ‘flea’. [*-tt- > c in Num; *-t- > l in Tak] [kw1q,2r,3d,4n] [NUA: Num, Hp, Tak; SUA: Tep, TrC, CrC, Azt]

972 Hebrew **qippoz** ‘arrowsnake’:
Tr **aposini** ‘venomous serpent.’ This term also shows the s < *z/đ (like 922 gđb) and is missing initial q with no rounding from q, which are all consistent with Sem-kw. [kw1q,2pp,3z]

973 Hebrew gɛlɛd ‘skin’, gildaa-w ‘skin-his’; Arabic *gild ‘skin’; Aramaic gild-aa’ ‘skin-the’:
UACV-2022 ***’ïli… > Tep *’ïlida** ‘skin’: TO eliđag / elđag ‘skin of a person or animal, bark of a tree’; Nv ïridaka ‘skin, bark’; NT ïlíádï ‘cáscara’; NT ïïlípai ’skin an animal, v.’ The -g (< *w) on TO eliđag fit the possessive suffix Hebrew -aaw ‘-his’ or the *-w of the final glottal stop of Aramaic -aa’ ‘the’. [1g,2l,3d] [SUA: Tep]

974 Samaritan **kakkar**, Hebrew kikkar / kekar ‘round loaf, disk, vicinity, district, area around a place’ (as in the Jordan valley/towns through which the Jordan river flows):
UACV-362 ***aki / *haki** 'arroyo, waterway, canyon, valley': VVH57 *’aki 'arroyo'; B.Tep299 *’aki 'arroyo'; M67-348 *’aki; L.Son50 *haki 'arroyo'; M88-ha2 'arroyo'; KH/M06-ha2: NP tïhaga’yu ‘canyon’ (Miller has < NP *tï’aka); NP(B) tïakai ‘canyon’; NP(B) tïhaga ‘a hollow, little valley’; TO aki ‘ravine, arroyo, wash’; NT áki; LP(B) ’ak; NT akíívi ‘el arroyo’; ST ’ak; Eu hakít 'arroyo [gully, wash], valle [valley]'; Yq hakia ‘arroyo’; My hakía ‘arroyo’; Wr akí ‘arroyo, creek’; Tr aki- ‘water channel’; Cr áči/háči ‘arroyo’; Wc ’áki; PYp aki ‘arroyo, wash’. Note h in Cah, NP, Cr vs. ø elsewhere. This matches Sem-kw in loss of initial velar stop and anticipation of r causing a high-front vowel. [*k > č/_i in Cr] [kw1k,2kk,3r] [NUA: Num; SUA: Tep, TrC, CrC]

975 Hebrew qrb ‘approach, draw near’; Hebrew qaaroob ‘near’; Hebrew qéreb ‘inward part, midst’ (BDB):
UACV-1243 ***’ïrapa** ‘inside’: B.Tep336 *’ïrava ‘inside’; M88-ï15; KH/M06-ï15: TO eḍa ‘the insides or interior’; TO eḍawi ‘in the middle of’; TO eḍawek ‘intestines, insides’; LP ’ïrav; PYp era; PYp erava ‘middle’; NT ïráva; ST ’ïrvan; TO edawi-ko (Saxton)/ edavko (Mathiot) ‘in the middle of, halfway’; TO edavko matches Hebrew qereb-bo > qerev-kwo ‘inside-in it’. [*-r->Tep-r-] [kw1q,2r,3b] [SUA: Tep]

976 Hebrew qrb ‘approach, draw near’; Hebrew qaaroob ‘near’:
UACV-2356 ***ayopi** 'soon [i.e., near in time]: Tr ayobe/ayowe/ayowi ‘soon, immediately’. [-r- > Tr y] [kw1q,2r,3b] [SUA: Tep, TrC]

977 Arabic qariib ‘near, soon’; Aramaic(J) qaareeb ‘near’ > PYp aliv 'soon'

978 Semitic *gabbaar ‘man, strong/mighty man’ in several Semitic languages: Aramaic/Mandaic gabbaar; Syriac gəbar ‘man, strong or mighty man-the’; Syriac gabr-aa ‘man-the’; Arabic ğabbaar ‘giant, tyrant, mighty, powerful’; Hebrew gibboor < *gabbaar (oo < *aa):
UACV-1427 ***appaC-ti** ‘boy’: Kw ’eepi-ži; Ch áipaci; SP aipaC-; WMU ááppa-či ‘boy’; CU ’áapa-ci ‘boy’. To compliment a boy calling him a man makes this semantic shift understandable, but bb > not kw [1g,2bb,3r] [NUA: SNum]

979 Semitic kbr or gbr or gbh all could fit this; Hebrew gbr ‘be superior, increase’; or Arabic kabura ‘be great, big, increase’; or Hebrew gabah ‘be high, exalted, great’:
UACV-206 ***’apa’** ‘much, big’: Kw ’awa-(tü) ‘be much, many’; Ch(L) ’ava’a-/’ava’ana ‘many’; SP ava’-‘much, great, big’; SP ava’-na ‘much, v.n.’; SP ava’-tï ‘big, participle’; WMU avá’ni ‘big’; WMU av̲á’ne / av̲átne / av̲á’ni; prefixed: av̲á’a- / av̲á’an- ‘many, much, lots, adv’; CU ’avá-tï 'big'; CU avá’-na ‘many’. Jane Hill adds Ca a’avuk ‘grow’. [1g,2bb,3r] but bb > not kw [NUA: SNum, Tak]

980 Arabic klm ‘address s.o.’ > Ls ’ulómi ‘call s.o. names’ [1k,2l,3m]

981 Aramaic(J) gaz / gas, gaz-aa ‘bird of prey, falcon-the’:
UACV-741 ***’asa-wïr** ‘eagle’: BH.Cup*’ašwït; M67-147 *’as; KH.NUA; M88-’a12; KH/M06-’a12: Sr ’ahïŋ-t / ahïn-t 'eagle'; Ls ’aṣ-wu-t 'golden eagle'; Cp ’ašwe-t 'eagle'; Ca ’aswet; Gb ’asáwt 'golden eagle'; Tb ’aašawï-t 'eagle’. As Miller suggests, the -wï syllable in these forms probably means 'big'; yet a 2nd V *a* after *s* is apparent in both Gb and Tb. Note also Sr’s ŋ where others have w. [ŋ/w] [1g,2s,2z] [NUA: Tb, Tak]

982 Hebrew qll ‘be small, insignificant, light, fast’; Arabic qaliil ‘little, few, insignicant’; Arabic qll ‘be little, few, insignicant, inferior’:
UACV-1356 ***ali** ‘little’: B.Tep300 *’arii ‘little one’; M67-387a *’ali, 387b *’ili; M88-’a7; KH.NUA; KH/M06-’a7: TO al ‘little’; TO ali ‘baby, child’; LP lii; NT áli; ST ’alyii; My iliči / ili’iči; Sr añii’či’ ‘small one, little one, baby, child’; Ca íñišily ‘small one’; Ls ’ááli-may ‘woman’s brother’s child’; Ls ’alú’-ma-l ‘small, thin, a baby’. Add Tbr ali- ‘pequeño’; AYq ili ‘small, little, few’; AYq iliči ‘small, little’. [kw1q,2l,3l] [NUA: Tak; SUA: Tep, TrC]

983 Hebrew škb, impfv -škab ‘lie down, lie’ something else?
UACV-1318 ***hapi** ‘lie down’: I.Num31 *hapi ‘lie down’; M88-ha8 ‘lie down’; KH/M06-ha8: Mn hapi; NP hapi; TSh hapi; Sh hapiC; Cm hapi; Kw havi; Ch haví; SP avi; WMU aví; CU ’aví; Eu ’abi ‘lie’ (Shaul 2003, 29). Perhaps tied to Cr abiíci’i ‘escondido’ and Wc ’avieta ‘hide (claws/teeth)’ at *’api ‘hide’.
[NUA: WNum, CNum, SNum; SUA: TrC]
UACV-1181 ***’api** ‘hide’: Cr abiíci’i ‘escondido’; Wc ’avieta ‘hide (claws/teeth)’. This may relate to Num *hapi ‘lie down’ since hiding often involves lying down or laying s.th. down. [1s1,2k,3b] [SUA: CrC]

984 Hebrew **gullaa** ‘bowl’ (< Hebrew gll ‘roll’ niqtal: ‘be rolled together’); Akkadian gullu ‘bowl’:
UACV-431 ***ola** / *olol ‘ball’: M67-20 *'ol ball; M88-’o16; KH/M06-’o16: TO ola; NT oróóši 'ball, ball game'; Cr ú’uraara; CN te-ololtik; CN ololtik 's.th. ball-shaped, spherical’; Pl ulul-nah 'round, spherical’. SUA *ola and Hp ŋöla ‘hoop, ring, wheel, tire’ may both be of Sem-kw, in loss of g in SUA and g > ŋ in Hp. Compare 931 from a different form of the same root. [*o > Cr u, liquids] [kw1g,2l,3l] [NUA: Num, Hp; SUA: Tep, CrC, Azt]

More examples of Semitic-p preserving initial q-, k-, g-:

985 Arabic kasara ‘break, shatter, fracture’
UACV-286 ***kasi** ‘break’: Tr kasi 'break in pieces'; Wr kasí- 'break (of brittle obj's), vi’. [1k,2s,4r] [SUA: TrC]

986 Hebrew qiir ‘wall, town’; Hebrew qiryaa ‘village, town’:
UACV-1214a ***kiC** ‘house’: Sapir; VVH44 *ki; M67-240 *ki; BH.Cup *kica; B.Tep100 *kii; L.Son80 *ki; M88-ki1 ‘house’; Munro.Cup64; KH.NUA; KH/M06-ki1: Hp ki-/kiihï; Eu kit/kíit; Tbr ki-tá; Ktn ki-c; Sr kii-č; Ca kí-š; Ls kíí-ča; Cp kí-š; TO kii; Nv ki; PYp kii; NT kíí; ST kii; Wc kíi; Cr čí’i.[*k > c/_i in Cr] [NUA: Hp, Tak; SUA: Tep,TrC, CrC]
UACV-1214b ***kiC-tu / *kiC-ta** ‘build a house’: KH.NUA: Sr kiiču’ ‘build a house’; Ls kííču; Ca kíču ‘dwell’; Hp kiita ‘build a house’. [p1q,p2y,p3r] [NUA: Tak, Hp]

Note the contrast of the same word qarʕ- ‘gourd, pumpkin’ from Sem-p qarʕ > UA *kuyawi (987) in contrast to Sem-kw qarʕ > UA *aya(w) (988):

987 Arabic **qarʕ**- ‘gourd, pumpkin’ (Sem-p):
UACV-2135 ***kuyawi** 'gourd': Tr guyowí ‘guaje [gourd]’; Wr kuyawí ‘planta de bule [gourd plant]’; Tb(H) kooyoo-t ‘turtle’. [*-r->Tr/Wr -y-?] [p1q,p2r,p3’] [SUA: TrC; NUA: Tb]

988 Arabic **qarʕ**- ‘gourd, pumpkin’ (Sem-kw) or Syriac qara’-aa ‘gourd’:
UACV-2141 ***ayaw < *arawV** ? ‘squash, gourd’: CL.Azt159 *ayoh ‘squash’; M88-’a2 'squash, pumpkin'; KH/M06-’a2: Ls yáá’aya-t 'turtleshell rattle'; Sr ’aayt 'rattle'; Hp aaya, pl: aa’aya 'hand rattle (made of gourd)'; Wr aláwe 'calabaza'; CN ayo’-tli 'squash, pumpkin’. AMR (in his long unfinished article “Ontology”) and Ken Hill add TO haal ‘squash, pumpkin’ and My aayaw, pl aya’aw-im ‘calabaza harota’. Yes! Add also Tbr haya ‘calabaza’ (Tbr haya-we-t ‘turtle’); Yq ayá’awi ‘calabaza sazona’; PYp ara ‘small squash’; and Op arii ‘squash’ (Shaul 2007). Wr, TO, and PYp all suggest an original liquid underlies y, though Wr -l- vs. Cah -y- is curious. [l/y] [kw1q,2r,3’2] [NUA: Hp, Tak; SUA: Tep, TrC, Azt]

As a turtle shell looks somewhat like the rough exterior of a rounded gourd/squash, Some UA turtle terms derive from gourd/squash words in UA. Below is an example.

989 Arabic **qarʕ**- ‘gourd, pumpkin’ (Sem-kw) or Aramaic(J) qaaraa’ ‘pumpkin, gourd’; Syriac qara’-aa ‘gourd’:
UACV-2422 ***ayaC / *ayoC** 'turtle': Sapir; M67-445*’ay 'turtle'; M67-341*ay 'rattle'; BH.Cup*’áyila 'turtle'; CL.Azt179 *aayoo- 'turtle’, 28 **ay- 'turtle'; Fowler83; M88-’a14 'turtle'; Munro.Cup134 *'ááyi-la; KH.NUA; KH/M06-’a14: Kw ’aya; SP ’aya; CU ’ayapï-ci; Cp áyily; Cp -áyi 'turtle shell rattle (poss'd); Ca ’áyily 'turtle'; Ca -’áyi 'turtle shell rattle'; Ls ’áy-la 'abalone'; Ls páá’i-la 'turtle'; Ls páá’aya-t 'turtleshell rattle'; Hp aaya 'rattle'; Tbr haya-wé-t 'tortuga'; Wc ’ayé/’aayée; CN aayoo-tl; HN aayoo-tl. Jane Hill (p.c.) reminds that CN aayoo-tl < *aya-wï- (turtle-big). CU -p- (vs. -v-) and Ls -t- (vs. -l-) suggest a final C. The 2nd V is difficult. SNum, Hp, Tbr, and one Ls form suggest *’aya, while CN and the other Tak forms are more consistent with *ayo, since Ca and Cp i < *o, then there is Wc ’ayé, whose 2nd V does not fit either. As Miller and Hill do also, this and 988 above have overlapping forms as gourds and turtle shells have similar shapes and surfaces. [-a/o] [kw1q,2r,3’2] [iddddua] [NUA: Num, Tak, Hp; SUA: TrC, CrC, Azt]

990 Semitic qr’ / *qara’ ‘call, name, cry out, shout, announce, conscript, muster, invite’ exists in nearly all Semitic languages; Hebrew qore’ ‘partridge, shouter’; Syriac **qary-aa** ‘caller, announcer’ (participle); in the UA set below, the lack of initial q and lack of rounding for final ’ means Sem-kw:
UACV-1492 ***aya** ‘call’: M67-75 *ay ‘call’; M88-’a15; KH/M06-’a15 *ay (AMR): Tb aay(at) ‘call, count, v’; Ls ’ayá’ ‘messenger who announces people making a formal visit’; Hp aya-ta ‘hire, direct, tell or ask (to do s.th.), vt’; Hp aya, pl: a’yat ‘helper, employee, hireling, person who helps in return for food’ (cognate? Hill queries); I say yes, since in other UA sets, terms suggest invitations (a call) for work help (in exchange for whatever); TO aaða ‘palate’ (cognate? Hill queries; probably). As for Hopi ‘hiring, telling, directing’ persons in work/projects, note the Semitic definitions ‘conscript, muster (military or work force), invite’. [kw1q,2r,3’] [NUA: Hp, Tb, Tak]

991 From Semitic qr’ / *qara’ ‘call, name, cry out, shout, announce’ is the Hebrew niqtal passive: Hebrew **ni-qra’** ‘he/it is called/named’; the UA set below appears to be from a fossilized **ni-qra’** which is the most common niqtal form ‘he/it is called or named’ and has exactly the Numic meaning and form, though with softened q > h; and lack of rounding for ’ is consistent with Sem-kw:
UACV-1490 ***nihya** ‘call, name’: I.Num117 *ni(C)a / *nih- ‘call, name, v’; M88-ni2 ‘call, name, v’; KH/M06-ni2: Mn niyat; NP nania; Sh niha/nihya; the -nia of Sh tïpinia ‘give a name’; Cm niha ‘name, be called, v’; Kw niyaa-vi ‘name, n’; SP nia ‘call by name’; CU niaa ‘name’. Add TSh niha / niya ‘name’; Ch nia-vi ‘name’; WMU nia / niyé ‘name, n’; WMU níyææ-n ‘my name’; and perhaps Tr neho / nehówi / o’wi ‘invite’. I like Iannucci’s reconstruction *ni(C)a, because the medial consonant is unclear and the variety again suggests that we may be dealing with a cluster. [Sem-kw with weakened q, r > y, and no rounding from ’] [kw1n,kw2q,kw3r,kw4’] [NUA: Num]

992 Semitic qr’ / *qara’ ‘call, name, cry out, shout, announce’; as Hopi o < UA *u, Hopi eyo and Ktn yu’ match each other with loss of initial vowel in Ktn: Hopi eyoyo-ta ‘ring, peel (of bell)’; Ktn yu’ ‘cry, sound, buzz, sing’ reflects the impfv stem plural yV-qrə’u ‘they call/cry’. Other forms resemble Semitic qr’, but some details are not yet clear; a list to contemplate: Ls ’uyá’a ‘feel bad, sad’ (i.e., cry); Ls ’úúyi ‘howl’; Ls hááyi ‘scream’; SP qwarava-ya’i ‘cry from pain’ vs. **UA**CV-613 ***otoNwa** (**oroNwa**) ‘groan’: SP oroŋwi ‘roar, growl’; WMU oróġoa̲’nI’ni ‘groan in pain’; CU ’oróĝwa’ni ‘suffer’. [1q,2r,3’] [NUA: SNum]

993 Hebrew **qəwuṣoot** ‘locks’; Arabic quṣṣa(t) ‘lock of hair’;
Syriac qauṣ-taa / quuṣ-taa ‘curl, ringlet-the, n. f.’, pl: quuṣaa-taa / qaswaa-taa ‘curls-the’:
UACV-1111 ***woC** ‘hair’: M67-210 *wo; I.Num270 *woo(h) ‘hair/head’; M88-wo6 ‘hair of the head’; KH/M06-wo6: Mn woo ‘head, hair’; Mn wóópi / a-qwoopi ‘hair of head’; NP kwo ‘head, hair’; Tb(M) woodzon ‘place where hair grows from, crown’; (perhaps Syriac quuṣtaa >) Tb(V) woodo-l ‘the hair center on head, the tip of basket cap’. Mn -p- is from gemination or final -C on 1st morpheme. [w/kw in WNum] [1q,2w,3s4] [NUA: Num, Tb]

994 Hebrew ʕqr ‘uproot, weed’; MHebrew(Jastrow) neʕeqar (< *na-ʕqar) ‘be uprooted’; Syriac ʕqr / ʕəqar ‘uproot, be barren, heal’, impfv -ʕquur; Hebrew ʕaaqaar ‘infertile’; Samaritan Aramaic (CAL) ʕaquur ‘death, barrenness’; loss of initial ʕ (perhaps in a cluster) while 2nd C q is retained in the UA form being impfv -ʕqar, with -a- instead of -u- (such dialect variations happen), or stressed 2nd syllable of a pfv ʕ̓qar > qay:
UACV-2489 ***qaya/i** ‘uproot, weed, clean, wash’: BH.Cup *qáyi 'wash';M88-ka24; KH/M06-ka24: Ls káyi ‘to uproot’; Ls qáya/i- ‘fall, as a tree, vi’, blow down (a tree), vt’; Ls qáya/i- ‘heal (sore), get well, vi, heal a sore, wash one’s hands, vt’; Ca qáyi ‘get clean, clear (ground, body, etc)’; Ca qáyi-n ‘to clean, get rid of, wash, clear’; Cp qéye ‘pull out, vt’; Ca qúyen ‘to pull out (tree)’. [1’2,2q,3r] [NUA: Tak]

Interestingly in the above, Bright’s Luiseño dictionary lists as separate verbs Ls qáya/i- ‘blow down (a tree)’, that is, ‘uproot’ and Ls qáya/i- ‘heal’, though the two are phonologically identical, and amazingly, the **Syriac verb also has both meanings ‘uproot’ and ‘heal’**. Tak also shows q instead of k.

995 Hebrew gbl ‘to fix a landmark, form a boundary’; Arabic ğabal ‘mountain’;
Hebrew gəvuul (< *gabuul) ‘mountain, boundary’:
TO gavul-k ‘be different, separate’; TO gavul-kad ‘to separate, divide’; and TO kavul-k ‘hill’. While a devoicing of g > k is plausible, but not certain, to have the two meanings ‘mountain’ and ‘boundary’ in both Hebrew *gabuul and TO gavul-/kavul- should create interest, or we can count only one. [p1g,p2b,p3l]

More cases of loss of initial q, k, and g, from Semitic-kw

996 Arabic yasaaran ‘at/on the left’; Arabic min-al-yasaariy ‘at/on the left’; Arabic ’aysar ‘left handed / sided’; Arabic -yasaariy ‘the left’ corresponds to Hebrew *yəšooriy, and with š > UA *c > Tep s, and Tep d < *y, loss of 1st syllable, and a Canaanite vowel shift aa > oo, *yəšooriy > PYp suurid ‘left, from the left’.

997 Hebrew **kəraaʕ** ‘lower leg’ (Sem-kw):
UACV-949 ***yï’u < *kVyu’u** ‘leg’: Kw yu’u-vï ‘leg’; Ch yu’u ‘leg’; SP yï’u / yu’u ‘leg’; WMU yu’úú ‘leg’; CU yu’úa-vi ‘leg’. Tb kuyuu ‘lower leg’ has the original initial *ku lost in SNum. [1k,2r,3’2] [NUA: SNum, Tb]

998 Hebrew qeren / qarn- ‘horn’; MHebrew qeren / qarn- ‘horn, corner, tip’; Akkadian qarnu(m) ‘horn’; Syriac qarn-aa ‘horn, pinnacle-the’ but non-definite Syriac qᵊren has nearly no vowel between 1st and 2nd consonants, making loss of first consonant plausible: SP yïnnï ‘crown of the head’. [kw1q,2r,3n]

999 Hebrew gaaroon ‘throat, neck’ (Sem-kw):
UACV-1516 ***iyoN** ‘back of neck, nape of neck’: WMU íyő / iyő / iyőm-pi ‘back of neck, nape of neck, n’; CU ’íyö-vi (WMU has a nasal vowel and/or consonant not in CU). This noun is also incorporated into verbs: *iyon-na- ‘put arm around s.o. (originally around neck, later to hug or put arm around in any manner)’: WMU i(y)őnt’a-qa-y, i(y)őn-náqa, iínt’a-qa-y, iín-qa ‘put arm around, hug s.o.’; SP iyonna- ‘carry in one’s arms’; CU ’íyönani’i ‘hug, vt’. Loss of g- and high-fronting of aro > iyo mean Sem-kw. [kw1g,2r,3n] [SNum]

More examples of Semitic-p retaining initial q-.

1000 Aramaic(J) qa’t-aa ‘pelican’:
UACV-580a ***koto (< *ko’ota)** ‘crane’: L.Son94 *koro ‘grulla’; Fowler83; M88-ko18 ‘grulla’; KH/M06-ko18:
TO kookoḍ; Nv kokorh; Op koro-ci; Eu koró; Tr goró; Yq kórowe; My kóorou; Tbr koló ‘pájaro’; NP kodïdï 'crane’. Fowler lists Mn kodito 'sandhill crane'; Mn kodi’i 'sandhill crane'; Sh koandata 'sandhill crane'; Kw ko’ota 'a kind of goose'; Ch cakora 'sandhill crane’. Especially Kw very nicely reflects the Aramaic.

1001 Arabic qiila (passive) ‘was said, it was said that …’ > CN kil ‘it is said that …’ [1q2w3l]

1002 Hebrew qool ‘voice, noise’ (qwl); Arabic qwl / qaala ‘speak, say, tell’; Arabic **qawl** ‘speaking (verbal noun), word, speech, saying’; Arabic qiila ‘it is/was said’ (passive): Hp qawï ‘to say, speak’; [1q2w3l]

1003 Arabic kirš / kariš ‘stomach, paunch, belly’
UACV-2195 ***kïca** ‘belly, waist’: Stubbs2003-36: Eu kecáka 'cintura [waist]’; PYp kesar 'womb’. Eu and PYp match through four segments, are semantically close, and 2nd C is the reduced cluster -rš-. [1k,2r,3s1] [SUA: Tep, TrC]

1004 Hebrew qšš ‘be old, dried up’ (BDB); qaš ‘straw, stubble, chaff’; Syriac qešš-aa ‘stubble, dry stocks, grass or leaves’; Aramaic(J) qašš-aa ‘straw, stubble’; Aramaic(J) qišqeš ‘knock, strike, shake, tingle’; **-qošš** is unattested in the Hebrew text, but is the usual voweling for verbs of identical 2nd and 3rd consonants: CN(S) košon-ki ‘seco [dry], triturado [crushed], molido [ground]’; CN košoni ‘resonar [resonate], hacer ruido (vasija que no está llena) [make noise (vessel that is not full)’; another example of a semantic tie between ‘dry vegetation’ and ‘sound, rattle’; see ṣll at 31.

1005 Hebrew qaśwaa ‘jar, f’; Hebrew pl: qəśoot; Arabic qaswat ‘basket’:
TO gihot ‘carrying basket’. Remember that Semitic s/ś/š > h in TO. [1q,2s2,3t]

1006 Hebrew qṣr ‘to reap, harvest’; Hebrew qaaṣiir ‘harvest, n’ > Wr kacuri ‘a kind of sweet corn’. [iddddua]

Sometimes Semitic x softens to h:

1007 Semitic *xdl (> Hebrew ḫdl / ḫaadal) ‘cease, cease doing’; OSArabic xdl; Akkadian xadaalu ‘cease’; Arabic xdl / xadila ‘stiffen, become rigid’; intervocalic -d- > -r- is common in English and many languages: Hp hïrïï-ti ‘come to a stop, harden’; regarding Hopi’s two rather different meanings, note that Arabic has one of the meanings (stiff/hard) while the other Semitic languages align with ‘stop, cease’, yet Hopi has both meanings ‘stop’ and ‘harden’ which are not usually related. Hopi has other related variant forms such as Hp hïïrïla ‘be hesitating, pausing, stopping’. [p1x,2d,3l]

While Semitic-kw loses initial q- in most UA languages, at least Hopi preserves a whispered remnant in h:

1008 Hebrew qrb ‘approach, draw near’; Arabic qariib ‘near’; Syriac qərib ‘come near, draw nigh’:
Hp hayiŋw- ‘draw near’. For final -b > -ŋw, see heart (1312) and snake (1198). [kw1q,2r,3b]

1009 MHebrew qmṭ ‘heap together, bind’; Aramaic(J) qmṭ ‘draw together, pack, bind’;
Syriac qmṭ ‘lay fast hold of, take, contract, shrink, shrivel, wrinkle’:
Hp hòm-ta ‘trying to grab or catch things thrown’;
Hp homi(k-)[1] ‘in competition with others, grasp, grab, or catch s.th. thrown’.
Hp homi(k-)[2] ‘shrink, draw together, gather up, shrivel up’.
Again notice two identical but separate forms in the Hopi dictionary due to different meanings, yet Semitic also has both meanings, like Semitic ʕqr ‘uproot, heal’ in Ls at 994. [1q,2m,3t2]

1010 Syriac qlp ‘to peel, shell, scrape off, strip off’; Arabic qlp ‘strip bark from a tree’:
Hp hàapo(k-) ‘get loosened, chipped’. Hp -p- (vs. -v-) means a cluster, aligning with *qalpu. [1q,2l,3p]

1011 Semitic kwn / knn ‘be, exist, make’; Ugaritic kn / knn ‘make’; Arabic kwn, perf: kaana ‘be, exist, happen’; Arabic kwn II / kawwana ‘make, create, produce’; Hebrew (ni-qtal) na-koon ‘be established, completed’; Hebrew (hiqtiil) hekiin, **hekannu** ‘prepare, make ready, fix s.th.’;
UACV-681a ***hanni** 'do, make': I.Num29 *(ha(h)ni 'to cook, do, make'; M88-ha7: ‘cook, make’; KH/M06-ha7: NP hanni 'do, make, fix'; TSh hanni 'do, use'; Sh hanni 'do, make, fix, prepare’. CN ai 'do, make'? Miller asks; maybe.
UACV-681b ***’ani / *kani** ‘do, cause’: Langacker 1977, 41, 45 and Shaul 2003, 33 note Eu eni ‘do, be’;
SP -’ni ‘do’; Hp ni; Sr ñihai ‘do’; Tr nii- ‘be’; Tep denV (< *ye-ni); etcetera, focusing on *ni. Add Kw ’i-ni- 'do'; Kw ha-ga-ni 'do s.th.'; CU ’iní-k (variants ’uni-k, ’aní-k) 'do, act, make'; Yq ’ania ‘help’; Yq aane ‘be’; AYq aane ‘do, be around/about, vi’; AYq ánia ‘help’; Tb ’in 'do it'; Hp -k-na; Sr -k-in; Eu éni ‘estar’; Ch úúnii ‘be, do’; Ch uní-nupïru ‘make, v’; Ch hagá-ni ‘do what’. Note TSh kan ‘do’ in TSh suwakkan 'think about doing' (TSh suwaC 'think'). Note Ktn tama-wï-t ‘sharp (< tooth + aug)’ and Ktn tama-’n ‘sharpen (< tooth- do)’; in other words, -’n = ‘do/make’. SNum *uni; in fact, SNum languages have three vowelings: *’uni, *’ani, *’ini. Cf. Tewa ’an/kan ‘do’ (Martinez and Povijua 1982, 103; and Stubbs 2008). This also appears in many compounds, such as Tb tugaa’anït ‘make deep’ from Tb tugaa’ït ‘be deep’. [1k,2n] [NUA: Num, Hp, Tb, Tak; SUA: TrC, Tep]

1012 Hebrew **šiqma(t)**, pl -im and **šiqmoot** ‘sycamore tree’; Syriac **šeqma(t)**; the cluster -qm- > -ŋŋ- is very expectable in that q itself does q > ŋ in Sem-kw, then combined with another nasal to yield -qm- > -ŋŋ-, and all else as expected as well, in that *-m’- > -ŋ- (salt, husband, lung), also *-qm- > -ŋ- (large tree):
UACV-559 ***sïŋŋa(C)** 'cottonwood and/or aspen tree’: NP(Y) sïŋŋabi 'cottonwood’; NP(Y) gaiba sïŋŋabi ‘aspen’; NP(B) sïŋabi ‘tree’; NP(B) sïŋaabi ‘willow’; NP(B) kaibasïŋabi ‘quaking aspen tree’;
Sh sïnka-pin / sïnna-pin ‘aspen’. Note also TSh sïŋapin ‘aspen’; Sh(C) sïnka-ppï / sïnkaC-ppin ‘aspen tree, tree (generic), any mountain tree’; WMU sü̱ü̱á-v*ü* / sü̱á-vü ‘cottonwood tree, quaking aspen, n’; SP šüya-vü ‘quaking aspen’; SP šïaC- ‘sapling’; CU sű̱ü-vü-p*ü* ‘cottonwood’; CU sïa-vi ‘quaking aspen’. The -ŋ- occurs in all three branches of Num, as nasalized vowels in WMU with no other nasals in the vicinity. In some Sh dialects is seen *-ŋ- > -n-, while most of SNum lost the nasal altogether. While NP(B) seems to have merged the forms, most languages have separate forms for ‘willow’ (*sïhï, *saka) though close enough to understandably be confused. [1s1,2q,3m,4t] [NUA: WNum, CNum, SNum]

1013 Hebrew **šiqma(t)**, pl -im and **šiqmoot** ‘sycamore tree’; Syriac **šeqma(t)**; in contrast to Sem-kw šeqma(t), this is Sem-p šeqma(t) in light of the rounding about -q-:
UA ***sohopi** 'cottonwood tree' (Sem-p); Tak *sapo: M67-104 *so 'cottonwood tree'; I.Num180 *soopih 'cottonwood tree'; NP so’o 'aspen'; TSh sohopimpï; Sh soho-pin; Cm soho obi 'cottonwood tree'; Cm sohopokóó’ 'mulberry tree'; Kw soovi-pï; SP soopi-C/ppï; Hp söhövi ; Ca sívily 'maple, sycamore'; Cp ševí-ly 'sycamore' (vowel unexpected); Ls ṣivéé-la 'sycamore'; Sr havööč 'sycamore'; Ktn havo-č ‘sycamore’; Gb ṣevér 'sycamore’.
Ken Hill queries whether CN soomee-tl ‘elder tree’ is cognate. Yes! In fact, CN alone shows m. In the others the nasal, in cluster with a stop, changed the bilabial nasal to a bilabial stop. The Tak forms have the pV syllable well-embedded, opposing an old absolutive suffix in Num. The reconstruction *sohopi works for Num and Hp and Tak, though its first vowel varies, probably due to a past lack of stress. While most UAnists consider these may be related, an explanation is elusive. The semantic shift is slight: sycamores, cottonwoods and aspens are all large, leafy shade trees. A strong rounding effect of a former q suggests Sem-p. A stop-bilabial cluster of *-qm- > bilabial stop *-p- happens in WMU too. Though in a cluster where it might disappear, the q remains as h or a syllabic echo of -ho- or -’o- in some languages. The actual -m- in CN baffles UAnists, but fits Hebrew, as it lost -q- in the cluster, after retaining its rounding influence, and retained m. [1s1,2q,3m,4t] [NUA: Num, Hp, Tak; SUA: Azt]

1014 Syriac qədaal-aa’ ‘neck, nape of neck’; Arabic qaḏaal ‘occiput’; Aramaic(J) qədaal-aa’ ‘back of neck, neck, back’; Aramaic(S) qədaal-aa ‘neck’; rounding power of Semitic-p q- encourages qədaal > qutaC:
UACV-1501 ***kutaC** ‘neck’: Sapir; VVH154 *ku$_s$ta ‘neck’; M67-303a/b *kuta/*ku; I.Num67 *ku(h)ta; BH.Cup *qel ‘nape’; L.Son111 *kuta; B.Tep123 *kusivu; CL.Azt258**kuta; CL.Azt115 *kəc; M88-ku9; KH/M06-ku9 (*kucV AMR) and at least Tak of KH/M06-ko29: Besides Mn kúta; Np gguta; TSh kutan; Sh kuta; Kw kura-vi; Ch kura; SP qura-vi; WMU qurá; CU kurá-vi; Tb kulaa-; Cp qil^y’a ‘nape of the neck’; Ls qelá-t / qilá-t; Eu kutát; Tr gutá(ra); Wr kuhtamó; and

CN keč-tli; My kúta' náwwa 'cuello'; Yq kútana; Cr kúh-ta'a-n 'behind, at back of his neck'. Tak lowered the round vowel toward *a* (*kuta > *qola), so the Tak forms derive from *qola (< *kuta). Miller and Sapir tie CN keč-tli with the above, explainable in the usual Azt change *u > i, then assimilation i-a > e-a: *kuta > kica > kec. [p1q,2d,3l] [NUA: Num, Tb, Tak; SUA: TrC, Azt]

1015 Akkadian kabaaru 'be big, fat'; Arabic kbr / kabara 'be older, great, big, grow, increase'; Arabic kabiir 'big'; Hebrew kabbiir 'strong, mighty'; Syriac kəbar 'to increase'; the intervocalic -t- in CNum are really -r-, and note the Syriac stress pattern of 1st V as schwa-like with stress on later vowels:
UACV-1391 ***kapataC*** 'long, tall': TSh kïpïtappi 'long, tall'; Sh(M) kïpata 'long, tall'; Sh(C) kïpattax 'long, tall'; Sh(C) kïpatta-wïnïh 'stand tall'; Wr kahpíla-ni 'be long'. Sh kïpata is pronounced kïbara and 'big' > 'tall'. Tb ekeewan / egeewan 'big, large' perhaps Sem-kw as -w- < *-kw- (< *hit-gabbar with -tg- cluster would explain both k/g (vs. h), the lead vowel and *-bb- > UA *-kw-. [p1k/g,2b,3r] [NUA: Num, Tb; SUA: TrC]

1016 Hebrew qbr / qaabar / qəbar- 'bury'; Hebrew qeber 'grave'; qbr 'bury' also in Ugaritic, Akkadian, Samaritan, Syriac, most dialects of Aramaic, Arabic, and Epigraphic South Arabic:
UACV-666a ***kopa / *kopor*** 'dig': B.Tep114 *kovai 'he digs'; M88-ko34; KH/M06-ko34: TO kow 'dig in a hard place'; TO(M) kovod-k 'shallow hole with flat bottom surface'; LP kov; PYp kov; NT kóvai; NT kovóóltïudai 'make a hole'; ST kov. Note -l- as 3rd C in the NT form. Add Nv kokova 'cavar' and Wr te'kopá-ni 'be a hole or slight depression'. What is more grave-like than a flat-bottom hole? And TO shows all 3 consonants. [SUA: Tep, TrC]

1017 Hebrew qbr / qaabar / qəbar- 'bury'; Hebrew qeber 'grave'; qbr 'bury' also in Ugaritic, Akkadian, Samaritan, Syriac, most dialects of Aramaic, Arabic, and Epigraphic South Arabic;
Hebrew qubbar 'be buried' or impfv: -qbur > *kkwur; or infinitive qəbor:
UACV-322 ***kuC / *kuy / *ku'way?*** 'bury': M67-65 'bury': Mn kuu; Ca kúy 'bury (s.th.), fill up hole (with dirt), vt'. Add NP ku'u 'bury, vt'; NP tïku 'bury, vi'; TSh kuu 'bury, vt'; TSh nakuuh 'bury, vi/passive'; Kw kuwa 'cover up, cover over'; Kw kuwa-kwee 'bury'; Ch kúú 'bury, v'; Sh naku-ppï 'grave'; The impfv -qbur > *kkwur may explain some. M67 includes Tb woohat ~ owooh 'bury' and Tb w is the reflex of *kw. [NUA: Num, Tak; SUA: Tep]

1018 Hebrew nagaš 'approach'; Hebrew niggaš 'approach' (niqţal):
Ca néq- 'come' (Sem-p); Ca néŋ- 'hide' (Sem-kw).

5.15 Further Sorting the Semitic-p and Semitic-kw Infusions

The first feature dividing the Semitic-kw and Semitic-p languages is dageshed b. (Dageshed means initial b- or doubled -bb-, that is, a hard b. Non-dageshed position is after vowels which was pronounced v in the Masoretes' reading of the Old Testament text.) More than 25 sets show Hebrew dageshed b > PUA *kw (4-27, 954), while 33 sets (527-559, 870) show Hebrew dageshed b > UA *p. Both are substantial numbers. In addition, Hebrew dageshed b > PUA *kw appears in sets usually showing Hebrew ṣ > UA *c (6, 7, 8, 78), while Hebrew dageshed b > UA *p and Egyptian b > UA *p both appear in words showing Hebrew ṣ (or Egyptian ḏ) > UA *s (194-201, 731-740). Other correspondences are on the chart at 5.1, p. 157, or in Appendix A. Such consistencies are a good start or strong suggestion that two distinct dialects of Northwest Semitic are to be found in UA.

Relative to Hebrew ṣirʕa(t) 'hornets' > Tak *saŋa 'yellowjacket, bee' (737), the fact that Hebrew ṣ > PUA *s would suggest that this is of Semitic-p (rather than Semitic-kw, which has Hebrew ṣ > PUA *c). Another r + pharyngeal cluster -rħ- behaves the same in Takic: Egyptian -rħ- > -ŋ- in Egyptian qrħt 'serpent' > Tak *qoŋV 'snake' (332). In fact, R. Joe Campbell (1976) found evidence to reconstruct *koŋwa 'snake'. Since Egyptian is associated with Semitic-p, these are consistent with one another.

The two UA sets for 'penis'—Hebrew báášaar > UA *kwasi (5) and Aramaic bəšár > UA *pisa (550)—from Sem-kw and Sem-p, respectively, suggest that -r in Sem-kw tended to raise and front preceding vowels (> i/y), while Sem-p's -r had no such inclination. UA *puku 'domestic animal' (< Hebrew baaqaar / baquur 'livestock'), necessarily of Sem-p, agrees with that lack of raising and fronting vowels before r. In fact, it shows the uvular q to have a strong rounding influence on adjacent vowels (a > u), stronger than any influence of -r. UA *quwïs 'summer' (< Hebrew qayiṣ 'summer') would suggest the same. In fact, UA *quwïs 'summer' (< Hebrew qayiṣ 'summer') is consistent in showing two features of Sem-p: Hebrew ṣ > *s and Hebrew q with a strong rounding influence, overpowering medial -y- to have a w-effect replace -y-. UA *pïrok 'lightning' from Semitic baraq 'lightning' also shows both b > b/p and this rounding influence of the uvular q of Sem-p. Accordingly, UA *tïki 'cut' (< Hebrew daqar 'cut') is likely of Sem-kw for two reasons: one, no rounding near q; two, Vr > ir > i.

Uto-Aztecan *taka ‘man, person’ from Aramaic dakar (Semitic *đakar, Hebrew zaakaar ‘male’) shows no raising influence from -r, which is consistent with Sem-p as well as (565) *makaC ‘give’ < Semitic *makar; so Sem-p has Semitic *đ / Hebrew z / Aramaic d > UA *t and Semitic *z > UA *c/s. Another example is (1019) *cukuC ‘old man’ < *đaqen, with *đ > UA *t > c before a high vowel.

Remember it was previously mentioned that Proto-Semitic *’axar ‘after, another’ yields both a Sem-p reflex in UA *wakay ‘two, after’ (570) and a Sem-kw reflex in UA *ahoy ‘back, follow’ (643); and also (646) Hebrew náɦal (< *naxal) ‘river valley, wadi, stream’ > Ktn naka-č ‘gully, ravine, cliff’ such that *x > UA k with no rounding is Sem-p, yet (647) Hebrew náɦal > SP noiC / noi-ppi ‘canyon, wash’ shows pharyngeal rounding from ɦ instead of *x, suggesting Sem-kw, and a final liquid raising and fronting the vowel (a > i) also suggests Sem-kw. Two nice pairs of the same word reflected by Sem-p and Sem-kw, respectively.

Returning to Sem-p *wakay ‘two, after’ (570) and Sem-kw *ahoy ‘back, follow’ (643), we see in Sem-p’s *’axar that the glottal stop (’) shows rounding like the pharyngeal ʕ and that Proto-Semitic *x > UA k, instead of *x > ɦ > ho/w like later Hebrew and like the Phoenician Sem-kw. Several examples of glottal stop behavior are found at 5.4 and 5.5. The distinction of Sem-p preserving Proto-Semitic *x vs. Sem-kw showing the post-exilic Hebrew change of Proto-Semitic *x > ɦ is discussed at 5.8 with examples. At 5.13 and 5.14 are discussed and exemplified g/q > ŋ in the Takic reflexes of Sem-kw, but g/q > k in Sem-p. A nice distinction occurs in Southern Paiute in two terms from Semitic ’agap-u ‘wing, pinion, arm, shoulder’: one, Sem-kw SP aŋavu-vi ‘arm’, which shows Sem-kw changes of *’ > ø, *g > ŋ, at 925 UACV-861 *aŋapu; and two, Sem-p SP wiġivï-vi ‘eagle tail-feather’ which shows Sem-p changes of *’ > w, *g > UA *k, at 926 UACV-866 *wakapu.

At 7.9 is a more thorough treatment and sorting of the Semitic-p and Semitic-kw initial q-, k-, and g-, and also the intervocalic liquids -r- and -l-. Nevertheless, a summary is that Semitic-p generally preserves initial q-, k-, and g- as PUA *k-, though Takic more finely distinguishes *qa and *ka as qa and ka (see at 6.6). Semitic-kw, in contrast, seems to have lost initial q-, k-, g-, except in Takic, where Semitic-kw initial q- and g- both correspond to Takic initial ŋ- (see at 5.13), but seem to have been mostly lost in the other branches. As for liquids, intervocalic -l- is usually preserved in both Semitic contributions, while Semitic-p intervocalic *-r- > -r- and Semitic-kw intervocalic *-r- > -y- most often, though exceptions do their usual havoc on perfect neatness.

We may also learn something about stress in UA from Hebrew bááśaar > UA *kwasi (5) and Aramaic bəśár > UA *pisa. In the Hebrew cognate of Sem-kw the stress is on the first syllable and notice that the stressed vowel keeps its original value (bááśaar > UA *kwasi), while the non-stressed vowel does not. Also in the Aramaic form of Sem-p the stress is on the 2nd syllable, which keeps its original value (bəśár > UA *pisa) while the non-stressed vowel goes to the unstressed option, UA schwa-like *i*.

The two seem to differ in consonant cluster behavior. Sem-p tends to lose the 1st consonant of a cluster, absorbing the 2nd, but in Sem-kw, the first consonant is more often more prominent. For example, (84) Sem-kw (Hebrew/Phoenician) yi-ṣmaɦ ‘sprout’ > UA *icmo- ‘sprout’ shows the 1st and 2nd consonants and the rounding of a pharyngeal, whereas (813) Sem-p reflects more original *ya-ḍmax > UA *yama ‘sprout’ but loses the 1st consonant of the cluster. We see a similar distinction in the imperfective stem -qna’ ‘be jealous’ in Sem-p (1031) Semitic -qna’ > UA *nawa ‘jealous’ losing the 1st consonant of the cluster and also -’- > -w-; in contrast Sem-kw (1032) -qna’ > Ls ŋe’i ‘get even’ shows the 1st consonant’s reflex q > ŋ (absorbing the 2nd) and -’- > -’- without rounding, also like Sem-kw.

From the above—Sem-kw yi-ṣmaɦ > UA *icmo vs. Sem-p *ya-ḍmax > UA *yama—we see two other sets of consistencies: Sem-p shows no pharyngeal rounding because it reflects Proto-Semitic non-pharyngeal *x versus Phoenician ɦ (< *x) in Sem-kw. Sem-kw icmo (< yi-ṣmaɦ) also shows the typical Hebrew/Phoenician yi- prefix versus the Sem-p *ya- prefix. Note other examples of *ya- prefix (instead of *yi-):

(1035) *ya-qmoṣ / ya-qmuṣu ‘grab, stingy’ > UA *yamuC 'angry, stingy’;
(560) Semitic *ya-bka^{y} ‘he/it weeps, cries’ > UA *yaCkaC ‘to cry’;
(561) Semitic *ta-bka^{y} ‘she/it weeps, cries’ > NP taka (< *taCka) ‘to cry’
(1063) Hebrew yaabeš ‘dry’; Arabic yabisa; Hebrew yiibaš / tiibaš. UA contains the feminine prefix of the impfv stem Hebrew tiibaš > UA *tapas, with ta- or a vowel assimilation:

In contrast to Semitic-p, prefix vowelings like yi- and ni- seem typical of Semitic-kw:
(728) Hebrew yr’; impfv: yiiraa’ ‘(he/it) fears’ (tiiraa’ ‘she/it fears’) > UA *iya-paka ‘to fear’;
(991) Hebrew ni-qra’ ‘be called/named’; softened q > h/ø; lack of rounding for ’, -r- > -y- are all consistent with Sem-kw: UA *nihya ‘call, name’;
(696) Semitic lqḫ, impfv *ya-lqaḫ > Hebrew *yi-qqaḫ ‘take, take as wife’ UA *yïkoC > *yokoC ‘to copulate’;
(886) Hebrew y-’rk ‘be long (verb usually of time) > UA *yïŋï ‘be/pass a long time’:

Cp yéŋe ‘to last a long time, endure’; Ca yéŋ ‘pass a while (of time)’; Sr yïïŋï’k ‘be a long time’
Also note baka’/y ‘cry’ from Sem-p vs. Sem-kw, respectively paka’ vs. kwïkï

Much sorting remains, but the above distinctions give us a good start in discerning the differences.

1019 Hebrew zaaqen / zaaqan (< *đqn), impfv: yizqan ‘be an old man, be an old woman, grow old’:
UACV-1569 ***cukuC** ‘old’: TSh cuku-cci, cukuppï-cci ‘old man’; Sh cuku ‘old man’; Cm cukuhpï (obj) ‘old object, elderly male’; Cm sukuupï ‘old man’; Mn ugú’ ‘old man’. High vowel encourages palatalization: *t > c/_u. [p:1z2,2q,3n] [NUA: Num]

1020 Syriac blṣ ‘to bud, blossom’ > Ca če-kwála’an ‘open (eyes or mouth)’. [iddddua] [kw:1b,2l,3s4]

1021 Hebrew nhy / nahaa^{y} ‘to lament’; Hebrew nahi / nəhi ‘lamentation’; Arabic nhy / nahaa^{y} ‘forbid, ban’:
UACV-1944 ***nï’ï** ‘sing’: M88-nï4 song: B.Tep180 *nï’ï ‘to sing, dance’, and *nï’i ‘song’; M67-378 *na ‘sing’; L.Son 170 *nawahi ‘cantar’; Miller has B.Tep180 at both M88-na22 and M88-nï4 ‘song’; KH/M06- nï4: TO ne’e ‘sing’; PYp ne’em ‘sing’, nei (perfect); NT nïi/nïídyagai ‘song’; NT nïïyi ‘sing’; ST nïï’; Cr tyí’i-nye’e ‘he’s dancing.’ [iddddua] [1n,2h]

1022 Hebrew maaḫaar ‘next day, tomorrow’ < *ma’xar (what is after) (KB cite Brockelmann);
Hebrew moḫoraat ‘tomorrow’; Aramaic məḫar, maḫr-aa ‘tomorrow, next day-the’:
UACV-2360 ***muCa / *mo…** 'tomorrow': Mn mowahúsu ‘tomorrow’; NP muu’a ‘tomorrow’;
CN moostla ‘tomorrow’. Ca mawa ‘after awhile, later, tomorrow’. In CN, -r- > -s- in a cluster with a voiceless consonant. [1m,2’,3h2<3x,4r] [NUA: Num; SUA: Azt]

1023 Hebrew tqn ‘make straight’; Aramaic(J), Samaritan, CPAramaic tqn ‘to set, lay’
UACV-1744 ***tïka/i** or ***tïkaC** ‘put lying down, stretched/spread flat’: Sapir; VVH18 *tï$_{ş}$ka ‘to put, lay flat object down’; I.Num239 *tïkV put; CL.Azt100 *teeka ‘lie down’; M88-tï7 ‘place sg. obj.,v. t.’ and M88-tï33 have nearly the same forms, and so KH/M06-tï7 soundly combines M88’s two sets: Mn tïki-t ‘place, put, v’; NP tïkï/tïgï ‘put’; Cm tïki ‘put s.th. away’; TSh tïkiC ‘put’; Sh tïkiC ‘put, place, create (of God)’; SP tïgaa ‘measure, imitate, practice’; TO cïïkid ‘place, put, lay, lay away or set aside for s.o., offer as a sacrifice’; Eu teká ‘poner’; Wr teká/tegi ‘poner acostado [put lying down]’; Tr reká/rik-/-tegá ‘poner sg. obj. tendida, acostada, horizontal’; My teeka ‘acostarlo’; CN teeka ‘stretch oneself out, lie down, settle, stretch s.th. out, spread s.th. on flat surface’. Sapir ties SP tïġaa ‘measure, imitate, practice’ to CN teeka, which tie is likely, since a typical way to measure is to stretch out s.th., and the segments of the two are identical. Add PYp teek ‘to put, place’; Cr raa-takïïnte ‘lo estira’; Tb(H) tahkinat, prfv attahkin ‘sleep’ (< Semitic *tkn). A final -n in Cr, Tb, and a final -C in Num suggest a 3rd C, though languages without it applied the -a/-i active/stative feature as the final vowel. [-a/i] [1t,2q,3n] [NUA: Num; SUA: Tep, TrC, CrC, Azt]

1024 Hebrew tkn ‘examine, check’, qittel: tiqqen / -taqqen ‘make correct, measure, calculate size’ and also Hebrew tqn / tiqqen / -taqqen ‘make straight, straighten s.th. crooked’ (some Semitists it a variant of tkn);
Kw tïgïhaa suggests < *tïkïn-ha with -ha ‘it’ a fossilized object: *tïkïnha > tïgïha > tïgaha > tïgaa.
UACV-690 ***tïkïha** ‘measure, imitate’: Kw tïgïhaa ‘try, try on, measure’; Kw tïgeki ‘act’; Ch tïġái ‘act’; Ch tïġá- ‘take picture’; SP tïġai ‘happen, take place’; SP tïġaa ‘bring about, causative of tüġai’; SP tïġaa- ‘measure, practice, imitate’; WMU tïġáa-y ‘measure, happen, stretch (a hide)’; CU tïġáa-y ‘measure, copy, duplicate’. Note Semitic ‘measure’ and UA ‘measure’, Semitic ‘calculate size’ and UA ‘try on’, Semitic ‘straighten s.th.’ and WMU ‘stretch (a hide)’, Semitic ‘make correct’ and UA ‘imitate, practice’. The UA form reflects a Semitic form having the common -ha object suffix, that is, measure it’ with loss of -n- in the cluster: *tVkk/qqVn-ha > *tïkïha. [1t,2q,3n] [SNum]

1025 Aramaic guuryə-taa / guur-taa ‘cub (female), young of animal (usually lion or dog):
UACV-693 ***koCti** 'dog': Sapir; Ken Hill (p.c. 2004); KH/M06-ku39: Sr koči’; Tr kočí. Sapir also lists Kitanemuk guci and Ken Hill adds Wr ku’cí ‘puppy’. Note that NUA or Sr č is typically from -Ct- and Wr even shows another consonant -’t-. [1g,2w,3r4t] [NUA: Tak; SUA: TrC]

1026 Hebrew lo ‘to it/him, has’: the -lo of Tbr kowa-ló ‘gallina ponedora (egg-has)’ [1l,2w]

1027 Hebrew yšb ‘sit, dwell’ but Arabic wθb, impfv: yaθibu ‘jump, hop, jump up and run, start’; the UA sets reflect the Hebrew sound correspondences, but the Arabic meaning of ‘jump up’ to fly away:
UACV-928a. ***yasa** ‘fly’: M67-182 *ya ‘fly, v’; M88-ya18 ‘fly, v’; KH/M06-ya18: SP yaaša ‘fly off, pl’ (vs. SP nonci ‘fly, sg’ and *yïci/*yoci Miller notes); CU yaasi ‘flock, fly in a flock’ (vs. CU yïčí ‘fly’ below).
UACV-928b ***yaCa** ‘fly’: M67-182 *ya ‘fly, v’: TO da’a; PYp da’a; NT dadáïyi, dáígigi; ST daičgda, daya; ST daidya ‘fast flier’; Cr wa-ta-ra’a-raa ‘it flew off’. Hill adds TO da’a to the SNum *yasa forms, which is reasonable, as *yasa > Tep yaha normally, but h > ’ is the next step. While TO da’a and dai of the other Tepiman languages could possibly tie to *ya’a/ya’i ‘run, go’, both Miller and Hill separate them, which I do also pending provision for improved probabilities. This is the same verb at 3 meaning ‘sit, dwell’ in Hebrew, but in Arabic it means ‘hop, jump up, start’ and starting to ‘fly’ is a ‘jump, hop, jump up, start’. Furthermore, the other sense ‘sit’ is in the other branches, but this sense in Numic. [1y,2s1,3b] [NUA: SNum; SUA: Tep]

1028 Hebrew **yooliid (< *yo(w)liid)** ‘cause to be born, hatch, vt’;
Hebrew yld / yaalad ‘give birth, lay eggs, beget (of man); participle: yooled:
UACV-13 ***yoli** 'live, alive, bear, be born': M67-264 *yo ‘live’; CL.Azt33; M88-yo4 'to live'; KH/M06-yo4: CN yooli 'live, come to life, hatch, vi'; CN yool-li 'heart'; CN yoolloo-tl 'heart, life, spirits’; CN tlayoolitiaa 'give birth'; Pl yuultuk ‘alive’; My yoore 'be born, healed'; Wc yuri/yuuri ‘be alive, grow’. As the semantics of My also mean 'heal’, so also PYp do’a 'alive' and PYp do’alim ‘be born, get well’ bear the same semantic combination (born, heal) as the My term; and PYp ’ from yowli > yo’li > yo’ali. Miller includes Cr rúu 'he is alive’. Cr in a fuller form suggests consonant harmony, as in Cr ruúrikame 'alma [spirit], vida [life]’. Wc yuri / yuuri 'be alive, grow' fits better with My and CN *yooli, since *o > u in Wc. If a fem prefix t- instead of masc y-, then Ls tóvli ‘bear a child, lay an egg’ aligns with Hebrew *towliid ‘she bears a child’. Relevant to these, Sapir ties CN yool-loo-tl 'heart, life, spirits' to Wc iyali ‘heart’ also. Wc ’iyári / ’iyáari ‘corazón [heart], alma [soul], espíritu [spirit]’ has the same consonants as CN yool-li 'heart’, but different vowelings. KH/M06-yo4 mentions Eu dor ‘man’, which, with its cognates, merits consideration. [*o > u in Wc; a-o; liq] [1y,2w,3l,4d] [SUA: TrC, CrC, Azt]

1029 Hebrew **maanaa** ‘divide, count’ (inf *manoot ‘counting’); Akkadian **manuu ‘**count, reckon, recite’**;** Hebrew maanoot **‘shares, portions’:**
UACV-21 ***man(n)u** 'all, every, the count (of)': Kw mono-yo ‘all (same subject)’; Kw mono-ko ‘all (acc.)’; Ch man(ó) 'every, all' ; SP manno-/ mannu- 'all'; CU manú-ni 'all, every'; CU manú-ku (acc.); WMU manő-ni ‘every, all (nom)’. WNum *waha-mano 'twenty, i.e., two-counts' > Mn waha-wanótu 'twenty' and NP waha mano’yu 'twenty’ may suggest an original meaning of Num *mannu 'complete count, the number, all’, since it appears in words for 'twenty' in WNum and 'all' in SNum. The alternate forms in TSh manukin~manikin 'five' suggest that this may relate to *maniki 'five’, involving assimilation *manu-ki > maniki. [*a-o/u > o-o; and o vs. u] [1m,2n] [NUA: WNum, SNum]

1030 Hebrew **nɛpɛš** ‘soul, self’, **napš-ó** ‘itself, himself’; Syriac **npeš** ‘life, soul, self/oneself’; the lack of initial n- in UA is interesting in that Syriac is written npeš where n- would be vulnerable, though a short helping vowel n^{ə}peš is supposed to be there, though not written, and UA’s final vowel of -u aligns with the 3rd person masculine singular suffix, the most common person for which this form is used:
UACV-27 ***pïsu / *pasu** ‘self’: Mn pïïsu ‘oneself, to oneself’; NP pïïsu ‘oneself (refl)'; NP pïï sï’mï ‘alone’; Eu -vasu ‘mismo [self], solo [sole, alone]’; Eu né-vasu ‘yo mismo, solo’; Eu náp-vasu ‘tu mismo’, etc. Hp naap / naapo ‘by oneself, on one’s own’. There is a relevant Tr form. [1n,2p,3s1] [NUA: WNum; SUA: TrC]

The next three derive from Semitic qn’ ‘be zealous, be jealous’: the first (1031) from Sem-p impfv *-qna’ ‘jealous’ > nawa ‘jealous’; the second (1032) from the Sem-kw imperfective *-qna’ > ŋe’i; the third form (1033) reflects an adjective *qanii’ > kïnii, which separates 1st and 2nd consonants:

1031 Hebrew **qn’** ‘be jealous’, impfv: **-qna’**; Arabic **qn’** (impfv: -qna’u) ‘become intensely red, incite, kill’ (Lane 2565); Ethiopic **qan’a** ‘be jealous’**;** Soqoṭri **qn’** ‘be jealous’ (Leslau 47):
UACV-29 ***nawa** ‘jealous’ matches the unattested impfv *-qna’ ‘be jealous’: Cp náwe 'be jealous of, vt’; Ca nawaan 'be jealous, vi’; Ls nááwin 'be jealous'; Hp nawawa-ta 'complain’; NP nawoho ïnaggwi 'jealous’. Miller includes My na’ibúke ‘está celoso’. [p1q,p2n,p3’] [Num, Tak, Hp; TrC]

1032 Hebrew **qn’** ‘be jealous’, impfv: **-qna’**; qn’ ‘be jealous’:
Ls ŋe’i ‘get even’; My na’ibúke ‘está celoso [is jealous]’. My na’i- aligns very well with Ls ŋe’i, because NUA ŋ > SUA n. Semantically, ‘being jealous’ (Semitic) is what one feels and ‘getting even’ (Ls) is doing what one feels. [iddddua] [kw:1q,2n,3’] [NUA: Tak; SUA: TrC]

1033 Hebrew qn’ ‘jealous’; Hebrew qannaa’ ‘zealot, jealous one’:
Kw kïnii-ga-dï ‘one who is greedy or covetous’. [1q,2n,3’]

The three forms above are a consistent portrayal of Sem-p impfv (1031), Sem-kw impfv (1032), and an adjectival qanii' (1033). Sem-kw -qna' > Ls ŋe'i shows the dominance of the first consonant of the cluster, as Sem-kw does, and it shows q > ŋ as Sem-kw does, and glottal stop stays glottal stop. Sem-p nawa shows glottal stop to w, as Sem-p does, and loss of first consonant in the cluster, as Sem-p does, and the rather rarer vowel -a- of the imperfective (most are o/u). And 1033 has 1st and 2nd consonants separated.

1034 Hebrew **nqm** 'avenge oneself', suffixed pfv stem naaqam / nəqam-, prefixed impfv stem -**qqom**; Arabic **naqama** 'revenge o.s., be hostile, mad, angry':
UACV-34a *nakuma / ***na-kuma** 'upset, jealous': Tr na-kumé 'perturb e.o.'; Tr (ni)kume 'perturb s.o.'; Eu kúme('e) 'envidiar [be jealous]; Eu nekúme 'envidiar'; CN ma'komana 'be upset'; CN(RJC) ma'komantinemi 'he goes about upset'. With loss of initial k, or k > ', then Yq 'omte 'enojarse' and My om-te 'está enojado' belong. Sem-p?
UACV-34b ***na-kamu** 'upset, angry': Wr nehkamú-na 'estar enojado [be angry]'; Eu nekauhce 'enojarse'. Wr and Eu suggest *-kamu, while Tr, CN, and another Eu form suggest *-kuma / -kume. [-mC- > -uC- in Eu]
UACV-34c ***naŋaN-ya'i** 'angry-die': Kw naha-ye'e 'be angry'; Kw naha-(m)bištï 'one who is short-tempered'; Ch naŋá-ya'i 'angry'; SP naŋaN-y'ai 'be/get angry < anger-suffer'; WMU naa̲i'ye-y / naa̲i'i 'be angry'; CU naáy-'ay 'be angry'. Kw and SP also show nasalization in a 3rd C as well. Note Kw -biš and Tb *-piš suffix. Of Sem-kw, in Sem-kw ŋ, which shows Num medially doing the same g/q > ŋ as Tak initially.
[q > h and > ŋ; -ŋ- > -h-/-ø-, *-CC-?; *a-i > e-e] [1n,2q,3m] [NUA: SNum; SUA: TrC, Azt]

1035 Hebrew qmṣ 'take a handful' (impfv *ya-qmoṣ = Arabic ya-qmuṣu / ya-qmuzu); of the same root is Hebrew qammәṣ-aan 'miserly, **stingy**' (Klein 583) from qittel: qimmeṣ 'grasp, take handful, collect, save':
UACV-36 ***yamuC** 'angry, stingy': KH.NUA: Sr yaam(u) 'become angry'; Cp yámuki-ly 'an insect, the stingy finder, crawls to stingiest person'; Cp yámukwi-š 'stingy, adj'; Ktn yam 'be or get angry'. This aligns with Sem-p impfv *ya-qmuṣ with loss of -q- as first segment in the cluster. [p1y,2q,3m,4s4] [NUA: Tak]

1036 Hebrew ntn / naatan 'give', imperative: ten / teni 'give!' (impv) < *tani;
impfv: -tten, yi-tten 'he gives', ti-tten 'she gives':
UACV-71 ***tani** 'ask for': VVH92 *tani 'ask, beg'; M67-13 *ta; B.Tep212a *taanïi 'he asks for'; 212b*taani 'to ask for'; 212c *tai 'he asked for'; L.Son273 *tani 'pedir'; CL.Azt6 *tlahtlani 'ask'; M88-ta18 'ask for/pedir'; KH/M06-ta18: TO taani; NT taañí; ST tañia 'pedirlo, comprarlo'; Wr ihtaní; Tr taní/raní 'tocar música, pedir, apostar'. Wr ihtaní and CN i'tlani 'ask, request, beg s.th.' show an affinity that we also find in Wr ihkucíwa and CN i'kuč-in, both 'worm'. Only valid with a semantic shift from 'give it' > I ask/buy/get it. [iddddua] [1n,2t,3n] [SUA: Tep, TrC, Azt]

1037 Hebrew yoorɛ 'to water, send rain' (< *yawre, hiqtil); Hebrew yoorɛ 'to be watered' (hoqtal); Hebrew yoorɛ 'early rain, n'; Arabic wariy 'clouds with large raindrops' (=Hebrew yry II, alternative of rwy I):
UACV-2076 ***yuya (< *yawya)** 'snow, v/n': Sapir; BH.Cup *yuy 'to snow'; M67-399 *yu 'snow'; M88-yu5; Munro.Cup120 *yúúya-t 'snow'; KH.NUA; KH/M06-yu2 *yuya (KCH) 'rain, v': UA verb forms 'snow, v': Cp yúye-; Ca yúy-; Ls yúy(u)-; Sr yui 'snow, vi'; Gb yúyyok 'está nevando' [is snowing]'; Ktn yu 'snow, vi'; Ktn yuy 'está nevando'. UA noun forms 'snow, n': Sr yuat 'snow, ice, n'; Ktn yua-t; Cp ayúy'a; Ca yúyat; Ls yúúyi-t; Gb ywat / yowát; 'cold': Cp yúy 'cold'; Ca yučiwi 'cold'; Hp yooya-ŋwï 'rain, rainstorm'; NT duúdu 'it rained'. Add CN -yawi in CN kiyawi 'rain, v' and CN sepayawi 'snow, v', which is likely cognate with Tak *yuy (< *yuwi < *yawi/*yawya). The final -a of the Cp, Ca, Sr and Gb forms suggests final -a may well be original in the noun, at least. I also agree with Sapir's inclusion of Wc 'ïïví 'nieve [snow], hielo [ice]', for Wc ï < *u, Wc v < *w, and i are apparent, though it is missing initial y. [Wc v < *w] [1y,2'2,3r] [NUA: Tak, Hp; SUA: CrC, Azt]

1038 Hebrew yry, hiqtil impfv: yoorɛ 'to water, send rain', pfv: **hoora**, inf: **hooroot** 'watering'
UACV-1765 ***horo** 'rain, fall': L.Son62 *horo 'llover [rain]'; M88-ho7 'llover [rain]'; KH/M06-ho7: Tbr horo 'llover [rain]'; Op hára; Eu hóro 'fall'. [Liq] [SUA: TrC]

1039 Ugaritic yrw 'throw, shoot'; Hebrew yry 'throw, shoot'; Hebrew prtcpl yoorɛ 'throwing/thrower'; Hebrew (hiqtiil impfv) yoorɛ / toorɛ 'he/she throws, shoots':
UACV-2319a ***yu'ri** '(be) empty': Ls yuya/i 'become empty, vi, empty, vt'; Wr yu'ripú- 'empty, throw out liquid, vt' (Wr yu'ri 'fall by itself'); Tr ŕu'ri 'derramarse, verterse [be poured, spilled, dumped]'; Tr ŕu'ri-wa- 'derramar [pour out, spill], verter [pour, spill, empty, dump], vt'; Eu dúri-da'a- 'vaciarse [become empty]'. Because Eu d < *y, then Ls, Wr, and Eu < *yu'ri, and Tr either from fem verb form or consonant harmony.

UACV-2319b ***yuna/i** 'pour': Mn tïyuna 'pour into'; Cm payunitï ‘pour water on, water, vt’; Ch yuná 'put pl obj's'; CU yunáy ‘scatter, put pl obj’s’; Kw yïna / yuna ‘pour’. [*r > n in NUA] [NUA: Num, Tak; SUA: TrC]

1040 Hebrew ḫml / **ḫaamal**, impfv: -ḫmol ‘have compassion’; Syriac ḫml / ḫ^{ə}mal ‘gather in, lay up, take up, collect’, participle ḫaaml-aa ‘one taking-the’; Arabic ḫml / ḫamala ‘carry, lift, pick up, load up and take along’, verbal noun/infinitive ḫaml; Arabic maḫmuul ‘(s.th.) carried’:
UA *homa ‘take, carry’: Hp ömàa-ta ‘receive, get or take, pick up’.
UA *huʼma: Kw huʼma- ‘carry pl objs’; Wr uʼma / huʼma, redupl uhuma ‘flee (with s.o. or s.th.), choose, carry’; PYp uʼa / uʼu / uʼi ‘carry pl objs’. These reflect the pfv *ḫamal, with rounding for the pharyngeal. [1h2,2m,3l] [NUA: Hp, Num; SUA: Tep, TrC]

1041 Hebrew ḫml / ḫaamal, impfv: **-ḫmol** ‘have compassion’, infinitive **ḫəmol**; Syriac ḫml / ḫ^{ə}mal / -ḫmul ‘gather in, lay up, take up, collect’; Arabic ḫml / ḫamala ‘carry, lift, pick up, load up and take along’:
UACV-115b: Ca **húmul**ku 'wrap around, vt’ reflects either the Hebrew impfv -ḫmol or infinitive -ḫəmol; perhaps also Ls móra/i 'be rolled up, curled up, v.i., roll up, wrap a package, vt’. [cluster; ':l; Ls o, Ca u,]

1042 Arabic al-**marʼ**- ‘the-man/person’ and Arabic al-**marʼa**(tu) ‘the-woman, wife’ show the underlying Semitic *marʼ ‘lord, prince’ and feminine marʼa(t) ‘princess, woman, wife’; the Aramaic forms also being Aramaic *marʼ-aa ‘lord, prince’ and *marʼa-taa ‘princess-the, woman/wife/daughter-the’;
Aramaic(S) maary-aa (> construct: maaree) ‘master, owner’; Aramaic(J) maar-aa ‘man, lord, master-the’; Biblical Aramaic maaree’ ‘lord’; Syriac maare ‘master, owner of’:
UACV-140 ***marCa** ‘daughter, child, offspring’: VVH84 *mala ‘child, with female reference’; M67-86 *mal/*ma 'child'; BH.Cup *-ma(l) ‘diminuitive suffix’; B.Tep145 *mara 'offspring'; L.Son137 *mara 'hija del padre'; M88-ma7; KH/M06-ma7: Sr maih-c 'young one, child'; Ktn mayha-t ‘child’; Hp maana 'daughter, adolescent girl, woman who has never been married'; TO maḍ(ï) 'female's offspring, nephew or niece by a younger sister, fruit of a plant'; PYp mar ‘child’; PYp mar-t ‘bear a child’; PYp mar-tim ‘give birth’; NT már(a) 'daughter, son'; ST mar; Op mara; Eu márwa; Yq maára; My maála; Wr malá-la (absol)/ mala-wá (poss’d) ‘daughter’; Tr mará. In light of PYp mar-t ‘bear a child’, note Sr maiha’ ‘bear (a child)’; Ktn mayha’ ‘give birth’ and Nv marhta ‘parir’ as if from *mar-ta, a verbalized noun—'to make/cause offspring' or 'to be daughtering or offspringing'—similar to Hp tii-ta 'offspring-do’. Also related are Ca mayl^{y}u ‘niece or nephew, sister’s child’ and Ls mééla ‘give birth’ probably with suffixes. This set may be key to clarifying liquids in a cluster: SUA -r-, NUA -yh-, Hopi -n-. In fact, Sem-kw *-rʼ- > Ktn/Sr -yh- is expected. And this is another example of SUA liquids, but not nasals in NUA except Hp, but -yh- in Tak. [iddddua] [1m,2r,3’] [NUA: Tak, Hp; SUA: Tep, TrC]

1043 Arabic marʼa(tu) ‘woman, wife’ (feminine form of the former *marʼ-u):
UACV-2583a ***maʼa > *mamma'u** 'woman': Kw momoʼo ‘woman’; Ch mamáʼu ‘woman’; Ch(L) mamauʼu ‘woman’; SP mammaʼu-ci ‘woman, young woman’; WMU mamá-či ‘woman’; CU mamá-ci ‘woman’. Note the vowel leveling in Kw, as in Kw poʼo ‘water’. These are a reduplication of *maʼaC 'old, (later) old woman’ as seen in Kw maʼapï-zi 'old woman' and Ch(L) maaʼïpïci ‘old woman’; *maʼa > *maʼï before -pï, then > *maʼu. [kw:1m,2r,3’] [NUA: Num, Tak]

1044 Aramaic(CAL) **ʕrʕytʼ / ʕurʕytʼ** ‘wasp’; Aramaic(S) ʕaaraaʕii-taa ‘wasp-the, n.f.’:
UACV-165 ***waʼwa** 'wasp': Ls wááwa-la 'mud wasp'; Cp waʼwalim 'yellowjacket'; Tb weweehyuu-l 'yellowjacket’. [assimilated/raised V in Tb ?; *-rʕ->-’w-] [1’2,2r,3’2,4y,5t] [NUA: Tb, Tak]

1045 Hebrew ***moškat / moškoot** (sg or pl?) ‘bracelet, fetter, belt (KB 646, 987)’; Arabic masak(at) ‘restraint, armband’; Tb mohkat-t is nearly a perfect match, in final t and š > voiceless h in a cluster:
UACV-181 ***mo** ‘belt’: Tb mohka-t ‘the belt’; Tb(H) mohkatt ‘belt’; Eu móitepura ‘cinta del cabello’; Tbr moó-r 'cincha’. [1h2,2g,3r] [Tb; TrC]

1046 Hebrew ḫgr / ḫaagar ‘to gird, gird oneself’; Aramaic(J) ḫ^{ə}gar ‘encircle, gird, tie around’; Hebrew ḫ^{a}goraa ‘girdle, loincloth, n.f.’; Aramaic *ḫagor-taa is unattested, but the Hebrew feminine form with the Aramaic definite suffix would be ***ḫagor-taa**. The -rt- > -s- as also the -rtḫ- > -s- in ‘turkey vulture’ such that in both cases clustering with a voiceless consonant causes devoicing of r > s:
UACV-177 ***wikosa** 'belt': L.Son337 *wiko ‘faja [sash, girder worn around the waist]’; M88-wi14; KH/M06-wi14: Eu wikosa / vikosa ‘faja [sash, girder worn around the waist]’; Yq wikósa 'leather belt, waist’; My wikosa ‘cintura [waist]’; My wikohpo 'en la cintura’ [at the waist]; My wikósam ‘faja’; Tr wikó ‘entrañas, descortezar los árboles en cinturón [debark trees in the middle]’. My wikosa ‘cintura’ and My wikoh-po ‘en la cintura’ demonstrate the vulnerability of sibilants in clusters. [*-sC- > -hC- in Cah] [1h2,2g,3r,4t] [SUA: TrC]

1047 Hebrew ħgr / ħaagar ‘to gird, gird oneself’; Aramaic(J) ħ^{ə}gar ‘encircle, gird, tie around’;
Hebrew ħ^{a}goraa ‘girdle, loincloth, n.f.’; with loss of initial guttural, -gora(t) > UA *kora > Yq/My ko’a, because -r- > -’-. This ħ^{a}goraa term is Sem-kw, the above Sem-p.
UACV-481 ***ko’ali** ‘skirt, enaguas, probably originally a general undergarment’: CL.Azt150 *kweey ‘skirt’; M88-kwï6 'skirt'; KH/M06-kwï6: CN kweei-tl 'skirt, pettycoat'; Pl kweeyi-t ‘skirt, native skirt’; My koá’arim ‘enaguas’. To the My and Azt forms in M88-kwï6, add Yq kó’arim 'enaguas'; AYq koarim 'skirt'; AYq ko’arek 'wear skirt'; Eu kóa 'falda’; and Tbr koayí-t 'enaguas’; all suggest *k, not *kw, and *a instead of *ï. Note Tbr as a bridge from TrC to Azt. From ħəgor-taa > ko’ta > ko’ara. [1h2,2g,3r,4t] [SUA: Azt, TrC]

1048 Aramaic(Gal) zwsṭ- ‘belt’:
UACV-182 *ṣutka ‘belt’: Sr ṣuutka’(t) ‘belt’; Ktn šutkï-t ‘belt’. Aramaic -sṭ- > UA -t- is expected, and the Sr -ka and Ktn -kü are likely a later morpheme. [1z,2w,3s,4t2] [Tak]

1049 Aramaic(S) qnwqn(h/t’) ‘grape vine creeper’ n.f. (CAL):
UACV-184 ***kunuki** 'elderberry': Fowler83 *kunuki 'elderberry’: Mn kunugíbï 'elderberry bush';
SP kunnuġui 'huckleberry’. [iddddua] [1q,2n,3q,4n] [NUA: Num]

Two words for younger brother match Semitic words for ‘son, child’

1050 Hebrew bɛn ‘son’, pl: **bənee(y)** ‘sons, children’; Arabic ibn ‘son’; :
UACV-310a ***poni** 'younger brother': M67-490 *po; L.Son213 *poni 'hermano menor'; M88-po8 'younger brother’; KH/M06-po8: Eu bonwa/vónwa; Tbr woní; Wr poní; Tr boní; Cr huu. The following Yq term demonstrates how a term for ‘son’ can come to mean ‘younger brother’ as it means both: Yq pale ‘hijo [son], hermano menor [younger brother]’. UA *poni could be from an older brother calling a younger brother ‘my boy’ or bən-i ‘son-my’ or ‘he’s a brother, son (of our father). It may derive from the plural construct form bənee(y): one, the final UA vowel (i) does correspond to Sem e; and two, that construct form causes the first vowel to be a very short schwa (ə) which is more likely to be influenced to rounding by bilabials. [Cr u < *o; Cr h < *p] [iddddua] [1b,2n] [SUA: TrC, CrC]

1051 Hebrew ṭap ‘little children’; Samaritan and Syriac ṭapl-aa ‘children-the’; Arabic *ṭipl- ‘infant, child’:
UACV-311 ***cipi / *cippiyi** / *cippili ‘younger brother' (> Tep *sipi(di)): Nv sipidiri; ST sïpji’n 'one’s younger sibling’. UA fits Arabic voweling best. [1t2,2p] [SUA: Tep]

1052 Hebrew š’p ‘pant’; Aramaic(J) š’p ‘gasp for air, pant’:
HN šošopaaka’ ‘make an inhaling noise’. Note that the presence of Nahuatl -p- may suggest a cluster, that is, *-’p- > -pp-; otherwise, Aztecan p is usually lost. [1s1,2’,3p]

1053 Hebrew šwb / šuub ‘turn back, return’:
Tb šiiub ‘back again’; Tb(H) šiiwpa ‘again, back again, back’. [1s1,2w,3b]

The next four items from longer Aramaic forms seem to have the stress moved late enough in the word that the first syllable was lost, yet the 2nd, 3rd, and 4th syllables match the Aramaic forms well:

1054 Aramaic **raqbubit**-aa ‘decayed-matter, moth-eaten, earth-worm, **moth-the**’; the change from Aramaic to UA involves the loss of first consonant, but shows the 2nd, 3rd, and 4th consonants and with credible vowels. UA separated what seems to be a cluster in Aramaic, but we see that often also:
UACV-330 ***(V)kupïpika** 'butterfly': Ca héveveqalet and Ls xuvóoviqa-l 'moth' certainly appear related and align fairly well through the 2nd, 3rd, and 4th syllables. Possibly Hp pïvïwi ‘moth’. Ls initial x- suggests a lost initial syllable, after intervocalic *-k- > -x-. The vowel (u) after q is expected for Semitic-p, and the *u > ï is common in Numic and occasional elsewhere, and the vowel (i) is an exact match. [1r,2q,3b,4b,5t] [NUA: Tak, Hp]

1055 Syriac **’aamaqqət-aa** ‘lizard-the, n.f.’:
UACV-1374 ***makkaCta**(Nka)-ci ‘horned toad’: Fowler83-3:21 and fieldnotes: NP makaca’a ‘horned toad’; NP(Fallon) magázaa; Kw makaca-zi ‘horned toad’; Ch(L) makačaci ‘horned toad’;
Sh makkiccankacci ‘horned toad’; Sh(W) maccankih; Sh(C) mahaccianka, maccinkipo;
Sh(Owyhee) mácaŋgina’a (Fowler’s notes); SP pahkaca ‘horned toad’; and Hp mácàakwa ‘horned toad’, but with *-Nk- > qw? WMU mattáqqa-či ‘horned toad’ metathesized the consonants or lost the 2nd syllable from s.th. like Sh: *makkattaNka-ci > ma(k)ttakka-ci. That and ST makaroič ‘renacuajo’ with r suggest CNum c < *-tt-. Jane Hill (p.c.) adds Tb mahkahsiit (Merriam 60:497). Other than loss of first syllable, NP, Ch, and Sh reflect well the Aramaic(Syriac) ’aamaqqət-aa > UA *makkata / makkaCta; in fact, Aramaic(Syriac) ’aamaqqət-aa’ literally ends with a

glottal stop, which actually appears in NP and many other UA instances, though it is not often considered to be pronounced in Aramaic. Numic *-aNka in *makkattaNka-ci which follows the more common *makkatta- has much in common with Hebrew ’anaaqaa ‘a lizard, gecko’. [*-Ct- > -c-] [1’,2m,3q,4t] [NUA: Num, Hp, Tb; SUA: Tep]

1056 Syriac ħady-aa ‘breast-the, n.f.’, pl: ħadaawaat-aa (from the root ħd’ ‘be glad, rejoice’ like other verbs of Akkadian xadu, Arabic xadaw/y, Ugaritic xdw, Hebrew ħdy ‘rejoice’); Syriac ħadwaa ‘joy’; Syriac ħaduut-aa ‘joy-the’; Syriac ħady-aa ‘breast-the’, pl: ħ^{ə}**daawaat**-:
UACV-425 ***tawi(C)** 'chest'; Sapir; M67-59 *tawi 'breast'; L.Son280 *tawi ‘pecho [chest]’; M88-ta29; KH/M06-ta29:
Hp tawicqa ‘breast area, chest’; Ca táw; NT tagí; Op tawa; Tbr tamwí-t 'body'; Tbr tamwí-ta-m 'chest';
Wr tawiráci; Tr ŕawí; Yq táwi; My tauwi; Cr tabí; Wc tawí/taavíi. The Aramaic(Syriac) plural loses its first syllable for lack of stress and extremely short vowel, then the 2nd syllable stress makes the 3rd syllable weakly stressed, which all fits UA *tawi well, since unstressed V > i is typical. Note Tbr tamwí-ta-m with -ta possibly the definite suffix, and Hopi tawicqa may be tawic- though the Hopi dictionary divides it tawi-cqa, but with a question mark for -cqa. [NUA: Hp, Tak; SUA: Tep, TrC, CrC]

1057 Akkadian **gursiptu** ‘butterfly’:
UACV-333 ***asiNpu(tonki)** 'butterfly': TSh aasiputuŋkwi; Sh a’ipputoonkih; Kw ’aasibï-zi; SP aïšï-vwïci. Sh and Kw suggest a cluster, and Kw suggests *-Np-. Though a different first vowel, after loss of the first consonant, UA *sippu matches Semitic for two syllables or four segments (consonants and/or vowels). [reductions; *u > ï] [1g,2r,3s,4p,5t] [NUA: CNum, SNum]

1058 Arabic **šarnaqat** ‘cocoon’, the pl šarnaqaat would correspond to Hebrew sarnaqoot / sarnaqootee^{y}:
UACV-507 ***ca’ïku / *caCCïku** ‘cocoon attached to plant': Wr ca’égori 'rattles of cocoon'; Tr čayéguri 'cocoon attached to tree’. Tr and Wr do not often have a correspondence of ’:y, which suggests we are dealing with a consonant cluster. Tr -y- from a cluster of an alveolar pair -rn- is natural. [1s1,2r,3n,4q] [SUA: TrC]

1059 Arabic dʕw / daʕaa ‘to call, name’
UACV-1489 ***tï(N)wa** / *tïnwa (AMR) ‘name’: Sapir; VVH20 *tï$_{n}$wa ‘to name’; M67-300a *tew ‘name’; Munro 1973; L.Son302 tïwa; Munro.Cup78; KH.NUA; M88-tï15 ‘name’; KH/M06-tï15: Hp tïŋwa (comb: tïŋwan) ‘name, refer to, vt’; Tb(V) ’ïndïŋwa-l ‘name’; Tb(M) ‘ïndïŋwa’anat ‘give a name to’; Cp téw’a ‘name (n. poss’d)’; Ca téwal; Ls túŋ-la; Sr tïwan(č) ‘name, n’; Ktn tïw; TO čïïgig ‘name, reputation’; TO cïïck ‘name, vt’; TO čïïg ‘(1) find, (2) call by name’; Eu tewát; Tbr temwa-ra; Yq tea; My tééwam; Wr tewá; Tr ŕewá; Wc téévää;
Cr an-tyawaa ‘he is named X’. Munro suggests that an intermediate ŋw may explain the change of *o > u in Ls. Note ŋ with w in Hp and Tb. Add PYp teegi ‘name’; ST tïïtgï’ ‘llamar [to call], nombrar [to name], vt’. As salt, girl *siwa > Ls suŋ, medial *w/ŋ. [1d,2’2] [NUA: Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1060 Aramaic(S) & Syriac paddaan ‘plow, yoke of oxen’; Syriac paduuʕ ‘iron bar, club, mace, axe’;
If Hebrew once had a cognate to Aramaic paddaan, it would be Hebrew *paddoon:
UACV-673 ***poto** 'digging stick': Mn pódo ‘digging stick, cane’; NP podo ‘digging stick’; TSh poton ‘cane, staff, digging stick, club, crutches, stick used as tool’; Sh(M) poton ‘digging stick’; Sh(C) poton ‘digging stick, walking stick, cane, crutch’; Kw poro-ci ‘cane, stick’; Kw poro- ‘walk with a cane or stick’; and CU pürű-ci ‘root-digger, spade, digging fork’. [p1p,p2d,p3’2] [NUA: Num]

1061 Hebrew rwy / raawaa (> raavaa in some dialects) ‘drink one’s fill’, impfv pl: yirvəyuun. In Talmudic Aramaic, an actual b (> v) is an alternate form due to strengthening of w > v/b:
Aramaic(J) raabe, f: raabaa ‘moist, saturated with liquid’; the pronunciation (of *w) in Modern Hebrew is also v; and the cluster shown below may encourage such strengthening:
Hebrew hirwaa / hirvaa, hirvee-ti, hirvii-taa-ni ‘to water thoroughly (person or thing)’;
Arabic rawiya ‘drink one’s fill, quench one’s thirst, be irrigated’ (rayy / riyy verbal noun);
Arabic rawaa ‘bring (s.o.) water, give (s.o.) to drink’:
UACV-719 ***hiCpï / *hi’pa / *hiypi (> *hippi / *hi’a)** ‘drink’: Sapir; VVH77 *hi ‘drink’; M67-141 *hi/*hi’i; I.Num40 *hipi; L.Son55 *hi; B.Tep313 *’i’ïi ‘to drink’ and *’ii ‘he drank’; M88-hi1; KH/M06-hi1: Mn hibi; NP hibi; TSh hipiC; Sh hipiC / hippiC; Cm hibitï; Kw hivi; Ch hivi; SP ivi; CU ’iví; Hp hiiko, hikwya pl.; Tb ’ii’ït / ’ii’ / ’ii’ïï; Cp héye; Ls hípi ‘sip, suck, of Shaman in curing’; TO ii’ï / i’im; PYp i’a / ie’e; NT yïï; NT íí 'he drank'; ST ’io’; ST ’ii’ 'he drank'; Eu hiá-; Tbr hé/ihé-; Yq hé’e; Yq hí’i-ne 'puede beber'; AYq he’e; My hé’eye; hi’i-; Wr ihí; Tr ba-hi-; Cr raye’e 'lo bebe'; Cr néheye 'bebo'; CN ii. A UA stem found in all branches, but not without difficulties. Sh and Ls show a geminated medial consonant *-pp-, and a cluster likely explains the variant medial reflexes: -pp-, -’-, -y-. A reconstruction of *hiypi may or may not help explain why -y- appears in Cp, Cr and My. However, when medial p is not apparent, such forms as PYp i’a/ie’e and other TrC and Tep forms suggest that we are dealing with

first vowel i, but a lower second vowel, which assimilated toward the first in other cases. The Numic forms (Mn, NP, TSh, Sh, Cm, Kw, Ch, SP, CU) and Ls show a syllable (*hi**Cpi**) not as apparent in the others, though PYp and Hopi may show hints of it. Despite none of us being able to explain all in this set, I agree with Miller and Hill, that these are probably all related. Also note CN a-yoa / a-yowa (a=’water) ‘get wet, full, be drunk (of a liquid)’. [p1h,p2r,p3w,p4y] [NUA: Num, Tak, Hp, Tb; SUA: Tep, TrC, CrC, Azt]

1062 Hebrew yaabeš ‘dry’; Arabic yabisa; Hebrew impfv yiibaš / tiibaš. But *pasaC in WNumic and CNumic, as if the prefixes yii-/tii- are dropped from impfv stem, common in the change from Semitic to UA:
UACV-721 ***-pasa** ‘dry’ (SNum *tapasa) I.Num140 *pasa(h) ‘(be) dry’; M88-pa19; KH/M06-pa19: Mn pasa ‘be dry, dried out’; Mn pasakkï-t 'dry (acorns, etc.), vt’; Mn kupasa ‘be dried out’; NP wïpasa’hu 'wind dries it'; NP mabasaga ‘dry food’; TSh pasaC; pasaŋkïn; Sh pasa(C); pasa-nkï 'dry s.th.'; Cm pasa(kï)rï; Cm pasapï 'dry obj’; Sr vaṣi-vaṣi 'thin (as cloth)'; PYp vahakisi (< *pasakici) ‘something hung out to dry for preservation’ adds the Tep branch. [NUA: WNum, CNum, Tak; SUA: Tep]

1063 Hebrew yaabeš ‘dry’; Arabic yabisa; Hebrew yiibaš / tiibaš. These contain the feminine prefix of the impfv stem tiibašuu > UA *tapasu, with a vowel assimilation or Semitic-p *ta- prefix instead of *ti-:
UACV-721 ***ta-pasu** ‘dry’ (SNum *tapasa) I.Num140 *pasa(h) ‘(be) dry’; M88-pa19; KH/M06-pa19: Kw tavasï 'dry, v’; Kw tavasï-kwee-pï; Ch tavásï; SP tavašu 'dry, v'; SP tavášï-i 'is drying'; CU tavási 'be dry, get dry’. ‘dry’. Note *pasa for WNum and CNum (Mn, NP, TSh, Sh, Cm) and *tapasa for SNum (Kw, SP, CU). As the concepts 'thin' and 'dry' are closely tied in UA, add My tapsiólai 'thin' and AYq tapsiolai 'thin'; Eu tasúkei 'thin' (loss of *p in a cluster is like My’s cluster followed by round V); Cr tïsiisčira’a ‘thin (of person)’, loss of *-p- expected in CrC; and probably Ls tavíiča/i 'dry up, vi, drink dry, vt’. [ta- prefix; -p- lost in Cr] [1t,2p,3s1] [NUA: SNum; SUA: TrC, CrC]

1064 Ugaritic lxšt ‘whispering’; Akkadian laxaašu ‘whisper, exorcise’; the unattested qal impfv *-l**xoš** does not occur in the OT text, but in the qittel and hit-qattel, *lxš means ‘whisper, charm (BDB), mutter incantations, whisper(KB)’ like the general Semitic meaning ‘whisper, sing incantations’; and the UA verb *kusu is from the impfv ***-lxusu**, losing -l- as first consonant in the cluster:
UACV-1539a. ***kusu** ‘make sound (characteristic of the animal): VVH122 *kusu ‘to sound (of animal)’; L.Son110 *kusu ‘gritar, cantar’; M88-ku1, ku19, ku26; KH/M03-ku1: Kenneth Hill rightly combines ku1 ‘characteristic noise’ and ku19 ‘flute’ and ku26: Cp kúṣe ‘make characteristic noise’; Cp kúṣnine ‘play an instr’; Ca kúspi-ly ‘throat’; Ca kustémi ‘choke with s.th. stuck in throat’; Gb kúsa ‘quejar’; TO kuhu ‘make sound, neigh, crow, caw, blow (instrument)’; Eu kúsa; TO kuhi ‘the sound of neighing, crowing, blow (horn), n’; Wr kusu ‘sing (birds), bellow (cows), etc’; Wr kuicá; Tr kusú/gusú; My kúuse; Tbr kosú / kusi / kusu; CN kikik(i) ‘whistle, hiss’. Sr kuuhan ‘call, invite’ like Gb kúsa ‘quejar [complain]’ has the vowel -a as 2nd vowel. The general meaning is ‘make characteristic noise of whatever animal’. This stem is prevalent in Tak, Tep, and TrC.
UACV-1539b ***kus** ‘flute’: M88-ku19: M67-179 *kus ‘flute’; KH/M06-ku1: TO kuhu ‘play flute’; Tr guséra / kuséra / guséara ‘larynx, flute’; Yq kusia ‘flauta’; Yq kuuse ‘tocar instrumento’; My kusia ‘laringe, garganta’; NP kocokkwoino (McDonald); NP kosokwa’i ‘whistle’; Cr kï’ïšï ‘chirp (bird), rattle (snake)’. See a derivation of this stem at neck: *kuspi ‘throat’. [SUA: Tep, TrC, CrC, Azt; NUA: Tak, Num]

1065 Same as above, impfv *-l**xoš** ‘whisper, charm (BDB), mutter incantations, whisper(KH)’ like the general Semitic meaning ‘whisper, sing incantations’; *lxoš > kus:
UACV-1503 ***kus(pi)** ‘throat, craw’: Sapir: Sapir links Cr kïhpíh ‘buche, cuello, pescuezo’ and Ca kúspi-ly ‘throat’, which are a perfect match, with suffix -pi < Aramaic -be ‘with it; thus, ‘vocalize with-it’; of course, these derive from *kusV ‘call out, make characteristic noise’ as also
UA *kusi-ra ‘throat, larynx, flute’: My kusia ‘laringe [larynx], garganta [throat]’; Wc -kïsa’a in wá’ikïsa’a ‘garganta’ (wá’i ‘fish’); Tr guséra ‘flute, larynx’; Yq kusia ‘flute’ (-r- lost). [1l,2x,3s1] [SUA: CrC, TrC; NUA: Tak]

1066 Arabic ḍrʕ / ḍariʕa ‘1. be lowly, humble, 2. become weak, slender, light of flesh, lean, emaciated’, verbal nouns ḍarʕ, ḍuruuʕ (Lane 1787):
UACV-1228 ***corowa / *corwa** (< ***cVrVwa)** ‘be hungry’: Stubbs2003-5: Wr coloá-ni ‘be hungry’ (Wr co’-cóla-ni ‘be hungry, pl’); Hp cöŋö-w(ï), cöŋ- ‘hunger’ (< *colwa). Wr coloá- and Hp cöŋö- match well, since Hp ö < *o, and a cluster of *-rw- > -ŋ- in NUA, as in 737. Add Tr čiriwísa ‘tener hambre [be hungry]’ (the same 3 consonants are apparent—c, liquid, w) if we allow for two alveolars causing V’s > i in Tr and the labial w causing V’s > o in Wr and Hp. This ties to *coro ‘wither, shrivel’ (UACV-724 below).
[Liq; V > i in Tr like at *(hi)paca 'sweep'] [NUA: Hp; SUA: TrC]
UACV-933 and UACV-724 ***coro(N)** / ***co’ro** ‘wither/arrugarse, wrinkle’: L.Son44 *coro/cor-i ‘arrugarse’; M88-co11 ‘wrinkle’; KH/M06-co11 ‘wither/arrugarse’: Eu zorópe- (pret. ~pi, fut. ~ce); Eu coró; My čóori / čooli ‘arrugado’; AYq čoowe ‘dry up, wither (of plant), get skinny’Tr čo’ró ‘marchitarse [whither, shrivel]’; PYp soron

‘wrinkle’; Nv sorhona ‘arrugar’, pl: sosorhka / sososka; ST šo’lyik ‘encogido’; ST so’lyka’ encoger, vt’; and is CN šoločoaa ‘fold, wrinkle’ another c/s dichotomy? Or borrowed from Tep? The -su’u- of Cr rasú’uta’ihina ‘lo pliega’ fits, since liquid > -’- in Cr, and *o > Cr u. This tie to *corowa ‘hungry’ with a laryngeal 3rd C explains what became the anticipated glottal stop in Tr and ST. [-r- > -’- in Cr] [1s4,2r,3’2] [SUA: TrC, Tep, CrC, Azt]

1067 Hebrew bʕy / baʕaa[1] ‘enquire, search’; Ugaritic bġy ‘wish’; Arabic bġy ‘seek, desire, wish for’; Syriac bʕ’ / bʕy ‘seek, pray, beseech, summon, desire’; Syriac baaʕy-aa ‘advocate’; Syriac baʕaay-aa ‘he who desires, entreats, sues’:
UACV-1491 ***paya** ‘call’: Sapir; B.Tep255 *vaidai ‘to call’; B.Tep255b *vai ‘he called’ (both Tep forms occur in all four languages); M88-pa24 ‘call, summon’; M67-74 *pai ‘call’; KH/M06-pa24: Mn pee-t; NP pai; Kw pee; SP pai; CU paay; TO waiđ; Wr paé-; Wr(MM) pa’é /paé ‘llamar [call]’; Tr bayé/páe; Wc (h)áine ‘dice’; NT vaidyai; ST vaidy; UP waidï; LP viaj. This is Semitic-p—one, b > p; two, -ġ-, not ʕ, and -ġ- disappears in medial cluster, perhaps baġy-aa or verbal noun; thus, this Semitic stem bġy > *paya in Semitic-p and bʕy > kwawi in Sem-kw (36). [*y > Tep d, *p > h/ø in Wc] [p1b,p2g2,p3y] [NUA: Num; SUA: Tep, TrC, CrC]

1068 Hebrew qaššɛbɛt ‘attentive’ (the subject of the verb is ear, Nehemiah 1:6,11); Hebrew qšb / ti-**qšab**-naa ‘be fully alert’ (the ears of listeners)’; Hebrew hi-qšiib ‘listen, prick up the ears (to listen)’ (pfv); Hebrew ya-**qšeeb-uu** (impfv; see Jastrow 1428); Proverbs 2:2 ha-qšiib … ozne-ka ‘perk up your ears, cause ears to pay attention’. The UA forms *kïpu / kepu and *kipu reflect very well Hebrew impfv (present/future) plural: **-qšebu / -qšiibu** with loss of -š- in a cluster and various prefixes ya-/ta-/ha-/ma-, or Hebrew pfv (past) plural hi-**qšiibu** ‘they heard’; yet notice the -s- in some UA forms:
UACV-1164 ***kïpu** ‘hear’: Stubbs 2003-34: Eu keivuwa-/keivúve ‘escuchar’; Tr gipú ‘oir, escuchar’; Wr kepú-na/ma ‘oir’. Note Eu kéisive ‘oido [inner ear]’. Eu ke ‘oir’ (perhaps an old preterite of *kïpu). Sr qävaač ‘ear’ is interesting (if < *kïpa...)? [1q,2s1,3b] [SUA: TrC]

1069 Hebrew qšb / ti-**qšab**-naa ‘be fully alert’ (the ears of listeners)’; Hebrew hi-qšiib ‘listen, prick up the ears (to listen)’ (prfv); Hebrew ya-**qšeeb** (imprfv); the UA set below matches the Hebrew non-3rd person prfv: hi-qšab-; note that some languages show hikkaha, and Sr and Ktn show the -b-:
UACV-1163 ***kaha** ‘hear’: VVH126 *kahi/*kaha; M67-221 *ka ‘hear’; B.Tep98 *kaï ‘hear’; kai ‘heard’; CL.Azt83 *kaki, 243 **kahi; M88-ka11; KH/M06-ka11: Tb ha’~’aaha’; Sr qävaač ‘ear’; TO kaa, kai; LP kai; PYp kaara; NT kaï; ST kïï; ST kka; ST kaaya ‘hear, obey’; ST kaidya ‘s.th. heard, s.o. who can hear’; My híkkaha; Yq hikkaha / híkka; Tr aké; CN kaki. Add Ktn kava-c ‘ear, leaf’. Note the hi- prefix in the Cah languages and consonant harmony in CN. [1q,2s1,3b] [SUA: Tep, TrC; NUA: Tb, Tak]

1070 Hebrew qaššɛbɛt ‘attentive’ (the subject of the verb is ear, Nehemiah 1:6,11); Hebrew qšb ‘be fully alert’ (the ears of listeners); Hebrew hi-qšiib ‘listen, prick up the ears (to listen)’ (prfv), ya-qšeeb (imprfv; see Jastrow 1428); Proverbs 2:2 ha-qšiib … ozne-ka ‘perk up your ears, cause ears to pay attention’.
UA ***naqapa** ‘ear’ appears to be from a ni-qtal < *na-qtal form: ***na-qšab** ‘what is perked up, i.e., the ear’, though the form is not attested that I know of; CN, Pl, Cr, Eu show s, and Sr, Kw, Ch, SP, WMU show p:

Mn	náqa	Hp	naqvï	Eu	nakát 'oreja'
NP	naka	Hp	naaqa 'ear pendant'	Eu	kéisiven 'oido'
		Tb	naŋha-l ‘ear, leaf’	Tbr	naká-r
TSh	naŋki	Sr	qävaač ‘ear, leaf’	Yq	náka
Sh	nainki	Ca	náq-al	My	nákka-m
Cm	naki	Ls	náq-la	Wr	nahká
Kw	naga-vi-vi	Cp	náq’a	Tr	naká
Ch	naŋkávï	TO	naak	Cr	našaíh
SP	naŋkava-vi	PYp	naaka	Wc	naaká
SP	naŋka 'hear, v’	NT	naáka	CN	nakas-tli
CU	nïká-vi	ST	naak/nak	Pl	nakas

UACV-752a ***nakka / *naNkapa (< *na(N)kasapa ?)** ‘ear’: Sapir; VVH47 *naNka 'ear'; M67-148 *naka; I.Num109 *naŋka/*naŋki; BH.Cup *naqala; Munro.Cup37 *nááqa-la; L.Son163 *naka; M88-na1; B.Tep162 *naaka; KH/M06-nal *nanka (AMR): some terms of interest include Mn naqqa 'ear, to hear, vt'; NP naka (< *nakka) 'ear, to hear'; SP naŋka 'to hear, ear ornament'; SP naŋkava 'ear'; Cr našáih ‘ear’. WMU has a variety of pronunciations: WMU nügáv / nüügáva / nü’gáva / nugáv / nIgávačü- ‘ear’. ‘Ear’ is one of few pervasive UA words. Some peculiarities are *s* in Aztecan, Eu, Cr, and *p* in SNum, Hp, Sr, Ktn kava-c (and lacking na- in Ktn, Sr); and

both in Eu kéisive 'oído'. Eu ke 'hear', Eu keívuve 'listen' (< *-qšebu be) and many other initial *ka… forms are at 'hear'. Those forms and the Sr and Eu forms, which show the same consonants as Num and Azt/Cr (i.e., k-s-p), suggest that *nakasapV contains a fossilized verb prefix *na-. TO nahagïw 'flap the ears, v. (of certain animals)' is a verb and may show the same consonants (*n-k-s-p) with s anticipated (*n-s-k-p) and voicing of k > g. PUA *s clustered with either k or p would disappear quickly, so its survival in Azt, Cr, Eu, and TO is noteworthy, and its absence in most is expected. Kw mistakes 3rd syllable for a double absolutive.

UACV-752b ***nakka/*naNka** 'hear, v': M88-na1 'ear': Mn naqqat 'hear, vt'; NP naka 'ear, hear'; TSh naŋka 'hear' vs. TSh naŋki 'ear'; Sh nanka 'hear'; Sh nenki 'ear'; Cm nakarï 'hear'; Kw naga; Kw naa-kee-; Ch nanká-kai; SP naŋka 'hear'; CU nïká-y; Ca náqma 'hear, listen'; Cp náqma 'hear'; Cp náq'ači 'listen'; Ls náqma 'hear, listen, understand'. [cluster; s; na-; reduction] [1n,1q,2s1,3b] [iddddua] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC,CrC, Azt]

1071 Related to *naqšab 'ear' discussed above is 'leaf' because a leaf looks much like an ear:

UACV-1297 ***naNkapï** 'leaf': Kw naga-vï; Ch nanká-va; SP maavï-naŋqa-vï 'leaf' (vs. SP naŋqava 'ear'); CU nïká-'a-vi (vs. CU nïká-vi 'ear'); Tb naŋhabïï-l; Hp nàapi. Hp may be a loan from Num, and lost intervocalic -ŋk-. Are Tb and Hp loans from Num or is Num -vï/va/vi not really an absolutive suffix? Either way, Hp nàapi/nahpi shows -p- instead of -v- due to a cluster. The SNum, Tb, and Sr forms are related to 'ear': often one word in each language means both (e.g., Sr qävaač 'ear, leaf') or the words for 'ear' and 'leaf' are similar, but morphologically different (added upon) in most languages (e.g., Tb naŋha-l 'ear(s), leaf'; Tb naŋhabïï-l 'leaves, lots of leaves'). Like Sr is Ktn kava-c 'leaf'. [iddddua] [NUA: SNum, Hp, Tb, Tak]

1072 Hebrew yáʕar 'wood, forest, thicket, wooded heights with trees to be felled' (BDB); Hebrew yáʕar 'thicket, undergrowth, wood' (KB); Arabic waʕr 'rock debris; rugged, roadless terrain':

UACV-756 ***yawa > *yuwa** 'open country, flat land, outside': AYq yeewi 'towards outside'; Yq yeu- 'para afuera'; TO jïg 'ouside'; Kw yuw-a=aka 'desert, plain'; CU yúaa-vi 'plains, open country, wild country'; CU yúaa-vatï 'outdoors, out-country, in the open'; WMU yuwaa-v*i* 'level country or land'; compounded with ki- 'house' is CN kiyaawak 'outside'. These all point to *yawa. Note also perhaps Tbr -yá(n) 'fuera'; Tbr (ki)-yá-n 'fuera de (casa)'. [Semitic-p vs. Sem-kw yuwiC] [p1y,2'2,3r] [NUA: Num, Tb; SUA: Tep, TrC, Azt]

1073 Hebrew suupaa, suupat- 'storm, gale' (KB) 'storm-wind' (BDB), pl: suupoot; Aramaic(J) šwp 'to blow (of wind)'; in Hosea 8:7 is the locative or accusative Hebrew suupáátaa, which can be a rare simple accusative (since the accusative vowel -a is rare in the OT text, though standard in standard Arabic) or it can be the locative 'to/at/in': Hebrew suupáátaa 'stormwind-to/in/at'; two things support this tie; one is that Ls has the original first vowel u; most forms of UA *sïpï show both vowels as the mid-central default vowel ï to which both u and a often change (u > ï, a > ï); levelings like *supa > sïpï are common; yet Ls ṣuvoo corresponds to *supï, which *supï < *supa is only an expectable vowel change from identical; two, many languages show the 3rd consonant -t- as a liquid between vowels and perhaps the final -ta of the adverbial or locative accusative in WMU, My, Wc, and NT ïvïli 'wind':

UACV-508a ***sïpï / *sïpïta / *sïppï** 'cold, cold wind, winter': Sapir; B.Tep90 *hïïpida-i 'it is cold'; M67-94a *se/*sep 'cold', 94b *si/*sip, 94c *sap, 94d *ce/*cep; M88-sï7: KH.NUA; KH/M06-sï7 *sïp 'cold/frio': SP šïC- 'cold'; SP šï-ppa 'cold feeling, suffering from cold'; SP šï-ppï 'cold (of objects)'; CU sïpïr-'ay 'be cold (things, persons, or weather)'; CU sïpï-vï 'cold, low temperature, n'; Tb sï'bït~'ïsïp 'be cold'; Tb(H) šïïpït, pfv ïššïïp; Cp sevél 'wind'; Ls ṣuvóo-ŋa 'in winter'; Ls ṣuvóo-wu-t 'winter'; Ls ṣuvó-lku 'to shiver with cold'; Gb sovó' 'cold'; Sr ṣïvït 'wind'; TO hïïpi; LP s'hïpi; PYp heepi 'cold'; PYp heve 'cool'; NT ïïpíd^{y}i; Yq sé(e)be; AYq seve; sevele 'feel cold'; My sébbe 'hace frio'; My sébele / sébere 'siente frio [feel cold]'; Tbr sevé/sewé 'frio [cold], hacer frio [be cold weather]'; Tr sipi-mea 'freeze, vi'; Tr sepe-ca-ma 'freeze, vt'; Wc šeere 'enfriar'; Wc kaa.šíivari 'stormwind'; Cr wá-see 'be cold outside'; Cr seeri 'ice, snow, frozen'. Ch(L), CU and SP also show underlying *-pp-: Ch(L) sïpaŋuci 'cooled off' and WMU s(*ü*)ppűra-y / süppűra-y / spűra-y 'be cold (weather or object)'.

UACV-508b *sïpïl / *sïppï 'cold, windy': B.Tep89 *hïvïri 'wind': in contrast to *-pp- in TO hïïpi 'cold', are TO hïwïl 'air, wind'; TO hïw-kk 'to become chilled (person)'; TO hïw-kon 'to blow on, vt'; TO hïwïd 'to blow (wind)'; TO hïwajid 'vt, cool, chill, relieve (pain)'; TO hïwastk 'be able to endure wind and cold'; LP s'hïpi 'cold'; LP ïbïri 'wind'; PYp heepi 'cold' vs. PYp heve 'cool'; PYp hevel 'wind'; PYp heve-lim 'to blow'; NT ïïpíd^{y}i 'adj, cold'; NT ïïpiar^{y}i 'vi, be cold' vs. NT ïvïli/ïvïïli 'wind'; ST hïïpidy 'cold' vs. ST ïváámuku 'tener frio'; ST hïvïïly 'wind'; ST hvr 'windy'.

UACV-508c *sappa / *sïppa 'freeze, ice': M67-94c: Ls ṣáápa/i 'freeze'; Eu sebát/ sebáwa 'ice'; Yq sápa 'ice'; My sáppam 'snow, ice'; Tb šip-t 'ice'; CN sepayawi-tl 'snow'. These 'ice' terms may tie to *sïpï 'cold', though the languages listed here have other forms matching *sïpï 'cold'; on the other hand, the Eu terms suggest a tie: Eu sebá 'helar'; Eu sebé 'helarse'; Eu sebí 'helado'; Eu sepá 'enfriar'; Eu sepé 'enfriarse'; Eu sepíce 'estar fresco'. In all terms whose first V is *a*, that vowel stressed, pointing to it as the original vowel, and the other schwa-like variants e/ï/i are likely unstressed variations. Ch(L) and Ls -p- (vs. v/b), and some Eu show *-pp-.

UACV-508d *sïpï ‘rain’: Hp sïvïyoyaŋwï ‘long and steady drizzle’; Tr sepewá ‘lloviznar’; Eu sipupé ‘lloviznar’. These ‘drizzle’ terms belong too. 1s3,2w,3p,4t] [NUA: Tak, Tb, Num; SUA: Tep, TrC, CrC, Azt]

1074 Arabic **saaẖil** ‘coast, seashore’:

UACV-792 ***suwil** 'edge, shore, border': B.Tep76 *hugida 'edge'{NT ugídya; ST hugdya; UP hugidï; LP hugd}; M88-su7 'edge/orilla'; KH/M06-su7: Wr suéla ‘edge, border’; Tr suw-é ‘orilla [edge, side], ribera [river bank], margen [border]’; TO hugid ‘edge, side’. From other sources, consider also PYp hug 'end'; PYp hugid ‘edge, shore’; ST hugiñ 'shore’. Tep h < *s, g < *w, d < *y; possibly Sr a-hïïvia 'bank, edge, side’ (Sr h < *s; *w > v in Sr?; ’ > Tep g.) Note the parallel between Wr suéla and Tep *hugida. [*w > v in Sr] [1s,2h2,3l] [SUA: Tep, TrC]

1075 Hebrew gab < *gabb ‘back’; Hebrew gabb-o ‘back-his’; gabb-aa ‘back-her’; Aramaic(J) gab ‘convex, arched’; Syriac gəbiibaa ‘hunchbacked’; Aramaic(J) gbb ‘arch, curve’; Aramaic(J) gab / gabb-aa ‘back, body, lump (of s.th.)-the’; note that Tr and Wr -w- < *kw < b for Sem-kw:

UACV-803 ***kakwa / *kappa** ‘egg’: M67-156 *kawa 'egg'; L.Son77 *kawa 'huevo'; M88-ka10; KH/M06-ka10: Yq kába; My kábba; Wr ka’wá/ká’awa-rá; Tr kawá/gawá/ka’wá; Tbr kowa-ló 'gallina ponedora'; Eu ákavo-ra ‘huevo, genitivo’; Op akkawo-ri. The o of Eu ákovere 'lay an egg' agrees with Tbr while the o of Eu ákavo-ra agrees with Op, but adjacence to -w- could cause either. The medial C is difficult. The only certainty is that it is not *-w- alone, but *-kw- or *-bb- are likely and a cluster. [iddddua] [a- prefix in Eu] [1g,2bb] [SUA: TrC]

1076 Aramaic(S) naab-aa ‘louse egg’ (often written na’b-aa’ with an aleph/’) < Akkadian naabu ‘louse’; Aramaic (J) nibbaa ‘eggs of lice’; Syriac naab-aa ‘louse egg-the’:

UACV-804 ***no’pa** > ***noppa** (SNum) ‘egg’: B.Tep172 *nonoha ‘egg’; M67-154 *no 'egg'; I.Num115 *no(yo) 'egg, house, dwelling'; M88-no3 ‘egg’; AMR1993a *nok ‘egg’; KH/M06-no3 *nok ‘egg’: Kw nopa-vi / nopo-vi (< *-pp- for both); Ch nopávi 'egg'; WMU n*ah*ppaa-vi ‘egg’; CU n*a*páa-v*i* ‘egg’; and perhaps SP noo’rua ‘be pregnant’. Only these Southern Numic forms clearly tie to *na’b-aa > no’pa / noppa. And note that they all have -p- < *-Cp- from a cluster. Perhaps p’-no’baa > Ktn pano ‘egg’ with the Egyptian prefix p’ ‘the’; Ktn aligns with several other Tak forms at UACV-805, KH/Mpa42. Other forms at *no... ‘pregnant’ (M88-no4 'pregnant’) might be considered, but CNum and WNum noyo are at 1524 Egyptian isnwi. [Tep h and NUA h like hwopali at eagle and *hay at edge; medial C] [1n,2b] [NUA: Num, Hp; SUA: Tep]

Of special interest is the UA set for ‘moon’, one of the few sets found in all UA languages:

1077 Assyrian **manzal**-tu ‘abode of the gods’ which many see as the loan source for other Semitic forms; Aramaic(S) **mazzaal-aa** ‘zodiacal station, planet-the, fortune, luck’ (n.m.);
Hebrew **mazzaal < *manzaal** ‘star, constellation(s), but in Syriac ‘mansiones lunae (of the **moon**)’ (BDB); Aramaic(J) mazzaal-aa ‘constellation, planet, luck’; from Arabic nzl ‘descend, step down, sink, stop to rest, camp’ is Arabic manzil (pl: manaazilu) ‘stopping place, dwelling, camp site, **lunar** mansion’. Besides references to star and constellation, references to moon exist as well, as in Syriac and Arabic. Note that the long vowel in Semitic keeps its quality, while the shorter vowel succumbs to centralization (schwa-like ï) as often happens in UA and most language families; note that the -nz- cluster actually yields -n- in Ca and Cp, but the expected PUA *c throughout SUA, and *c > s in Tepiman, and *c > y in NUA, all as expected; and the final -d in Tepiman corresponds to Semitic l. So the whole holds a match of several specific details:

Semitic ***manzaal** > UA ***mïcaC** ‘moon’:

Mn	tadamï’a/tadawï’a	Hp	mïïyaw	Eu	miecát / mecát
NP	mïha	Tb	mïïyabiš-t	Tbr	macá-t
		Tb	mïïya-l 'month'	Yq	méča
TSh	mïa(cci)	Sr	mïaaţ & Ktn mïa-č	AYq	meeča
Sh	mïa	Ls	móy-la	My	meeča
Cm	mïa	Ca	méni-ly	Wr	mecá
Kw	mïa-zi	Cp	méni-ly	Tr	mecá
Ch	miyárogopici	TO	mašaď & Nv masada	Cr	máškïra’i
SP	mïaC	PB	mašad	Wc	méca;
CU	mïá-taġó-ci	PYp	masada	CN	meec-tli
		NT	masáádai		
		ST	masaad/masan		

UA *mïcaC (< *mancal) 'moon': AMR's sound law (*-c- > NUA -y-) explains PUA *-c- > -y- in NUA, but sometimes h or ø or ’ in Numic. UA *c corresponds to Semitic z, yet the Semitic cluster (*-nz- > -zz-) contained an -n-, and Ca and Cp show -n- rather than *-c-; Tep *masad shows *-l- (Tep d is from either *y or *l) and Tep s < *c; so all four consonants of *manzal are apparent and correspond quite well.

UACV-1451 ***mïcaC** (perhaps < *mancal) ‘moon’: Sapir; VVH158 *mïya ‘moon’; B.Tep146 *masadai ‘moon’; M67-286 *meca/*mea; I.Num102 *mï’a/*mïha; BH.Cup *mənila(?); L.Son145 *mïca; M88-mï1 ‘moon’; Munro.Cup73 *məyi-la ‘moon’; KH.NUA; KH/M06-mï1. The -d in Tep and Ls -la (absolutive) suggest a final liquid or cluster, with final gemination in Num and hints of a final -C in other branches: Proto-SNum *mïyaC-tokoC-ci. [p1m,2n,3z,4l] [NUA: Tb, Hp, Tak, Num; SUA: Tep, TrC, CrC, Azt]

1078 Arabic muxx- ‘brain’; Akkadian muxxu ‘skull’: Hebrew moẖ ‘bone marrow’;
Syriac muuẖ-aa ‘brain-the, marrow-the’:
UACV-1153 ***mo’o** ‘head’: Sapir; VVH134 *mo’o ‘head’; M67-218 *mo’o; B.Tep152 mo’o; L.Son147 *mo’o; M88-mo1; KH/M06-mo1: Ls méé-la ‘head of cattail rush’; TO mo’o ‘head, hair’; Nv mo’o; PYp mo’o; NT móo; ST mo’; Eu mo ‘hair’; Tbr mo-; Wr mo’ó; Tr mo’ó; My mó’oberi ‘sombrero (head-house)’; Cr mu’ú; Wc mu’úu. Add Yq mo’obe’i ‘hat’; and Yq muteka ‘pillow’ fits a compound of the UA etymons *mo’o ‘head’ and *tïka ‘put, lie’, even though Yq itself does not have *mo’o for ‘head’. [1m,2xx2h2] [iddddua] [SUA: Tep, TrC, CrC]

1079 Aramaic(S) naanii ‘mother’; Aramaic(A) naanaa ‘mother’ (< Semitic *nwn ‘multiply, increase’):
UACV-1454 ***nana** ‘mother’: Sapir; M67- 487 *nan ‘mother’; CL.Azt110 *naan, 312 *nana; M88-na14; KH/M06-na14: ST ’innan ‘my m.’; Cr náana; CN naan-tli. Add Tr nana ‘mamá’. [1n,2n] [SUA: Tep, TrC, CrC, Azt]

1080 Syriac tqp ‘wax strong, prevail’, impfv: ne-tqap; MHebrew tqp ‘seize hold of’;
Hebrew tqp ‘overpower’; Aramaic(J) təqoop ‘might, strength’:
UACV-1691 ***takopi** ‘gamble’: M88-ta47; KH.NUA; KH/M06-ta47: Ca táxpi ‘to gamble’; Sr taqwpi’ ‘to gamble’. The -qw- may be *qo* or the rounding strength of Sem-p uvular. See also *kopi below.[iddddua] [NUA: Tak]

1081 Syriac tqp ‘wax strong, prevail’, impfv: ne-tqap; MHebrew tqp ‘seize hold of’;
Hebrew tqp ‘overpower’; Aramaic(J) təqoop ‘might, strength’:
UACV-1690 ***kopa/i** ‘win/lose in a game’: L.Son98 *kowi ‘perder en el juego’; L.Son98b is *kow-a ‘ganar en el juego’; M88-ko19; KH/M06-ko19: Eu kové ‘perder en el juego’; Eu kóva ‘win in a game’; Eu nekóva ‘ganar’; Tr we’-káwi ‘perderse’; My kóobe/kobáwa ‘perder’; Tbr kowa ‘ganar’; AYq koova ‘win’; My koóba-k ‘le gano’; Yq kobá ‘ganar’; My koóba ‘ganar’; Nv gu-guba ‘ganar’. Tr and Nv both suggest a possible prefix: *wï’-kopa. [*-p- > -w-/-ø-] 1t,2q,3p [SUA: TrC, Tep]

1082 Hebrew śəlaaw ‘quail’; Syriac salway ‘quail’; Arabic salwaa ‘quail’; Samaritan šalwi;
Hebrew pl: śalwiim:
UACV-1751 ***solwi** ‘quail’: CN sool-in ‘quail’; Mn sowi’ ‘pigeon’; Mn(L) soowi ‘wild pigeon’; these first forms anticipate the rounding of the -w- and the -l- is lost in Mn, much like the -l- in walk, talk, and salmon. Ca séyewe-t ‘baby quail’ and Cp síiyewe ‘baby quail’ have Ca/Cp i < *o, and with l > y, they seem to tie in as well. TO hohhi ‘the mourning dove’ and Tr soho ‘paloma torcaz’ show initial *so, and TO -hh- may mean a cluster. The following Tr and PYp forms are quite similar to the CN, except for some *tï- prefix as in *(tï’)solwi’ > *tïcoli: PYp tesoli / te’soli / tesori ‘quail’; Tr ŕe’čorí ‘cordoniz’. Note also Ca teseqáxa-l ‘kind of quail’ (Ca qaxal ‘quail’), whose first two syllables agree with *tïso, given a vowel assimilation. [l > y; *-’s- > -c-] [1s2,2l,3w] [NUA: Tak; SUA: Tep, TrC, Azt]

1083 A compound of deer (< Semitic raxel) prefixed with ‘water/big’; see ‘deer’ 638:
UACV-814 *pa-tïkïya ‘elk < big-deer’: TSh patïhïya; Sh patïhïyan; Cm parïa kuhma 'bull elk'; Kw pa-rïhïya; SP parïia; CU paríyï. Comparing ‘deer’ vs. ‘elk’ terms, one can see the greater phonological deterioration toward the end of longer words when a prefix is added. [deterioration at end of long words] [NUA: CNum, SNum]

1084 Aramaic(CAL) ’ystwr(’) ‘footing, base’; Aramaic(J) ’istwaawr-aa / ’istawr-aa ‘ankle’;
Aramaic(S) ’istwaawr-aa ‘a portion of the lower leg’; Ugaritic ’išd ‘leg’; Akkadian ’išdu:
UACV-948 ***wiCtaC** ‘calf of leg, lower leg’: NP kwiddza (< *kwicca/*kwiNca) ‘calf’; TSh wica-ppï ‘calf, lower leg’; Cm ta’wiica ‘calf’; Kw wižavu-vï ‘calf’; Ch(L) wiča ‘calf of leg’; SP wica ‘calf’; CU wicá-vi ‘calf’; WMU *hwič*á-vi / k*u*čávi / wičá-vi ‘calf of leg’. Note an extra syllable in Kw wižavu-vï with *-pu suffix, frequent in Ls. Note w > kw in NP and WMU. [w > kw; *-pu suffix in Kw, like Ls’s] [1’,2y,3s,4t] [NUA: Num]

1085 Hebrew hlk, impfv sg: yelek, pl: yelku, and an unattested cohortative *yelka (p. 30) matches well:
UACV-1022 ***yïNka** ‘enter, move, travel (sg/pl?)’: Sapir; M67-97 *ye ‘come (sg)’; M88-yï7; KH/M06-yï7: Mn iga; NP iga; Pn ikaC; Sh yïnkah ‘move, v.pl.’; WSh yïnka ‘travel, wander, live, vi pl’; Cm ikarï; Kw ’ïga; SP ïġa ‘enter’; CU yïgáy ‘enter, come in’; pl: waġáy; Hp yïŋ- in Hp yïŋ-ya ‘enter, vi. p. pl.’; Hp yïŋ-ta ‘be entering, vi.i.pl’; Wr yegi-ná/má ‘accept an invitation to a festival’; Cr ye’i ‘come (sg. subj. pres.)’; Wc yei ‘move, walk’. Sapir ties CN nite-ekawia ‘hacer llegar a alguien [cause s.o. to arrive]’ with SP ïġa. Add Ktn -yïk ‘to,

toward, at, directional/locative case ending'. Hp -ŋ- aligns with Num -k-. [medial cluster; CNum -nk-, Hp -ŋ-: W/SNum, Azt -k-: CrC glottal stop ?] [NUA: Num, Hp, Tak; SUA: TrC, CrC, Azt]

1086 Syriac **šql** take, take (self away), depart':
UACV-1029 ***saka(la)** 'go, leave': My sakka 'se van'; Yq sáka'a 'iremos, pl'; AYq saka'avo'em 'go away, pl'. For -l- > -'-, Semitic šaqala > Yq saka'a is as in Semitic bašala > Yq bwasa'a (4). [1s3,2l,3q]

1087 Arabic srʕ 'be quick, fast, hurry':
UACV-1033 ***i'siwi**: Wr isí-na 'andar [walk]'; CN i'siwi 'hurry'. Wr and CN match an unattested Aramaic asreʕ or a Hebrew hisriiʕ. [1s,2r,3'2] [SUA: TrC, Azt]

1088 Arabic xuld 'mole'; Aramaic(J) ẖld 'to undermine, cave, dig'; Syriac ẖld 'to burrow, drive a mine underground'; Syriac ẖaaluud-aa' 'jerboa-the'; Aramaic(J) ẖild-aa (< ***xild-aa'**) 'cave-dweller-the':
UACV-1043 ***kita** 'groundhog': Mn kidá' 'groundhog'; NP kidï 'groundhog'. [p1x,p2l,p3d] [NUA: WNum]

1089 Hebrew qippod 'hedgehog, short-eared owl'; Arabic ***qunpuđ** 'hedgehog'; Aramaic(J) **quuppaad** 'hedgehog'; Aramaic(J) quuppəd-aa 'hedgehog-the'; Aramaic(J) qurppədai 'mole'; Mandaic Aramaic qunpud 'hedgehog'; Syriac **quppəd-aa** 'hedgehog-the'; note the r/N or liquid-nasal interplay in Semitic too, like hip, grass'; sometimes *-NC-, sometimes *-NC- > -CC-:
UACV-1044 ***kïNpa** 'prairie dog': NP kïïbba 'prairie dog': Sh kïïmpai 'prairie dog'. [1q,2n,3p,4z2] [NUA:Num]

1090 Hebrew ṣmẖ / ṣaamaẖ (< *ṣmx) 'sprout, grow (of plants, hair)'; Ug ṣmx; Hebrew ṣémaẖ 'what sprouts, i.e., grass, etc'; Aramaic(J) ṣimẖ-aa 'growth-the, sprout, plant, n.m.'; Akkadian šammu; Hebrew ṣémaẖ is the underlying correspondent to Aramaic ṣimẖ-aa with the Aramaic definite article suffix, which corresponds perfectly to Sh sihmu 'bunch grass':
UACV-1057a ***(pa)-samaC / *-samuC** 'grass': BH.Cup *samVt 'grass'; M67-204 *(pa-)sa/*(pa-)ca 'grass'; CL.Azt237; Fowler83; M88-sa22; Munro.Cup53; KH.NUA; KH/M06-pa39: CL.Azt237 also discuss the difficulties of these words: Ca sámat 'brush, herb, grass'; Cp sámat 'grass sp.'; Sr haamt 'grass'; Ktn hamat. The preceding are of Sem-p *ṣmx, with no rounding effect like Sem-kw would (*ṣmẖ) perhaps as in Ls ṣáámu-t 'grass, hay, weeds', and Sh sihmu 'bunch grass' matches with schwa-like behavior in the first vowel. [NUA: Tak, Num; SUA: Azt]

The above is the Semitic-p source; the below from the Semitic-kw source:

1091 Hebrew ṣmẖ (< *ṣmx) 'sprout, grow (of plants, hair)'; Ug ṣmx; Hebrew ṣémaẖ 'what sprouts, i.e., grass, etc'; Aramaic(J) ṣimẖ-aa 'growth-the, sprout, plant, n.m.'; Akkadian šammu; Hebrew ṣémaẖ is the underlying correspondent to Aramaic ṣimẖ-aa with the Aramaic definite article suffix, which aligns with the below *-soho < *simẖ-aa with loss of the m as first element of the cluster:
UACV-1057b ***(pa)-soho** 'grass': Hp söhö 'galleta grass'; Hp(S) pashö; My básso 'zacate'; AYq vaso 'grass'. [s4,2m,3x,3h2] [NUA: Hp; SUA: TrC]

1092 Aramaic(J) qooʕ-aa 'throat, gullet, windpipe':
UACV-1512 ***ŋoho** 'neck': Sr ŋÿhÿ-ţ 'throat, neck, voice'; Ktn ŋoho-c 'neck'; the vowels perplex, but this may suggest that Sem-kw was also under some Aramaic influence. [kw1q,kw2'2,kw3] [NUA: Tak]

1093 Semitic yrq 'green'; MHebrew hooriiq / yooriiq 'become green, pallid, pale' and unattested hoqtal: *yooraq 'be made green'; Ugaritic yrq 'yellow'; Akkadian (w)araaqu 'become green, yellowish'; Hebrew yaaraaq 'greens, vegetables':
UACV-1078 ***yora** 'green': Wc yúuyúuri 'be green, grow'; Tbr nyoa-ká-r 'blue, green, unripe'; ST momdora' 'light green'. Remember that ST d < *y, and Tbr ny < *y. [1y,2r,3q] [SUA: Tep, TrC, CrC]

1094 Hebrew **ktš** 'pound (in a mortar), pound fine, bray, v'; perftv: kaataš; impfv: -ktoš < ***-ktušu** with loss of first consonant in the cluster:
UACV-1081 ***tusu** 'grind': Sapir; VVH75 *tuusu 'to grind'; M67-206a *tusu/*tusi, 206c *tu; I.Num232 *tusiu 'grind'; L.Son322 *tusu/rus-i; CL.Azt238 *tïsï 'grind'; 34 *tïs 'corn dough'; 238 PUA **tusu 'grind'; M88-tu7 'grind/moler'; KH/M06-tu7: NP tusu; TSh tusu / tusuC; Kw tusu; Sh tusu; SP tušu; CU tïsúi; Tb tusut~'utus; Hp tos-ta; Ca túlus / tús; TO ču'a/ču a/ču hi; Eu tusá; Wr tusu-ná; Tr rusu-mea; My tuuse; Wc tïsi; Cr ra-'a-tï'ïšï 'she is grinding corn'; CN tesi 'grind s.th. like cornmeal'; CN teš-tli 'flour'; HN tisi' 'grind'; Pl tisi 'grind'. Add Ktn tuh 'grind, bother'; Cm tusurï 'grind, thresh'; AYq tuuse 'grind, vt'; AYq saktuse 'be grinding, vi'. What of forms like Tr(H) rasa 'machucar'? [s > ' in TO; other Tep forms?] [1k,2k,3s1] [NUA: Num, Tb, Hp Tak; SUA: Tep, TrC, CrC, Azt]

Uto-Aztecan has three forms from Hebrew **ktš** ‘pound, grind’: (1094) above reflects the impfv -ktoš > tusu ‘grind’ and (615) reflects the perfective(past) *kittaš > kitte / kittasu and (614) reflects the noun *makteš ‘mortar, grinding stone’ > *ma’ta / *maCta ‘grinding stone, mortar’ with Ca *mattaš ‘crush’ showing š.

1095 Hebrew pṣṣ ‘break into pieces’; Arabic faḍḍa < *paḍḍa ‘break open, smash’; Syriac pʕʕ < *pḍḍ ‘to fell, grind’:
UACV-1093 ***pisa** ‘pound’: NT viaáhai ‘remoler’; Hp pïsïsï-ta ‘be a continuous drumming or pounding sound’. With vowel leveling, these agree. [1p,2s4,3s4] [iddddua] [NUA: Hp; SUA: Tep]

1096 Two forms of the stem or two stems—both Semitic śyẖ and śyx ‘grow (plants, vegetation)’—yield Ugaritic ẖ but Akkadian x; Akkadian šiaaxum, šaaxu ‘to grow in size or age’; Ugaritic sẖt ‘bush(es), shrub(bery)’; both Arabic šiiẖ ‘shrub, bush’ and Arabic šiix ‘to age, grow old’; Hebrew śiiẖ / śiyaẖ ‘shrub, bush’, pl: śiiẖ-iim; Syriac siiẖ-aa ‘mugwort (plant)’; MHebrew śiiẖ / śiyaẖ ‘growth’; the root—Hebrew śiiẖ / śyẖ—would have an unattested impfv: *ya-śyẖ or *ya-śiiẖ / *ya-śiyaẖ ‘to grow (plant growth)’:
UACV-1077 ***siwi(C)** ‘green growth’: AMR (1996d) suggests *siwiC for Hp siwi ‘Parryela filifolia (shrub sp.) and CN siwi-tl ‘greenery, foliage, herb, leaf, turquoise, year’ as a separate set. [NUA: Hp; SUA: Azt]
UACV-1076 ***siyo / *siya** ‘green’: KH/M06-si20 *siyV (AMR): Yq síali ‘not ripe’; AYq siasaali ‘greenish’; My síali/síari ‘green’; Wr sióna-ni ‘green, blue’; Tr siyó ‘green, blue’; Eu sídei / si’idai ‘green’; CN šoo- ‘green’; CN sel- ‘fresh, green, heat’. Manaster Ramer (1996d) argues well for anticipatory V assimilation in CN šoo- ‘green’. Eu suggests the presence of y (*siya) rather than merely a dipthong *sia. Wr sió- and Tr siyó may suggest a possible relationship to CN šiwi ‘green, year, turqoise’ and the other terms under ‘year’ as well as. [CN V_2V_2 < *V_1V_2] [s2,2y,3h2,3x] [SUA: TrC, Azt]

1097 Two forms of the stem—Semitic śyẖ and śyx ‘grow (plants, vegetation)’—emerge as Ugaritic has ẖ and Akkadian has x; Akkadian šiaaxum, šaaxu ‘to grow in size or age’; Ugaritic sẖt ‘bush(es), shrub(bery)’; also both Arabic šiiẖ ‘shrub, bush’ and Arabic šiix ‘to age, grow old’; Hebrew śiiẖ / śiyaẖ ‘shrub, bush’, pl: śiiẖ-iim; Syriac siiẖ-aa ‘mugwort (plant)’; MHebrew śiiẖ / śiyaẖ ‘growth’; the root—Hebrew śiiẖ / śyẖ—would have an unattested impfv: *ya-śyẖ or *ya-śiiẖ / *ya-śiyaẖ ‘to grow (plant growth)’:
UACV-2604 ***yasayawa** 'year': Hp yàasaŋw ‘year’; TO ahiđag ‘year’, Tb šuwaa-l 'his years'; Tbr asa-k; the 2nd syllable of Yq wasúktia 'year' and My wasuk-tiria/tiriam 'year' in Cah *wa-su(k) may tie in also, with a different fossilized prefix, though a reconstruction and explanation are difficult. CN šiwi-tl 'year, grass, turqoise’ may also belong. Note Hp aa-a < *aa-i like Mšẖ. [iddddua] [NUA: Hp, Tb; SUA: Tep, TrC]

1098 Hebrew qubbaa ‘vault, dome, arched room’:
Hp kòopa ‘top of head, crown’. Hp -p- (vs. -v-) suggests a doubled consonant. Arabic qubbat ‘dome, dome-shaped edifice’; Syriac qb(b) ‘to stand on end, bristle (of hair), to over-arch, form a dome’; Syriac qbiib ‘vaulted’; Syriac məqabb- ‘vaulted’; Aramaic(J) qubbə-taa ‘vault, dome, tent’; the meaning of Hebrew qubbaa is uncertain, but presumed to be similar to the other cognates. Contrast with Hebrew gobah at 1099:
UACV-1108 ***kuppa** ‘hair of head, head’: Sapir; VVH9 *kuupa ‘head hair’; B.Tep127a *kuupa ‘head, hair’; M67-209 *kupa ‘hair of the head’; CL.Azt168 *ïkpa ‘thread’; CL.Azt 240 **kuupa hair; M88-ku3; KH/M06-ku3 *kupa (AMR): NP kuba ‘above, postp’; Hp kòopa ‘top of one’s head, crown’; NT kuúpa ‘head, hair’; ST kuup ‘head, hair’; Wr kupá ‘cabello, pelo, lana’; Tr gupá / kupá ‘cabello’; Wc kïïpá ‘pelo, cabellos’; Cr kïpwá; CN iikpa-tl ‘thread, hemp fiber’; HN ’iikpa-tl cotton thread. Miller includes My kóbba ‘head’ which might belong here, though UA *kuppa ‘head hair’ and UA *kopa ‘forehead, head’ are separate since at least TO, NT, ST, Tr, Wr, and Cr have distinct terms for the two (see 1099), though some circular borrowing is possible. Ken Hill adds Sr a-kupiaa’ ‘top, up, above it’ and Ktn kupeac ‘top of head, summit of a mountain, top end’. Note also Ktn kopo-c ‘hair, head’; and TO kuwijk ‘have a dome or peak’ matches Semitic semantics wonderfully. Many UA terms suggest a gemination or cluster (*kuppa) while others (NP) do not necessarily. [Sr a- pref] [1q,2bb] [iddddua] [NUA: Num, Hp; SUA: TrC, CrC, Azt]

1099 Hebrew góbah ‘height (of a man), height of other things’; Arabic ğabha(t) ‘forehead’ derives from the same root, but has a different voweling; Note that UA nicely reflects the difference between UA *kuppa < Semitic qubbaa (1098 above) and UA *kopa < Semitic gobah (1099 here); e.g., Tr / Wr kupá (1098) and Tr /Wr kowá (1099) show the difference between *-bb- and *-b-, respectively:
UACV-958 ***kopa** is ‘forehead’ (in Tep, TrC), ‘face’ (in Num), ‘head’ (in Cahitan); an original meaning of ‘forehead, front of head’ with semantic shifts to ‘head’ and ‘face’ since ‘forehead’ is between the two.

UACV-958a ***kopa** ‘face’: I.Num62 *kope ‘face’; M88-ko16 ‘face’; KH/M06-’o16 ‘face’: Mn qóbe ‘face’; NP ggoba ‘face’; TSh kope ‘face’; Sh kopai ‘face’; Cm koope ‘face’; Kw kovi ‘face’; Ch(L) kova ‘face’; SP kova-vi ‘face’; CU ková-vi ‘face’.
UACV-958b Several postpositions derive from the ‘forehead/face’ terms: *kopi(-na) ‘before’: Mn -qobewéé ‘in front of, ahead of’; Mn -qobéna ‘in front of, before’; Mn qobe ‘face’; NP kobina ‘in front of, postp.’; NP wïkobina ‘in front, adv’.
UACV-958c ***kopa** ‘forehead’: B.Tep113 *kova ‘forehead’; M88-ka31; KH/M06-ka31 *kawaC (AMR): TO koa ‘forehead, brow, cliff, bank, dropoff’; LP kov ‘forehead’; PYp kova ‘forehead’; NT kóva; ST kov;
Tbr ková-r ‘frente’.
UACV-958d ***kopa** ‘head’: Yq kóba ‘head’; My kóbba ‘head’.
UACV-958e ***kowa** (< *kopa) ‘forehead’: M67-190 *kowa ; L.Son96 *kowa ‘frente’; M88-ka31 ‘forehead’; KH/M06-ka31: Wr koá ‘frente [forehead]’; Tr kowa-ra ‘frente’; Cr kuaaci ‘frente’. The TrC reflexes of a medial bilabial are similar to *kap(p)a ‘egg’. M88 and CL.Azt 62*kwaay < 308 **kowa all tie Aztecan *kwaay ‘head’ to TrC *kowa ‘forehead’, which works phonologically, as the Cr form attests, as CrC and Azt oft lose medial *-p- (*kopa > *ko(w)a > kwa) though other *kawa terms are below at *kawa. For Tr/Wr -w- < *-p-, see tobacco.
UACV-958f ***koa / *kua** ‘edge, cliff’: TO koa ‘forehead, brow, cliff, bank, drop off’; Nv skuabiga ‘cliff’;
Eu kóa ‘orilla’; Eu vákoa ‘ribera’ (vs. vákora ‘lavar, bautizar’; Tr (ŕ)e-kowá-ta ‘edge of a descent’; Tr koa / kowa-ra ‘forehead’; Wr pakó ‘rio’ (pa’wi ‘water’ + edge; vs. Wr pahko-ná/má ‘lavar, bautizar’); Wc kïa in Wc kïacá ‘slope’; Wc teekïa ‘edge of cliff’ (Wc ï < *u); and ST kookvan ‘at edge of a drop off’ with redpl. Wc and Nv show *u and the others may have raised *u > o before a. [1g,2b,3h’ [NUA: Num; SUA: Tep, TrC, CrC, Azt]

1100 Arabic kaʕb- ‘knot, knob, joint, ankle, anklebone, heel’; the *ko’oC of *ta-na-pi-ko’oC
PUA *tanapiCko’oC ‘heel’:
UACV-1171a ***tanappiC** (Tb) > ***tampiC** / ***tappiC** (WNum, SNum) ‘heel’: M67-224 *tampi ‘heel’, 225 *tem ‘heel’; M88-ta22‘heel’; Stubbs2000b-40; KH/M06-ta22: Tb tanapi-t / Tb(H) tannappi-t; NP ddabbi; SP tampiC-(ppi); WMU tappí- / taví-pp*ü* ‘heel, n’; taví-ppü-n / tappí-n ‘my heel’; CU tá-pi; Mn tapiqó’. [Tb, WNum, SNum]
UACV-1171b ***taNpi(N)ko** ‘heel’: TSh tappiŋko’o(cci); Sh tappikkon; Cm tapiko’. [CNum]
UACV-1171c ***taNpiC > tempe’e-** ‘heel’: My témpe’erim; Yq pémpe’im. [Cahitan in TrC]
UACV-1171d ***tanappiCko > *taniko** ‘heel’: Eu tenúka and Tr ŕanígora / ŕaníku-ra show a 2nd consonant n, and show the vowel shift/transposition. [TrC]
UACV-1171e ***tïkapo** ‘heel’: B.Tep240 *tïkavo ‘heel’: UP čïkïwo; NT tïkávo; St tïkvo; TO čïkwo ‘ankle’. [Tep]
Sr and Ktn seem of a different compound, likely built on s.th. like Sr ta-muk-pi ‘foot-nose-at’ (Ken Hill, p.c.):
UACV-1172a *tamukpi ‘heel’: Sr tamukpi’; Ktn tïmupi-c. [Tak]
UACV-1172b *tïmo ‘heel’: Wr talatémori; Tbr teoó-r. *tïmo may be shortening of *tamukpi or may have lost -p- from s.th. like My témpe’erim. Hp kïk-tönsi ‘heel (< ‘foot-?’) may contain s.th. like *tïmo [TrC]
UACV-1172c *tema/i ‘heel’: TO čeemi; Nv tïma; PYp teema. Final vowel change from *tïmo. [Tep]

1101 Arabic ṭanna / ṭannana ‘to sound, ring, hum, buzz’, participle: **muṭannin** ‘hummer, humming one’; Arabic ṭannaan ‘ringing, humming, buzzing’; this many UA words for ‘fly’ beginning with initial *mu make *mu(C)-tanaC ‘fly-humming’ or humming fly a possibility:
UACV-1220 ***muttanaC** ‘hummingbird’: M88-mu20 ‘hummingbird’; KH/M06-mu20: TSh muutu(n)anci / muuttuwancih; Sh(M) muttïhnaaci, mottuhnaaci ‘hummingbird’; Kw muutana-pi-ži < *muuttana-ppi-či; SP mu(h)N (cf. mooa ‘to hum’); WMU muuttatta-č*i* / muuttappa-č*i* / múuttaqqa-č*i* / múúttattaav(w)üč*i* ‘hummingbird’; CU múutata-či (< *muuttattaa-ci); Tb muutnapiiči. The t’s and p’s in Num and Tb (instead of r/l and b/v) all suggest consonant clusters. [NUA: Num, Tb]
This is likely of the same root as the above, less likely Akkadian muttaprišu ‘winged, flying’
UACV-919 ***mutaN** ‘bee’: SNum *-mutaN- with two prefixes (si’i-, piya-): SP si’imuutaN-, si’immoorampi ‘bumblebee’; CU piá-muu-raaC-ppi ‘honey-bee (lit: sweet-fly-?)’; WMU piyáá-muura-pi ‘bumblebee, n’. PYp mumur ‘bee’ with -r may merit contemplation. [1m,2tt,3p,4s] [NUA: SNum]

1102 Hebrew **ṣwm** ‘to fast’ (not eat):
UACV-1231 ***suma** ‘hungry’: Stubbs2003-15: Eu hisúmrava ‘hambre [hunger], n’; Eu hisúme ‘haber hambre [hunger exists]’; Eu hisúm-ce ‘tener hambre [be hungry]’; ST uama ‘die of hunger’ (*suma > Tep (h)uma > ST uama, anticipating vowels. If < *suw(V)ma, this, with a prefix, may tie to *-suwimu below. [SUA: Tep, TrC]
Hebrew **bə-ṣwm/ṣuum** ‘in fast, be fasting/hungry’: **UA**CV-1224 ***kwisuwimu** ‘be hungry’: B.Tep7 *bihugimu ‘be hungry’; M88-kwi16; KH/M06-kwi16: TO bihugim; LP bihigim; NT biúúgimu/giúúgimu; ST biu’/bio; PYp bihi; Nv vihugimu; Nv vihugiga ‘hambre’. Consonant harmony in NT. [1s4,2w,3m] [SUA: Tep]

1103 Arabic dakka ‘make flat, level, smooth, stamp, tamp’; Hebrew dakkaa ‘crushed’; Hebrew dkk ‘crush’:
UACV-901a ***takka** ‘flat’: BH.Cup *táka ‘flat’; M88-ta33; AMR 1993c *takka; KH/M06-ta33: Ca taqtáqa ‘be flattened’; Ls táka/i ‘be straight’; Ls tááki-š ‘stone for smoothing pottery’; Ls -taak ‘palm of hand’. AMR (1993c) lists SP takkaa-vi ‘flat country’; SP mut-takka ‘forehead’. Add Ch(L) takagani (< *takka-kani) ‘flat-topped house’; Kw takka- ‘flat part’. Jane Hill (p.c.) adds Ch taka(a) ‘roof, top’ of Harrington’s list. [NUA: Tak, Num]

1104 Hebrew ṣayyaad ‘hunter’ from the root ṣwd ‘to hunt’; Arabic ṣayyaad ‘hunter’; Akkadian ṣayyaadu ‘hunter’; Syriac ṣayyaad-aa ‘hunter-the’:
UACV-1238 ***caya** ‘follow’: B.Tep186 *saada, prêt: *sai ‘to herd cattle’: TO šaaƌ ‘herd, drive a herd of (animals), chase away (an animal)’; NT saadá; NT saadáigi ‘arrear [urge, spur, hurry]’; ST saada. [1s4,3d] [iddddua] [SUA: Tep]

1105 Akkadian kaliitu ‘kidney’; Ugaritic klyt; Hebrew kilyaa ‘kidney, n.f.’; Syriac kooliit-aa ‘kidney’; Aramaic koolyaa, kooliit-aa ‘kidney’; MHebrew kuulyaa ‘kidney’:
UACV-1259 ***kali** ‘kidney’: SP qaniN-, qanimpi ‘kidney’; k^{y}ele- of Hp k^{y}elevosna ‘kidney’; Ls tákalak-may ‘kidney’ perhaps with prefix ta-, perhaps Ktn kanïm ‘gall’. The Akkadian voweling and the Ugaritic consonants suggest a voweling like UA. Ls with the fem prefix ta-? [L:n; vowel leveling] [1k,2l] [NUA: Num, Hp, Tak]

1106 Aramaic(J) sbr ‘be bright, intelligent, understand’; Aramaic(J) sabbaar ‘reasoner, fine scholar’:
UACV-1274 ***suNpa** ‘know’: I.Num186 *sumpa/*sumpi ‘know, recognize’; M88-su15 ‘know, recognize’; KH/M06-su15: NP subbidaggwatu ‘know’; TSh sumpanai ‘know’; Sh sumpanai ‘know s.o.’; Cm supana’i ‘know of, know about, know s.o.’ [1s,2b,3r] [NUA: Num]

1107 Syriac hwn / huun ‘be endowed with reason, be rational, intellectual, be wise’ denominative verb from Syriac hawn-aa ‘mind-the, reason’:
UACV-1281 ***huna** ‘know’: Yq hú’unea ‘saber [know], conocer [be acquainted with]’; My hu’uneiya / hu’uneria ‘lo sabe [know it], lo conoce, entiende, comprende [understand]’. [1h,2w,3n] [SUA: TrC]

1108 Hebrew ṣlʕ ‘limp, be lame’; Arabic ẓlʕ / ẓalaʕa ‘be lame, limp’, impfv: **-ẓlaʕu** ‘limp, walk with a limp, walk lamely’; Hebrew ṣɛlaʕ ‘a stumble, fall, plunge, n’; Aramaic(J) ṭlʕ ‘to limp’; Syriac ṭlʕ / et-tallaʕ ‘fall in a stupor, become unconscious’; the UA forms resemble the impfv with loss of 1st C in the cluster:
UACV-1340 ***lo’i** ‘lame, limp’: Yq ló’i ‘lame’; Yq ró’iró’ikti weáma ‘anda cojeando’; My ro’i/lo’i ‘lame’. Op rho’omoi ‘cripple’ (Shaul 2007) as far as Op rho’o… resembles other TrC tongues (Yq, My) and the whole resembles NUA forms like Ca lúúmiš ‘crippled, paralyzed’; Sr luumiš ‘lame one’ (borrowed from Ca, notes Hill); possibly Hp rohona ‘one-legged’ and Ktn yu’u’ ‘lame’. [1s4,2l,3’2] [NUA: Tak, Hp; SUA: TrC]

1109 Aramaic mɧwṭ-aa’ ‘mucus, n.m.’
UACV-1475 ***mïɨt**... ‘snot, mucus’: KH.NUA: Sr mïriič ‘snot’; Gb móta’. [Gb o < *ï] [1m,2h2,3w,4t2] [NUA: Tak]

1110 Aramaic(J) ’ard-aa’ ‘mushroom-the, m.’; Syriac ʕard-aa’ ‘mushroom, truffle-the’;
UACV-1482 ***hitto’oC / *witto’oC** ‘mushroom’: TSh wiitto’e-cci ‘mushroom’; TSh hiitto’i ‘mushroom’; Kw hiito’o-pi ‘mushroom’. [1’,2r,3d] [NUA: Num]

1111 Hebrew **meetar** ‘bowstring, tent rope’, poss’d **meetr-** > CN **maatla**-tl ‘net, sling’ (< *maata).

1112 Arabic maa ‘no, not’:
UACV-1537 ***ma** ‘no’: NT mai ‘negative’ (Bascom 1982, 278); Wc maave ‘no haber, ausente’;
CN ma ‘no’ (in imperatives, optatives; RJC). [SUA: Tep, CrC, Azt]

1113 Syriac ṣiid ‘to, with, at’:
UACV-84 ***-ci** / ***-cï** 'at': Eu -ce 'en'; Tr -či 'sufijo locativo'; -c- in Hp a-c-ve(q) 'on, on top of’ (lit: 3p-on/above-PCT-(EX); Hp a-c-va(qe) 'along, in, on’. [NUA: Hp; SUA: TrC]

1114 a compound of Hebrew šɛlɛg ‘snow’ + Hebrew mukkɛ ‘smitten’:
UACV-1551 ***sïk-mukki** ‘numb < ice/cold-dead’: Hp sïmokiw|ta (with accent on 1st V) ‘be getting numb’; Hp(H) sïïmokiwta ‘be numb’; NP ta/ma-sïsïŋi ‘foot/hand goes to sleep’; Cm sïsï’nitï ‘numb, feel numb, asleep’; WMU sï’u̲ú ‘be numb’. The first morpheme is CN sek-tli ‘ice/cold’. Though Hp lost the velar stop, it preserved the vowel pattern best and shows the 2nd morpheme clearly. NP, Cm, and WMU are reductions showing residual features of both consonants, in which the velar + nasal cluster -km- went various directions: *-km- > ŋ (NP); -’n- (Cm); and ’u̲ (WMU), for all show signs of a velar (velar nasal or glottal stop) and a nasal or a nasal V in the case of WMU. The vowels or whole second syllable contracted severely. [cluster reduction -km- > ŋ, m, -’n-] [NUA: Num, Tak, Hp]

1115 Arabic ğauza(t) ‘nut’:
UACV-1562 ***kusi** ‘oak’: AYq kusi ouwo ‘oak tree’; Wr kusí ‘brush, thicket; kind of oak’. [1g,2w,3z] [SUA: TrC]

1116 Hebrew zɛ́pɛt (< *zipt-) / zaapet ‘pitch’; Arabic zift ‘pitch, asphalt’; Aramaic zepaa / zipt-aa ‘pitch, n.f.’; Syriac zapt-aa / zept-aa ‘pitch’; Akkadian zibtu:
UACV-1632 ***copï** ‘pitch, torch’: L.Son42 *cop ‘ocote’; M88-co13 ‘torch’; KH/M06-co13: Wr cohpí ‘ocote/torch’ (cf. Wr co’í ‘trementina, pine pitch, resin’); Tr čopé/-čobé-/čopi ‘ocote’. Add Tbr copé-t ‘trementina’. Note also CN capopo’-tli ‘type of tar, asphalt, used for incense and cleaning teeth—another instance of SUA vowel metathesis. [a-o = o-a] [SUA: TrC, Azt]
UACV-1633 ***co’i** ‘pitch’: My čoo’i ‘brea’; Wr co’í ‘trementina’; Tr čo’ré ‘resina’; perhaps AYq ču’ukum ‘gum, tree, resin, pitch’. Note loss of medial bilabials (-p-/-b-/-m-) in dbr and šmr too. [1z,2p,3t] [SUA: TrC, Azt]

1117 Aramaic(CAL) kwkby; Syriac(S) kuukkəbbe ‘owl’; Syriac(P) kuukkəbbay ‘unclean bird, perhaps an owl’:
UACV-1589 ***kuku** ‘ground/burrowing owl’: M88-ku35; Munro.Cup87 *kuku-l/*kukuu-l ‘owl’; Stubbs1995-21 *kwuku; KH/M06-ku35: Ca kuku-l ‘ground owl’; Ls kukúu-l ‘burrowing owl’; Gb kukúy’ ‘burrowing owl’; Ktn kukuku-č ‘owl sp’; Hp koko ‘burrowing owl, little owl’. Add Tr okowí / okó-turi ‘small type of owl’; Tr o*ko ‘type of owl’; TO kuukvul ‘elf owl’; TO kokoho ‘burrowing owl’. Tr often loses its initial consonant, and with intervocalic -b- > Tr -w-, Tr okowí reflects the Aramaic/Syriac form well. [1k,2w,3k,4b,5y] [NUA: Hp, Tak; SUA: Tep, TrC]

1118 Arabic ’akamat ‘hill, reef, heap, pile’:
UACV-1624 ***wïkka** ‘pile’: NP wïkatïga ‘pile up’; TSh wïkkatï ‘pile, vi’; TSh wïkkatïŋkïn ‘pile up, vt’. Initial ’ > w would be Sem-p, if m was absorbed in a cluster, but no -m- has it less sure. [p1’,p2k,p3m] [NUA: Num]

1119 Hebrew har ‘mountain’; pl: haree^{y} ‘mountains (of)’:
UACV-1457 ***huya / *huri** ‘mountain’: B.Tep317a *’oidaga (UP,ST) / ’oidigi (LP, NT) ‘world, mountain’; M88-’o23 ‘world, mountain’; KH/M06-’o23: UP ’oidagï; LP oijig; NT oidyigi; ST ‘oidya’; TO oiđag ‘field, farm’. Add Cr hïrí ‘cerro [hill]’ and Wc hïríi ‘sierra’ (Cr borrowed from Wc?). Yq húya ‘árbol, monte’ and My huyya ‘árbol, monte’ probably belong at ‘arrow/tree/wood’ where Hill has them, and Tbr huwa ‘monte’. Tbr hanyí-t ‘cerro’ has 3 of 4 segments, since Tbr ny < *y. Putting Tep *’oidaga into PUA segments yields *hoiyawa and makes Cahitan *huya tempting, since Tep ’ < *h, especially if the latter segment of the dipthong shows anticipation of the y (*uy/oy > oiy), which is often the case in Tep (and in UA): *huya > *hoya > *hoiya. [*-u-a > o-a; r > y] [1h,2r] [SUA: Tep, TrC, CrC]

1120 Hebrew **yişhar** ‘oil’ (this and mtn have h > hu; or the pharyngealized ṣ caused h > ɦ):
UACV-845 ***yuhu** ‘grease’: I.Num294 *yuhu grease; M88-yu11; KH/M06-yu11: Mn yuhu ‘grease’; Mn yuhúbi ‘fat’; NP yuhu ‘fat’; TSh yuhupin ‘fat, oil’; Sh yuhu/yuhi ‘fat, grease, oil’; Cm yuhu ‘fat, grease, lard’; Kw yïhuu/yuhuu-vï ‘fat, grease, lard’; Ch yuhú-v*i*; SP yu(h)u-vi ‘fat, grease’; CU yïú-vi ‘fat, oil, grease, lard’. Add ST jua(kam) ‘que es gordo’; WMU yuú-v*i* ‘fat, grease, oil, n’ (vs. yu’ú-v*i* ‘leg’). [u > ï in unaccented syllable] [1y,2s4,3h,4r] [NUA: Num; SUA: Tep]

1121 Aramaic(J) dabbar ‘lead, drive’; Syriac dbr ‘lead, take, drive away’
UACV-1727 ***tappi** ‘pull, drag’: Kw tapičinï ‘drag’; Sh(C) tïppi ‘pull’. Are the following also related or are we dealing with prefixes?: *ca-pi- or *capi: Mn capidïna ‘drag’; NP capiwoya ‘to drag with hand’; NP cipi / cibi ‘pluck out’; Cm cahpi’erï ‘jerk down, pull down’. [CC] [1d,2bb,3r] [NUA: Num]

1122 Hebrew pny ‘turn to one side, turn head in a particular direction’; unattested ***panniy** ‘turn (vt), direct’:
UACV-1729 ***pani** ‘pull, drag’: TO wani- ‘a pulling or influencing action’ (TO w < *p); TO wanimun ‘pull pieces or strands from, vt’; TO waničk ‘pull on, influence, vt’; PYp vancim ‘cut, break off’; PYp vavinim ‘pull, vt’; PYp vainim ‘pull off, break off, vt’; PYp vancikim ‘pull, vt’; PYp vainit ‘pick fruit’; ST vañiis pret. of vaissïna’ ‘estirar, alargar’; Tr bani-mea ‘arrastrar [drag]’; Tr banisu-ma ‘jalar [pull]’; Wr pansú-na ‘pull’; Wr pansú-ro-na ‘pull along (as horse by rope, child by the hand)’; Wc hana ‘drag, pull, stretch’ (Wc h < *p); Wc hání ‘pulled’. Tr’s alternate form Tr baná-če ‘quedarse obstaculizado, cerrarsele a uno el paso [be blocked, one’s progress impeded]’ matches Hp pana ‘put into, bring into’, both of which include examples of corralling animals’. [*p > Wc h, c/s] [iddddua] [SUA: Tep, TrC, CrC; NUA: Hp]

1123 The intensive of Hebrew pny ‘turn to one side, to head in a particular direction’ would be *-panni / *pinne ‘have s.o./s.th. turn or head in a direction’:
UACV-1747 ***pana** ‘put in’: Ken Hill (p.c. 2004), KH/M06-pa71: Hp pana ‘put into, let enter, bring into’; Sr paa^{r}van ‘wet, add water to, thin (e.g. soup) by adding water’. Ken Hill noticed this nice pair as Sr paa^{r}-van clearly appears to be a compound meaning ‘water-put in’, that is, ‘put in water’. Add Tb(H) paanat ‘to close, vt’? [1p,2n,3y] [iddddua] [NUA: Hp, Tak]

1124 Hebrew -o ‘his’

UACV-1703 ***-wa** ‘possessed suffix’: KH/M06-ns3: Ca -w’a; Cp -w; Ls -w; CN -w/-wi/-wa:- (-kone:-w ‘child’; -o’-wi ‘road’; -kone:-wa:-n ‘children’); Pl -w (-o:mi-w ‘bone (poss.)’). Add Ch(L) wïn’napi ‘flint’; Ch(L) huu wïn’na-wa ‘arrow’s flint’; Eu -wa; Op -wa (Shaul 1990, 565; Shaul 2003, 26). [1w] [SUA: Azt, TrC; NUA: Tak, Num]

1125 Aramaic(S) tiigaar-aa ‘a vessel’ < Middle Iranian *tigaar (note New Persian taġaar ‘earthen dish or bowl’) > Arabic tiiġaar (Canaanite vowel shift aa > oo in Northwest Semitic):

UACV-1710 ***tïko-(ri)** ‘dish’: Eu tékori ‘plato, carrete’; Tbr teka-lí-t ‘olla’; teko-lí-t ‘olla’. [SUA: TrC]

1126 Hebrew yṣb or yṣg (hiqtiil means ‘to set, place’) or yṣʕ / Arabic waḍaʕa ‘lay, put down, set, place’:

UACV-1742 ***yaca** ‘put, set down’: VVH40 *yaca ‘to set it down’; B.Tep14 *daasai ‘he sets down’ and *daasa ‘to set down’; M88-ya2 ‘place sg. obj. in sitting position’; KH/M06-ya2: TO daaš; LP daaša; NT daása; ST daasa; Wr yahca ‘ponerlo sentado [put seated]’; Tr acá, acába ‘poner o asentar una cosa’; My yécca ‘ponerlo sentado’; Tbr neca/nesa ‘sentarse, estar sentado, asentar, poner’; Tb yandzït~’ayanc ‘sit down, set (of sun)’; CN ye ‘estar’; Pl mu-estuk, mu-ectuk ‘be seated’ (defective vi). Add Wc yáaca ‘put, make stand’; Yq yéča ‘levantar, poner, sentar’; and AYq yeča ‘put, set, place, take off (clothes), awaken, get s.o. up’. Raising a > e between two palatals is natural enough. [initial C > ø in Tr] [1y,2s4,3b,3’2] [NUA: Tb; SUA: Tep, TrC, CrC]

1127 Three Hebrew stems (yṣb, yṣg, yṣʕ) in the hiqtiil would all have their participles beginning as mooṣii- like UA *moci- ‘set, put’; Hebrew yṣg, hiqtiil: hooṣiig, yooṣiig, ptcpl: mooṣiig ‘set, place’; Arabic waṣaba ‘be firm’; Hebrew yṣb ‘to stand, be erect’, prtc: *mooṣiib; Arabic waḍaʕa ‘lay down’; Hebrew yṣʕ, hiqtiil prtc: **mooṣiiʕ** ‘spread, make bed’:

UACV-1745 ***mociwa** ‘place pl obj’s seated’: M88-mo2 ‘be seated pl’; KH/M06-mo2 ‘be seated’: Wr moci-wí/-pó ‘estar sentados [be seated]’; Wr mocipá-ni ‘sentarse [sit down], pl sbj’; Wr mociwá-ni ‘sentarse [sit down], pl sbj’; Tr močiwa ‘objeto con que o en que depositar, colocar (como asentadas) [set seated/sitting up]’; Tr močíwi ‘sentados [seated], pl objs’; Tbr muci/mucu ‘sentarse’. UA *moci- followed by other affixes probably. [1y,2s4,3b,3’2] [SUA: TrC]

1128 Hebrew rby / rabaa ‘shoot (arrow)’ did a semantic shift from ‘shoot/throw’ to ‘put’, which shift is common; it happens in UA and in Semitic (e.g. Akkadian ramu ‘throw’ and ‘lay’), and in English “he put the arrow in the bull’s eye”, and toss it there = put it there:

UACV-1743a ***tap** ‘put’: BH.Cup *tav ‘put’; CL.Azt130 *tlaalia ‘put, place’; M88-ta34 ‘put’; KH.NUA; KH/M06-ta34 *tapic (AMR): Cp tava ‘put down’; Ls taváni ‘put, place sg obj’; Ls tavá’a ‘sit down, pl. subj.’; Ca táv ‘put sg. obj. in place, put in order, vt’; Gb tavó ‘poner’; Sr tav(ïi) ‘put sg. obj.’; Hp tavi ‘put it down, take (clothing) off’; Sr tavyi ‘put, place. This may tie to *tapa/tapi ‘throw’, though Hp has different forms.

UACV-1743b ***tali** ‘put’: CN tlaalia; Pl taaliya; Po tali; T tlolla; Z taaliya. From *tap-lia or *taptia with loss of *-p- in a cluster. [iddddua] [*-p- > ø in Azt] [NUA: Tak, Hp; SUA: Azt]

1129 Arabic **l’m / la’ama** ‘bandage (wound), (garment) fit (s.o.)’; Arabic **la’ma**(t) ‘cuirass, pair of cuirasses [protective covering for the torso, a similar protective covering]’:

UACV-255 ***taluma’ / *talumaC** 'blanket, garment': CN tilma’-tli ‘cloak, blanket, indigenous man’s garment fastened on one shoulder’; Eu terúwa/teruva ‘tilma, frazada’; TO čïdhum 'blanket'; Tb(H) taluumat-t 'breech clout'; ST tidya 'wrap with a blanket’. In TO čïdhum (< *tïlum?), the h may be excrescent devoicing (as in TO o’odham); nevertheless, TO has *tVLum in common with Tb, and an u with Tb and CN. Tb, TO, Eu agree in five of six segments *taluma, outside of a liquid raising a vowel in TO and Eu (*a > ï, i/_r, l, which is common in UA), an extra h in TO, and perhaps *m > w in Eu. Note how easily CN tilma’- can derive from *taluma’, since CN i < *u: *taluma’ > tul(u)ma’ > tilma’ or > *talima’ > til(i)ma’. Tb taluuma-t may show the original voweling, and Tb also has two verbs that may relate— Tb tuluumiin ~ ’utuluumiin ‘to roll his blanket’ and Tb tulu’uma ~ ’utulu’uma ‘it rolls’—and the Tb form has the glottal stop in place, perhaps also contributing to the rounding. Also note the final glottal stop in CN and -t (vs. -l) in Tb, both suggesting a final consonant. Ca lami ‘to fold, wrinkle, vi’; Wr lo’mi- ‘be folded’; Tb lam’mat ‘to get soft’. [p1l,p2’,p3m] [NUA: Tb; SUA: Tep, Azt, TrC]

1130 Hebrew pɛgɛr ‘corpse’, Aramaic pagr-aa ‘body-the’; Syriac **pagr-aa** ‘body-the, flesh-the, a carcase’: Hp pïïkya ‘skin, animal hide, flesh’; Mn(Lamb) pïka ‘get a deer carcass’; Mn(Lamb) pïkahnookaa ‘go to haul deer carcass’; Sh pika-ppïh ‘buckskin (of deer or antelope)’. Widespread Numic *pïhï ‘hair, fur, hide, skin’ with softened middle C is likely a related variant and Mn has both (via dialect recycling):

UACV-1110 ***pïkya / *pïCCa (> *pïhï)** ‘fur, body hair’: M67-212b *po ‘hair of the body’; 212e *pe; 212c *po ‘cut hair’; I.Num170 *pïhï ‘feather, hair, fur, hide, skin’; M88-pï11 ‘fur, hide’; KH/M06-pï11: Hp pïïkya ‘hide, skin’; Mn pïhï ‘skin, hide, body hair, fur, down’; NP pïhï ‘skin, hide, fur’; TSh pïhï ‘skin’; Sh pïïsi ‘feather’; Cm pïhï-cahkwe’ya ‘to skin an animal’; Kw pïhï-(m)bï ‘fur, hide’; SP pï(h)ï-vi ‘fur, hide’; SP pï(h)ïaa-vi ‘hair’; CU pïï-’ah ‘hide, skin’; Cp pélki-š ‘hide, skin’; the *-pï’a- in Ch tocí-vï’a-vï ‘head-hair’; Kw toci-va’aa-vï ‘head-hair’; toci-vïaa-vi ‘head-hair’; CU tïcí-vïï-vi ‘head-hair’; Cr nabih ‘piel, cuero’; and NP -bbï’a ‘bark, shell’ as well as the other NP term. Cp appears to have anticipated the liquid. [p1p,p2g,p3r] [NUA: Num, Hp]

1131 Syriac **pagr-aa** ‘body-the, flesh-the, a carcase’; the following has *tï- prefixed to the *-pïhï above:
UACV-2027 ***tïpïhï** ‘hide, skin’: I.Num249 *tïpïhï ‘hide, skin’; M88- tï26; KH/M06-tï26: NP tïpïhï; Cm tïhbï; Sh tïpïhï; SP tïvïïvï ‘skin (owned), hide’. This is often deemed a compound of ‘deer-hide’ (*tï-pïhï). [iddddua] [NUA: Num]

1132 Hebrew **pɛraʕ** ‘loosely hanging unplaited hair on the head’(KB) ‘long hair of head, locks’ (BDB); Arabic, Assyrian, Syriac show the root to mean ‘sprout’ (of plant or hair); Assyrian pir’u ‘sprout, progeny’; Assyrian pirtu ‘hair of head’; Arabic farʕ- < *parʕ- ‘long hair’ and Arabic farw-u < *parw-u (nom) / parw-a (acc) ‘fur, skin, pelt’; Syriac **perʕ-aa** ‘bud, shoot, blossom-the’; the clusters in the cognate languages show that Hebrew **pɛraʕ** as a segolate noun also once clustered the 2nd and 3rd consonants: note Hebrew construct pl: parʕoot. The Hebrew meaning ‘hair’ and the Syriac voweling are quite identical to UA ***pï’wa** ‘hair’:
UACV-1110 ***pï’wa** ‘hair, hide, fur, body hair’: M67-212b *po ‘hair of the body’; 212e *pe; 212c *po ‘cut hair’; L.Son207 *pïwa ‘piel’; M88-pï11 ‘fur, hide’; KH/M06-pï11: Eu vewá-t ‘pellejo’; My beewa ‘piel, pellejo, corteza, cuero, cáscara’; Cr nya-ïpéé-si ‘my cheeks’; Pl eewayu ‘skin, peel, hide, bark, shell’; CN eewa-tl ‘skin, hide, husk, rind’; Yq béa ‘skin (of animal)’; AYq beá ‘skin, shell, bark, rind’. Add Tb(H) piiwii’l ‘down feathers, breast feathers’. Hp pïvïwpi ‘eyelashes’ (redupl of *-pïw-) may also belong, in contrast to the above Hp pïïkya ‘hide, skin’. Where the raising and fronting of the vowel anticipating the r is more like Sem-kw, while no such r-effect is in Sem-p. [p1p,2r,3’2] [NUA: Tb; SUA: TrC, CrC, Azt]

1133 Syriac **baʕw-aa** ‘camel hair-the’; that is, hair, fur, or hide of an animal; as Arabic baʕiir ‘camel’ takes Semitic baʕiir ‘livestock, any domestic animal’ and limits it to camel, Syriac baʕw-aa similarly reduces the semantics to a camel, though easily extendable, if not originally, hide of any animal’:
UACV-1109 ***po’wa / *poCwa** ‘hair, fur, hide, skin’: Sapir; VVH7 *po ‘body hair, fur’; B.Tep280 *vopo ‘body hair’; M67-212b *po; I.Num149 *po’a(a) ‘cover, skin, bark’; BH.Cup *pe’; L.Son216 *powa ‘pelo, lana’; KH.NUA; M88-po2 ‘body hair, fur, skin’; KH/M06-po2: TSh po’a-cci ‘bark’; Sh po’an ‘skin, bark’; Cm po’a ‘cover, bark, skin’; Tb poont ‘hide, body hair, fur’; Cp pi’i ‘down, body hair, non-flight feathers’; Ca píi-ly, píh’i ‘body hair, fur, down’; Ls pé’ ‘feathers, fur, body hair’; Gb péhan ‘beard, body hair, down’; Sr pöh ‘fur, body hair, feathers’; Ktn poho-c ‘body hair, feathers, fur’; Hp pöhö ‘fur, body hair, body fethers, down, fuzz’; TO wopo ‘body hair, fur’; Wr po’á ‘lana’; Wr(MM) po’wá / po’owá / po’á / poa ‘vello [down, fur]’; Tr bo’wá / boa / bo’o / bó ‘vello, lana’; My bowwa ‘lana, pelo’; Yq bóa ‘pelo, plumas’; AYq voa ‘fur, down, body hair’; Tbr womé-t / womó-r / womá-r ‘lana, pelo’; Cr hú’u-ša’a ‘peach fuzz on body’; Sapir lists Cr ki-poa ‘hair’. The variety in Tb -n-, Num -’-, Gb, Sr, Ktn, Hp -h-, and Wr, My, Tr -’w- recommend a cluster that may contain a liquid (Tb) and/or glottal stop, or other possible combinations. [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC]

1134 Aramaic(J) tiklaa ‘purple-blue wool’; Syriac tiklətaa ‘dark blue, violet, purple’;
Hebrew təkelɛt ‘a blueish or violet-colored purple wool’:
UACV-1777 ***tï’kaC** ‘red pigment, clay’: Ls tó’xa-t ‘red clay’; Cp te’xa-t ‘red paint’. For a liquid to be anticipated and then become glottal stop, see gml (938), etc. [1t,2k,3l] [NUA: Tak]

1135 Hebrew **qaanɛh** ‘reed, stalk’; Aramaic and Syriac qanyaa ‘reed, stalk’:
UACV-1778 ***pa-kaN** ‘reed, phragmites’: Sapir; VVH8 *paʂka ‘reed’; M67-344 *paka ‘reed’; I.Num135 *pakaN ‘arrow, cane’; L.Son185 *paka ‘carrizo’; CL.Azt133 *aaka ‘reed’; Fowler 1983; M88-pa18 ‘cane, arrow’; Munro.Cup97 *pááxa-l; KH.NUA; KH/M06-pa18: Mn paqa ‘arrow’; TSh pakan ‘arrow’; Sh pakan ‘arrow’; Cm paak/paka ‘arrow’; Kw paga-bï ‘carrizo grass, common reed’; SP paġaN-, paġampi ‘cane’; Tb pahaabïl / paha’bïl ‘sugar cane plant’; Cp páxa-l ‘arrowreed’; Ca páxal ‘common reed, phragmites communis’; Ls páx-ma-l ‘type of greens’; Gb páxo-t ‘knife, pito de hueso’; Sr paaqa-ţ; Ktn paka-č; Hp paaqavi ‘reed, phragmites australis’; TO waapka ‘bamboo, cane, reed’; PYp va’agar ‘any kind of cane or reed’; PYp vapaka ‘reed’; ST vaapak; Wr paká ‘carrizo’; Tr paká; Yq báka; My baákam; Tbr waká-t, wakó-t ‘carrizo, flecha’; Cr haká; Wc háka ‘a grass for arrows’; CN aaka-tl. This stem is found in every branch, almost every language; semantically it appears to have originally meant ‘reed’ (apparently used for arrows), then ‘arrow’ in the Numic languages. Only Numic shows the nasal N.
[*p > h in CrC; Tb h < -k/ŋk-; bilabial > ø/_C] [Sem-p: Tb h < q; no ŋ in Tak] [1q,2n] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1136 Hebrew ’ébɛh ‘reed, papyrus’; Arabic ’abaa’; Akkadian abu / apu ‘reed, papyrsu’:
UACV-1781 ***wapi** ‘foxtail’: BH *wávic ‘foxtail’; M88-wa20; Munro.Cup48 *wáávi-š ‘foxtail (plant)’; KH/M06-wa20: Ls wáávi-š; Cp wávi-š; Ca wáávi-š. [p1’,2b] [NUA: Tak]
UACV-1785 ***owa / *oha** ‘caña verde’: Dakin 1982-63: Tr owé ‘maguey de hebra’; Wc úha ‘caña’; CN owa-tl ‘stalk of corn, cane, green stalk’; Pl uuwa-t ‘cane’. Cm owóora ‘tree trunk’ at *wo’ota ‘stalk’ may tempt a tie therewith, but let’s not, though not beyond possibility. Yes, *-b- > -w- in TrC. [SUA: TrC, CrC, Azt]

1137 Hebrew gómɛ(’) ‘papyrus’ or Hebrew qaamaa ‘standing grain’:
UACV-1786 ***oma** ‘reed’: Eu omá ‘caña [cane]’; Wr omá ‘sugar cane, the large variety that grows at lower elevations, from which panocha and mescal are made’. [Sem-kw] [1g,2m,3’] [SUA: TrC]

1138 Hebrew šor ‘navel, navel cord’; Arabic surr ‘navel cord’ > Sr ṣuur ‘navel’.

1139 Hebrew ro’ɛh ‘seer’, that is, one who sees visions, from the verb r’y / ra’aa ‘see’:
UACV-1798 ***tï’a** ‘have a vision or supernatural power’: M67-424; M88-tï40 ‘supernatural’; KH.NUA; KH/M06-tï40: Sr tï’ain ‘be bewitched, have a supernatural vision’; Ca té’ayawa ‘power’; Hp tïï’aw-ta ‘have a vision, have a mystical experience of seeing s.th. extrasensory in nature or of de ja vu’. Miller includes Ls tówi ‘see supernaturally’; Ls shows medial w, while Sr, Ca, and Hp agree exactly in the first four segments *tï’a. This (*tï’a) may be of Sem-kw, wherein ’ > ’, vs the set below (*tïwi) of Sem-p, wherein ’ > w. [1r,2’] [NUA: Hp, Tak]

1140 Hebrew ro’ɛh ‘seer’, that is, one who sees visions, from the verb r’y / ra’aa ‘see’:
UACV-1799 ***tïwi** ‘deity, spirit, seer of supernatural means’: Munro.Cup34 *tɔɔwi-š ‘deity/spirit’; KH/M06-tï40: Ls tóówi-š ‘spirit, ghost, devil’; Ls tóówi ‘see by second sight, be clairvoyant’; Cp təwi-š ‘a deity’; Ca tétiwi-š ‘dreamer’ a reduplicated form of expected Ca téwi-š, notes Munro; Sr tïiit ‘devil, evil spirit’. [NUA: Tak]

1141 Hebrew ħool ‘sand’; Aramaic ħaal-aa; Aramaic(S) pl: haalaat-aa ‘sand, sandy area’:
UACV-1868 ***(h)ola** (Tep) / ***otta** (Num)‘sand’: Sapir; B.Tep326a *’oo’orai ‘sand’; M67-355: TO o’oḍ ‘sand’; NT óórai ‘sand’. Though Semitic is masc, the Aramaic pl looks fem, and if later perceived as fem, the ħooltaa would result, like Ch otá-vï and WMU tá-vï ‘sand’, which lost the first syllable, as it occasionally does. In fact, Sapir ties Tep and SP atta ‘sand’, assimilating from *otta, which *otta is what we find in Ch. Sapir cites SP taŋa ‘knee’ < *toŋa as a parallel example of that vowel change. Note also B.Tep326b *’oo’ia ‘sand’, a compound of *hora and *siwa. [V change] [1h2,2l] [SUA: Tep; NUA: Num]

1142 Aramaic blṭ / balleṭ, impfv yV-balleṭ (see all conjugations and dialects) ‘shut eyes, be worm-eaten, moth-eaten, rot’:
UACV-1848 ***yïpali** ‘rotten’: B.Tep31 *dïvariga ‘rotten’; M88-yï13; KH/M06-yï13: TO jewa; UP jïwaligï; PB dïvilgï; NT(B) dïváliga ‘rotten’; NT dïvááli/duvááli ‘pudrido’; NT dïváárïi ‘pudrir, vi’; ST dyïvaalyi’.
Add PYp devlim/dever ‘rot, vi’; PYp develik ‘rotten, adj’. [liquid] [1y,2b,3l,4t2] [SUA: Tep]

1143 Arabic pasada, impfv ya-**psudu** ‘become bad, rotten, decayed, putrid, spoiled’;
UACV-1852 ***sora** ‘rot, go to waste, throw away’: Tr sorá-ta ‘podrirse’; Eu nasór-tu’u ‘echarse a perder’; Eu nasór-ta’a ‘echar a perder’; Eu nanásora ‘componer’; My nasontu ‘descomponerse’; AYq nasonte ‘harm, ruin, spoil, break down, vt’; AYq nasonti ‘ruined, blotched, vi’; AYq nasontu ‘wear down, break down, vi’; Yq nasonta ‘descomponer, vt’; Yq nasonte/nasontu ‘descomponerse, vi’. [l > n in SUA] [1p,2s,3d] [SUA: TrC]

1144 Hebrew ’almaanaa ‘widow’ built on the verb reflected by Arabic ’alima ‘to experience grief’; related but less relevant are Hebrew **’lm** ‘be dumb/silent’; Hebrew **’elem** ‘silence’:
UACV-1863 ***o’mana** ‘sad, suffering’: CN a’mana ‘be unsettled, upset, disturbed’ (RJC); Tr o’moná / o’móna-ma ‘be afflicted, saddened’; Tr o’móna-ri ‘sadness, affliction’; the -uŋani- portion of Sr ahauŋanik ‘sad, miserable’; Sr hahauŋan ‘be poor, pathetic, miserable’; Sr hauŋani-č ‘poor one, orphan’; Ktn haoŋa ‘poor’. Words as long as the Sr forms must be compounds, and -oŋani- parallels *o’mana/i. We seem to be dealing with a cluster, which appears as -’m- in CN and Tr; in addition, the Tr and CN forms agree in the cosonants -’m-n-, but disagree in the vowels: a-a-a vs. o-o-a, while the Sr and Ktn vowels -o-a-i are between the two, CN and Tr each assimilating one vowel, in opposite directions. [*-’m- > -ŋ-; V assim] [1’,2l,3m,4n] [NUA: Tak; SUA: TrC, Azt]

1145 Hebrew ṣadooq ‘just, righteous’ (BDB) from ṣdq ‘to be in the right, be just, righteous’:
UACV-1864 ***sitoka / *siroka** ‘be sad, suffer’: My siróka ‘está triste [is sad]’; My sirókwame ‘tristeza [sadness]’; Yq sioka ‘sufrir [suffer], estar triste’; AYq sioka ‘be lonely, vi’; AYq sioktua ‘hurt, make sad, vt’.
The Semantic tie, not perfect, but likely in that the righteous patiently bear burdens stoically (sadly) or without vengeance. [1s4,2d,3q] [iddddua] [SUA: TrC]

1146 Aramaic(J) tkk ‘to squeeze, press (between), twist, twine’; Aramaic tek / tikk-aa ‘twisted cord, ring, chain’; this set has the Egyptian pronoun -pu ‘it is’ suffixed to *tikka: *tikk-aa-pu ‘cord-the-it is’ (see 122)
UACV-1845 ***tïkapu** ‘rope, thread’: Mn tïgápo ‘rope’; NP tïgapu ‘rope’. [1t,2kk] [NUA: WNum]

1147 Hebrew n’q ‘to groan’; na’aqat/na’^{a}qat ‘groan, n’; ‘groan/mutter’ > ‘speak’ is not a big semantic shift:
UACV-1869 ***ni’oka** ‘speak’: M88-na4 and M88-ni1; L.Son173 *nio ‘hablar’; B.Tep170 *niokai-i ‘to talk’, *nio ‘he talked’, and B.Tep171 *ni’oka-i ‘word’; KH/M06-ni1: TO neok(i) ‘talk’; UP ñïokï; LP nook; NT ñíoókai ‘habla’; NT ñióóki ‘palabra, voz, mensaje, idioma, cosa’; ST ñioki; Tbr nyoka; Tr ne’ó-; Tr ne’oge/ne’oke/ne’ogí ‘word, language’; Yq nóoka ‘hablar’; Yq nóki ‘palabra’; My nóoka; Wc niuka; Cr niuka-ri ‘word, language’; Cr nyúukari ‘talk’. Ken Hill adds Hp nï’ok-ti ‘become benevolent, compassionate’. Also add Op niwa-t ‘word’ (Shaul 2007). [dipthongs > V; ’ > ø in Tep; NUA u : SUA o] [iddddua] [1n,2ww,3k,4h2] [SUA: Tep, TrC, CrC]

1148 Aramaic(J) tanni’ ‘relate, tell’; Syriac təna’ ‘tell, narrate’; Syriac tanni’ ‘tell, say’:
UACV-1877b ***tïni / *tïNV**: M88-tï17; KH/M06- tï17: TSh tïniŋwa ‘teach’; Kw tïniya ‘tell’; SP tïnnia ‘tell’; Tb tïŋgiinat ‘ask for’; Hp tïŋla’y-ta ‘ask for, hope, desire’; Pl teeneewa ‘speak against, criticize’. Add WMU tünníya-y / tünníye-y ‘tell (of story-teller)’; Kw tüniya; Ch tünía; and CU tüníyæy. NP tïïŋï ‘tell to’ may better belong here than with M88-tï18. Perhaps Sr täänön ‘speak to, say (something) to’. [1t,2nn] [NUA: Num, Hp, Tb; SUA: Azt]

1149 Hebrew impfv -diiʕ or more fully (yo/to/no)-diiʕ ‘inform, tell’ causative impfv of ydʕ ‘to know’, prfv hodaʕ- / hodiiʕ; yoodiiʕ ‘he says’, toodiiʕ ‘she says’, noodiiʕ ‘we say’; so the invariable stems are **-diiʕ / -daʕ**:
UACV-1878a ***tïwa / *ta(hV)wa** ‘say, advise’: My tééwa ‘dicen, cuotativo’; Yq téuwa ‘decir, hablar’; AYq tauhia ‘say to’; AYq tehwa ‘inform, show, tell, explain’; Pl ilwia ‘say, tell’ (also at *tu’i below).
UACV-1878b ***(i’)tawa** ‘tell’: CN i’tawa ‘tell’; CN i’toaa ‘speak up’; CN tla’toaa ‘speak’; Mn itawa ‘tell, inform, instruct’; NP yatua ‘talk’; NT áá táágai ‘platicar’. [1y,2d,3’2] [SUA: TrC, Tep, Azt; NUA: Num]

1150 Hebrew impfv -diiʕ in (yo/to/no)-diiʕ ‘inform, tell’ causative of ydʕ ‘to know’, perfv hodaʕ- / hodiiʕ; Aramaic iidaʕ / yədaʕ; UA *tïwi shows only 2nd and 3rd Cs, as -diiʕ / -daʕ, the prominent ones of the stem:
UACV-1275 ***tïwi** ‘learn’: Hp tïwi / tïwi’-ta ‘gain practical knowledge, learn, become familiar with, experience’; NT tïïgídyi ‘enseñar [teach], entregar [hand over]’. The two match through four segments *tïwi. In light of occasional ’/w alignments, note Yq ta’a ‘learn, know’, perhaps of Sem-kw. CN itawi ‘be talked about, acquire renown’; CN itoa ‘say s.th.’ [1y,2d,3’2] [SUA: Tep, TrC; NUA: Hp]

1151 Syriac pakken ‘to jaw, gabble’; Syriac **etpakkan** ‘be insolent, abuse, gabble’; Syriac(S) pakkaanaa ‘garrulous, gossipy’; Syriac(S) pakken ‘speak much, chatter’; note Tb shows -n-, the 3rd consonant:
UACV-1879 ***aNpaka-y** ‘talk’: Kw ’abigi ‘talk’; Kw nipaka ‘talk to’; Ch ampága- ‘talk/speak’; SP ampa-ġa-; WMU appáġa-y ‘speak, talk’; CU ’apáĝay ‘talk, speak’; Tb pahkaanï~pahkaan ‘to speak’; Tb(H) pahkannit, pfv appahkann ‘to speak, speak Tubatulabl’. Note that Tb has the 3rd C. [V assim in Kw] [1p,2kk,3n] [NUA: SNum, Tb]

1152 Aramaic šgḫ ‘to look, to care for, mind’:
UACV-1911 ***(i)soko** ‘look’: Hp(S) soh ‘look here!’ and Wr isógo ‘look!’ [1s1,2g,3h2] [NUA: Hp; SUA: TrC]

1153 Aramaic(CAL) ’bhl / ’bhwl ‘fruit or seed of mtn cypress’
UACV-1921 ***paha(i)** ‘seed’: Sh(C) pahai / pahe /pehe ‘seed’; Sh paihai ‘seed, pit’; TSh pehe(cci) ‘seed, pit’; Cm pehe ‘seed’. [1’,2b,3h,4l] [NUA: CNum]

1154 Hebrew ksy ‘cover’; Hebrew kissaa / kissii- ‘cover’
UACV-1923 ***kis** / ***kiCsi** ‘shade’: Hp kihsi/kìisi ‘shade, field hut, s.th. that makes shade’; Ca kís-iš ‘shade’; Cp kísi-š ‘shade’; Cp kísiyka ‘to the shade’. What of the -kayc of Ktn tïkwakayc ‘shade house, where people live in summer’. [1k,2s3,3y] [iddddua] [NUA: Tak, Hp]

1155 Arabic hazza ‘to shake (s.th.), swing, brandish, wave, rock’; as UA *-c- > -y- in NUA, these align:
UACV-1925 ***hïya** ‘rock, shake, swing’: M88-hï9; KH.NUA; KH/M06-hï9: Gb hoyó’o ‘manéalo [shake it]’; Sr hïïyï’ ‘shake s.th.’; Ktn hïyïk ‘swing, v’; Ls hóóya/i ‘rock (as rocking chair)vi, blow (of wind), vt’. [1h,2zz] [NUA: Tak]

1156 Hebrew ḫrk ‘set in motion’ (BDB); Arabic ḫrk / ḫaruka ‘move, be agitated’; Arabic ḫrk II, ḫarraka ‘to move, set in motion, stir’:
UACV-1926 ***huyuka** ‘move’: M67-296: Hp hoyo(k-) ‘move, change position, grow (taller)’, pl: hoyokya; Tb ’ooyoogat ~ ’ooyook ‘he is moving’; Tb(H) ’ooyookat ‘to move, vi’, pfv ’ooyook; TO ulugï / ulugid ‘to rock (a baby or s.th.)’. Hp o < *u; and Tb shows 3rd C k- clearly and probably lowered u > o due to a.

1157 Syriac haakeel ‘now’:

UACV-2352b ***aï-pi** 'now': Sapir; M88-ï19 (one item); KH/M06-ï19: Kw ’ïïvi ‘now, today, be new’; Ch áï-vi 'today, now'; SP aï-vi 'now'; WMU aa-v / aavuru ‘now, today, adv’; CU ’áa-vï 'now’. Add Wr(MM) ehé ‘ahorita [right now]’; Wr(MM) ehe-pá ‘ahorita’; the latter aligns with Tepiman *ïïpa, as Wr intervocalic -h- would disappear > ø in Tepiman; thus, TrC ehepa = Tep ïïpï is a good correspondence. The shortness of 2 vowels makes this a weaker claim, though initial h- and final -l are easily lost, and medial -k- > -h-/-ø- is common, and the two vowels are exactly as expected after loss of the easily lost consonants, so it is a good match.
UACV-2352c ***(h)ï(C)pï** 'also, more, again, now': B.Tep335 *’ïpï 'also'; M88-ï5 'now'; KH/M06ï5: Tb ’ïmbï 'more, again'; TO ïïp 'again, also, more'; UP ’ïïpï; LP ’ïïp; NT ïpï; ST ’ïp; Wr ehpío 'now'; Tr hí-pe 'now’. Add Hp pï’ 'today, now’. [1h,2k,3l] [NUA: SNum, Hp, Tb, Tak; SUA: Tep, TrC, Azt]

1158 Hebrew yoošbim ‘sit, pl’; this is of Sem-kw with clustered b > kw, and note that both the Semitic and the UA are plural forms:

UACV-2009 ***yukkwi** ‘sit, pl’: I.Num297 *yïkwi/*yïhkwi (dur.) sit, pl.; M88-yï8; KH/M06- yï8: Mn yïkwi ‘sit, pl. subj, vi’; NP yïïkwi ‘sit, pl’; TSh yïkwi ‘sit, pl’; Sh yïkwiC ‘sit, pl’; Cm yïkwi ‘sit down, pl’; Kw yugwi ‘live, sit, stay, pl’; SP yukwi ‘sit, pl’; Ch yïwí ‘sit, pl’; CU yukwi ‘be sitting, sit’. SNum shows u, while CNum and WNum show ï; one could go with the majority, except that the vowel change *u > ï is so common in Num, that *yukkwi is a better choice. [*-kkw- > -w- in Ch] [1y,2s1,3b] [NUA: Num]

1159 Hebrew ṭbl ‘dip s.th. into’ (quttal: ṭubbal), less likely ṭbʕ sink down (quttal or hoqtal f. pfv)

UACV-1993 ***cuppa** ‘sink, submerge, dip’: Mn cupa ‘sink into’; NP copa (< *coppa) ‘sink, v’; NP patacopa (< *pattacoppa) ‘sink (island or boat), v’; Ca čúpi ‘dip in water, vi’; Ca čúpi-n ‘dip, soak, dye, vt’; Ca čúpaq ‘stick in (mud, body)’. [u/o] [p-1t2,2b,3l] [NUA: Num, Tak; SUA: Tep]

UACV-1995 ***(ho-)top** ‘sink’: L.Son23 *oto ‘atascarse’; M88-’o21; KH/M06-’o21: Eu hotóe- ‘haber lodo, atascar’; Op oto-wa; Tr tobu ‘encajar, hundir’; Tr toba ‘hundirse en el lodo’. Add Yq rópte ‘sumirse en el agua’; My rópte ‘se sumergió’; AYq ropte ‘sink, submerge, drown’. If *t > c preceding a high vowel, is *cuppa above related? [1t2,2b,3l] [SUA: TrC]

1160 Hebrew ynq ‘to suck’, impfv: yiinaq; Syriac(S) **yaanq-aa** ‘nursing child-the’; the q is anticipated:

UACV-2048 ***yï’na** ‘smoke tobacco, smoke by sucking’: Sapir; B.Tep34 *dïïnïi-i ‘to smoke’; M67-394 *yena ‘smoke tobacco’; L.Son357 *yïna ‘fumar’; M88-yï3 ‘smoke tobacco’; KH/M06- yï3: Yq yena ‘to smoke cigar, etc’; My yena; TO jïïni; UP dïïñï; LP dïïñ; NT dïïñyi; ST dïïn; Wr ye’ni; Cr ra-yáahna ‘he is smoking’; Wc yená ‘fumar’. To these, add Eu déina ‘chupar tabaco’ and Sapir’s inclusion of Simeon’s entry: CN ye-tl ‘humo odorífero, perfume, tabaco, planta medicinal ...’; Nv dïnnï / dïdïna ‘chupar piciete’. [1y,2n,3q] [SUA: Tep, TrC, CrC, Azt]

1161 Hebrew qippaa’oon ‘sharp frost’ (< qp’ ‘to congeal, become rigid’)

UACV-2074 ***kïpa** 'snow, ice': B.Tep135 *kïvai 'ice, snow' (LP gïwï); M67-400 *kepa 'snow'; L.Son83 *kïpa 'nieve'; M88-kï1 'snow'; KH/M06-kï1: Tr gepá/kepá-(mea) n-(v); Wr kepá; v: keba-ní; Tbr kewá-t; v: kewá; Wc ’ïïví 'snow, ice' (lost initial k-); TO gïw; UP gïwï; Nv kïba; PYp keva; NT kïvai; ST kïv ‘ice’. Note the voiced g in both TO and Tr, rather than voiceless k as in other languages. A ST form also shows the voiced variant: ST gïvka’ 'freeze (animate subj) vs. ST kïvaiña’ ‘freeze (plants)’. [1q,2p,3’] [SUA: Tep, TrC, CrC]

1162 Hebrew ʕaṭiišaa ‘sneeze, n.f.’; Middle Hebrew and Aramaic(J) ʕṭš ‘to sneeze’;
Arabic ʕaṭasa, -ʕṭisu / -ʕṭusu ‘to sneeze’; the UA form derives from the noun ʕaṭiišaa or ha-ʕ^{a}ṭiišaa:

Mn	hakwïsa’i	Hp	ahsi; nïha	Eu	hačíswa
NP	akwisa’i; sidï’hu	Tb	(’a)hattišah(at)	Tbr	--
TSh	ukkwisai	Sr	ha’tisk	AYq	ha’ačihte
Sh	akkwihsiC	Ca	há’tis	My	he’ečihte
Cm	aakwïsitï; ca’akusitï	Ls	hatíís(a)	Wr	a’túsa-ni
Kw	ha’wiši	Cp	atíse	Tr	atíso(wa); atisi
Ch	haw’isi	TO	bisčk	Cr	he’eciupua
SP	a’ŋwïšši	Nv	vistku	Wc	--
WMU	wi’ísiu, wi’ísio	PYp	bisca		
CU	--	NT	bíštïïkyi	CN	eukšoaa; i’kwišoaa;
		ST	biščkia		iukšoaa

UACV-2071a ***ha’t(w)isa (> *ha’(N)kwisa)** 'sneeze, vi': M67-396 *hatis 'sneeze'; L.Son54 *hatisa 'estornudar'; KH.NUA; M88-ha5 'to sneeze'; KH/M06-ha5: Tb ha’dišt 'sneeze, n. (cognate? Miller queries; definitely, yes); Cp; Ca; Ls; Sr; Eu; Tbr. Ken Hill adds Gb hačeú’ax 'he is sneezing’. Add Ktn ha’ci’hïk ‘sneeze, vi’. Miller includes Pl

ahkweečiwi 'sneeze' with a question mark. I say likely, as -'t- or other clusters of -Ct- > -kw- as AMR (1991d, 1993a) brilliantly demonstrated for *tw > kw. But for clarity, I separate below. Add Cah (AYq, My) *ha'acih-te (< *ha'atis-tï); for UA *s > My h as initial C in a cluster, cf. sneeze and sit. probably Hp àasi 'sneeze'; Hp(S) ahsi 'sneeze'. The Num forms at M88-ha5 show a different medial consonant, agreeing with Tep b and CN kw in contrast to TrC with -c- < *-Ct-. [*-'t- > -c-]
UACV-2071b ***ha'kwisa'i** 'sneeze': Mn; NP; TSh; Sh; Cm; Kw; Ch; SP; CN i'kwišoaa. WMU wi'ísiu, wi'ísio lost the first syllable and shows a nasal like SP does.
UACV-2071c ***kwic**... 'sneeze': TO; Nv; PYp; NT; ST. Tep b < kw [kw1'2,2t2,3s1]
[NUA: Tb, Tak, Num, Hp; SUA: TrC, CrC, Tep, Azt]

1163 Syriac qəpa' 'collect, gather in heaps, congeal, **swim on the surface**'; western variant is qap (qpp); Mandaic Aramaic qəpa 'swim, **float** on the surface, assemble in a bunch'; Aramaic(CAL) qpy 'to coagulate, to **float**'; Aramaic(CAL) qpy' / qpee / qipy-aa 'floating stuff, n.m.':
UA *qoppV 'mark/stripe, float': Ca qípi / qíipi 'be marked (of line), **float** (as fish, bird)'; Cp qípe 'be striped'. The preceding are solid, but less secure are forms which cluster -p'- > -w-, like Hebrew pl: qaap'uu, or fem pfv: qap'a may underlie Tak *qawa: Syriac etqattal form means 'be dispersed as a cloud' and note Ls qawa 'clear of weather' (< *qap'a)?

The next two show the cluster -ɬr- > -'w- as r > ' in a cluster and then glottal stops are often anticipated: *-ɬr- > -w'- > -'w-.

1164 Arabic ṣḥr XI 'dry up, become yellow'; at 2606b is CN -sawiya, a good reflection of the three consonants, while the liquid appears in 2606a:
UACV-2606a ***sawari / *sa'wa** 'yellow': M67-478 *sawa; L.Son234 *sawa; M88-sa5; KH/M03-sa5: Wr sa'watό-ni; Wr sa'wamúriwa-ni; Tr sawaróame; My sawali/sawari; Yq sawái 'yellow'; Eu sávei / sábe / sáwe. Could these tie to Num *sa(k)wa 'green' as Wr sa'wa- may suggest?
UACV-2606b ***kosawa / *kosawiya** 'yellow': CN kosawiya 'to turn yellow'; CN kostik 's.th. yellow'; and perhaps Tbr kísara-ka-r 'amarillo' and Yq huusái. These TrC (a) and Azt (b) forms are likely related, for CN ko-, as a prefix, precedes other color terms, and the two sets otherwise match well. In fact, except for an initial k and a metathesis (s-w vs. w-s), Ch owásia-ka 'yellow' and CN kosawiya 'turn yellow' have much in common—(k)osawi(y)a and owasi(y)a—seven segments, no less. If an archaic compound does underlie their substantial sequence of similarities, then the TrC *sa'wa forms, the Num *ohaC forms, and CN kosawiya and Tbr kísara-ka-r may all be related. [p1s4,p2h2,p3r] [NUA: Num; SUA: TrWr, Cah, Opn, Azt]

1165 Arabic **baɬr-** 'sea, large river', that is, water vs. land; Arabic baɬra(t) 'pond, pool';
UACV-2497 ***pa / *pa'wi** 'water': Sapir; VVH123 *pa 'water'; M67-455a *pa 'water', *pa-cak 'wet'; I.Num127 *paa / *pa- (pref) 'water'; BH.Cup *pa 'drink', *pala 'water'; L.Son180 *pa; M88-pa7 'water'; B.Tep252 *vaagi 'wet'; Munro.Cup *páá-la; KH/M06-pa7: A pan-UA etymon; NP baa'a; Ca pá-l; -paw'a (poss'd); AYq vaa'am 'water'; AYq vaawe 'ocean'; Yq báa'a; My baá'a(m); Ls páa-la; Wr pa'wí; Tr ba'wi / ba'we / ba'; My báa'a; Tr ba'wí 'agua, jugo, caldo, líquido'; Wr pa'wí; Hp paahï; Gb par; Sr paaţ; Ktn pa-č; cf. also M88-pa8 'ocean': Wr pa'wé 'mar'; My báawe 'mar'. We might wonder about scarce rounding for the pharyngeal. First, a common word like 'water' said frequently could be established as initial CV / pa early on; second, some languages do show pharyngeal effect: Sr paa^{r}van 'wet, add water to, thin (e.g. soup) by adding water' is a compound *paa-pan and interestingly exhibits the raised r, meaning pharyngeal/retroflex, which Ken Hill (2011) says reflects rounding, which reflects the pharyngeal of Semitic baɬr. Other Sr compounds also do so. Note also the -hï of Hopi paahï, which -hï is thought to be a rare absolutive suffix, but could it simply be what is often dropped, as paahï < *baɬr? Note also the Ca possessed form -paw'a and Kw po'o. Note also Numic *paNkicu 'fish' (*kicu 'fish') whose water morpheme shows nasalization, which both the pharyngeal and the nasal would reflect in Numic (366) and Ls. Additional forms: Mn páya; payawi 'be water'; TSh paa(cci); Sh paa; Cm paa/pai; Kw pa, paa-po'o, po'o 'water, spring'; Ch páa; SP paa; WMU paa; CU páa; Tb paa-l; Cp pál; paw; Sr paaţ; Eu bat/báat; Tbr va-tá / ba-tá / wó-ta; TO wa'ig 'get water'; Nv vaigi 'traer agua'; Nv vagi murha 'fetch water'; PYp va'igim 'get water'; NT váígïi 'fetch water'; ST vaiñdya/vaigiñ 'get water for s.o.'; vai'gia' 'get water'; Cr hah; Wc háa; CN aa-tl. Though the Tepiman word for water (*sudagi < *cuyawi) is different than most of UA (*pa), note that reflexes for UA *pa are found in Tep forms of 'fetch water' (Bascom: *va'igïi), 'wet', and 'wash'. Several forms suggest rounding late in the word (Kw, Ca, Cp, Tr, Wr, which Miller and Hill put in a separate set M88 and KH/M08-pa8) and many show a glottal stop (NP, Kw, PYp, Yq, My, Wr, Tr) in three branches, no less; and some show both glottal stop and rounding (Kw, Ca, Tr, Wr). Some languages show w in the possessed forms of 'water': Ca -paw'a; Cp -paw; Ls -paaw; and a couple of them with -n: Gb -panen (par) 'water'; Tb -paan (paal) 'water'. Some Uto-Aztecanists consider TrC -wV a separate morpheme, perhaps *-wï 'big'. [*p > ø in CN] [p1b,2h2,3r] [NUA: Num, Hp, Tb,Tak; SUA: Tep, TrC, CrC, Azt]

Some explanatory discussion may be helpful for the next item. Semitic peoples generally established their cardinal directions by facing east, toward the rising sun, such that 'forward' is 'east', and 'right' is 'south' (e.g., Yemen is in the south of Saudi Arabia from Semitic ymn 'right'), and 'left' is 'north'; in contrast, the Egyptians faced south, toward their life source the head of the Nile River; so 'front' was 'south', and 'left' was 'east', and 'right' was 'west'; in fact, Egyptian uses the same root *imn* for right, but in Egyptian it means 'west' as we see at 466 (Egyptian t'-imnti 'the west'; Egyptian imntiw 'the west-people' > Sr tïmïnïmnu'ţ 'one(s) from the west'); the next item is from Semitic and from the word for 'forward/east':

1166 Hebrew qɛdɛm / qedɛm 'in front, east'; Hebrew qidmaa '(toward the) east of':
UACV-2102 ***kitam** 'south, east': BH.Cup *kicam 'south'; HH.Cup *kīčam 'south'; M88-ki6 'south'; KH/M06-ki6: Ktn kítamik 'toward the east'; Cp kičám; Ca kíčam-ka 'southward'; Ls kíča-mi-k, kíča-nuk 'southward'; Gb kitáme(k) 'south'. Sem-p with i between q and d, as d > l in neck if Sem-p. [*-t- > -c-] [1q,2d,3m] [NUA: Tak]

1167 Aramaic(S) **pəraḫ** 'to fly, depart, flutter'; Aramaic(J)) pəraḫ 'to bloom, move swiftly, fly, swim, run'; Syriac(S) pəraḫ 'to fly, spread'; Syriac(P) pəraḫ 'to fly, flee, float, crawl, spread (as sore, rumor)'; Aramaic(J) pəraḫ 'flower, n.m.'; Arabic and Akkadian prx; Hebrew pɛraḫ 'blossom, n.m.':
UACV-864 ***pïyaw** 'feather, to fly': Hp pïïyaw/pïïyal- 'fly, v' and the -wiđag portion of TO mačwiđag 'wing feather, ritual feather' show 4 of 5 segments agreeing with *pïyaw, only a slight discrepancy in the one vowel (i/ï). PYp vereg 'buzz, drone, v' also belongs, though the 2nd V assimilated to the first.
CN i'wi-tl 'feather, down', poss'ed forms: i'wiu' / i'wiyoo 'feather, down' with loss of *p: *pïyawi > *ïyawi (loss of Azt p) > i'wi. Sem-kw in *x/ḫ > w (not k) and -r- > -y-. [p:1p,2r,3h2] [NUA: Hp; SUA: Tep, Azt]

1168 Aramaic(J) pətaa'aa 'width; wide, open place'; Aramaic(J) pətaawaa 'enlargement, open place'; Syriac pəta' 'be enlarged, increased, wide, broad'; Syriac patwaa 'largeness':
UACV-205 ***patawa** 'wide': CL.Azt192 patla(awa)-k 'wide': CN patlaawak 'wide'; CN patlaawa 'widen'; Po patek; T patlowak; Z pataawak; Pl pataawak. Consider also Tb piišwabïïl 'enormous' with a hyper-palatalization. See 812 for another item from this root. [p:1p,2t,3'] [SUA: Azt; NUA: Tb]

1169 Hebrew ptḫ / paataḫ 'to open, open up'; Arabic fataḫa (< *ptḫ) 'to open'; Aramaic pətaḫ 'open':
UACV-1578 ***pïtïwa** 'open, uncover': Stubbs2003-29: Tb peleew~'epeleeu 'open it up'; Hp pïrï-k-na 'unfold, open up, unwrap, vt'; Eu périna 'abrir (la mano or un libro)'; CN petlaawa 'disrobe, undress, uncover, polish s.th.'; Pl peelua 'abrir, vt'; Pl ta-pelua 'abrir, vt'. [1p,2t,3h2] [NUA: Tb, Hp; SUA: TrC, Azt]

1170 Hebrew ha-ruuḫ 'spirit'; Arabic riiḫ 'wind, smell, odor'; Arabic ruuḫ 'soul, spirit':
UACV-2117 ***arewa** 'spirit': Tr arewá 'alma [spirit, soul]'; Wr arewá 'spirit, soul'. [1r,2y,3h2] [SUA: TrC]

1171 Hebrew roq 'spittle'; Aramaic(S) rqq 'to spit'; Aramaic(J) rwq / rqq 'spit, v'; Aramaic(J) ruqq-aa 'spittle-the'; Syriac raq, impfv: -ruuq 'to spit, v'; Syriac rauq-aa 'saliva, spittle-the'; Hebrew raqqa b-, impfv: yiroq b- 'spit on':
UACV-2122a ***cukV** 'spit, v': Ca čú'an; Ls čúxi; Cp čúxe; Ktn tohvïk / toqovïk / tohəvək 'spit on/up, vt'. Of the three Ktn forms, the 2nd shows 2nd C as *-k-, which lenited to -h- in the others. In Ls/Cp, *-k- (> -x-).

1172 Hebrew gəbuuraa 'strength'; Aramaic(S) gbr 'prevail, excel, be strong'; Aramaic(S) gubar 'man'; Arabic *gbr, ta-gabbara 'to show oneself strong or powerful'; Syriac gabbar 'to strengthen, embolden'; Tepiman g must generally be reconstructed as PUA *w, but other instances of g not devoicing to k in Tep allows the definite possibility that Tepiman *guvuka 'strong/strength' is from Semiti gbr 'be strong' or more specifically Hebrew gəbuuraa 'strength' (later gəvuuraa) > Tepiman *guvu-ka with the UA *-ka 'have' suffix, as in having strength, with only the loss of r in a cluster, which is usual;
UACV-2215 *wupuka or ***gupu**-ka 'strong, strength': B.Tep49 *guvuka 'strength'; M88-wu2; KH/M06-wu2: TO gïvk 'stiff, strong, hard'; NT guvúka; ST -guvuuk. Add PYp gevek 'be strong, stand upright'; PYp gevkam 'forcefully, adv'; LP(EF) ge'wek 'fuerte'. Would the vowel ï (*gïvïka) better fit the forms, since both e/ï and u appear in Tepiman forms? [1g,2b,3r] [SUA: Tep]

1173 Three related stems in many Semitic languages such as Aramaic mwṣ / mṣṣ / mṣy: Aramaic **mwṣ** 'suck'; Aramaic mṣṣ 'suck, drain, wring, press'; Hebrew mṣṣ, impfv: yi-**moṣṣ** 'slurp, lap':
UACV-2223 ***mos** 'suck': BH.Cup *mé 'suck'; M88-mo10; KH/M06-mo10: Cp míse 'suck (of baby)'; Ca míš 'to chew'; Ls méeči 'chew to extract juice'. [p1m,p2w,p3s4] [NUA: Tak]

1174 Hebrew ni-qtal impfv: yinnapeš ‘breathe freely, recover’; niqtal infinitive: **hinnapeš**:
UA *hiapsi ‘breathe, rest, live, heart’: My híabite 'breathe, rest’; My hiapsi 'heart'; My hiapsa 'alive’;
Yq híapsa 'vivir [live]’; Yq híapsi 'corazón [heart]’; Yq híabihte 'respirar [breathe]’; AYq hiapsi 'heart, soul, spirit'; AYq hiavihte 'breathe'; AYq hiapsa 'live’. Yq and My align with the niqtal infinitive hinnapeš with loss of intervocalic -nn-. [kw1h,2n,3p,4s1] [NUA: Hp, Tb, Tak; SUA: TrC, Tep, Azt]

1175 Hebrew gml, impfv **-gmol** ‘to complete, ripen, wean’:
UACV-1815 ***mo(y)** ‘ripen’: AYq momoi ‘ripe, mature’; ST moomta ‘ripen’ (of potatoes);
ST humtmoidyak ‘toward end of the month’. 1g,2m,3r [SUA: Tep, TrC]

1176 Hebrew nṣr ‘keep watch, watch over’; Arabic nẓr ‘look at, pay attention, take care of, look after’; Assyrian naṣaru ‘watch over, protect, keep’:
Tarahumara nesé- ‘pastorear, cuidar animales/personas [herd, watch over, care for (animals/children)]’;
Tarahumara nesé-ro- ‘pastorear, cuidar vivientes [herd, watch, guard living things]’;
Tarahumara nese-rí ‘pastor, pastora [pastor, herder, guardian]’. Perhaps Brambila rightly figured his morpheme boundaries, though nesero and neseri may be significant. [1n,2s4,3r]

In addition to three others (796-798), below are three more sets deriving from Semitic ’kl ‘eat’:

1177 Arabic ’kl / ’akala ‘eat, eat away, corrode’; Hebrew ’kl / ’aakal ‘eat, feed, savour, have sense of taste, enjoy love’; Semitic ’kl ‘eat’ is a common verb in most Semitic languages, and exhibits here the infinitive ’əkol, and a semantic shift from ‘eat, enjoy’ to ‘desire’:
UACV-2472 ***ukol** 'want': My ukule ‘lo deséa, lo apetece’; Yq’ukkule ‘desear’; AYq ukkule ‘desire’;
CN iikool-tiaa ‘long for, desire’; CN iikool-li ‘s.th. desired’; Wc -ku ‘querer’; and maybe Ca ’í’iklu ‘want, be fond of’. Wc and CN both agree with a vowel of o following k (*ukol), and Wc lacks the initial vowel. [o/u, Ca k/q] [NUA: Num, Tak; SUA: TrC, CrC, Azt]

1178 Arabic ’kl / ’akala ‘eat, eat away, corrode’; the worms and moths as eaters is an occasional semantic shift, as in Syriac ’akl-aa ‘weevil’ literally ‘eater-the’:
UACV-334 ***akal** ‘moth, butterfly’: Nv agari 'polilla [moth]'; Wr akároari 'butterfly’. Four segments (agar / akar) largely agree, perhaps with intervocalic voicing, unless Wr be a loan from a Tep language. Tbr hata-ká-r ‘mariposa’ is likely relevant. [k/g] [SUA: Tep, TrC]

1179 Hebrew ’kl ‘eat’; Syriac ’akl-aa ‘weevil’ literally ‘eater-the’:
UACV-2594 ***pi’akïC** ‘caterpillar, worm’: Fowler83: Mn piyagï 'caterpillar'; NP piaga 'bull pine caterpillar'; TSh piakïn 'caterpillar'; Sh piaken 'caterpillar'; Hp pi’akï 'caterpillar'; Tb pi’aagïn-t ‘worm’; Ca píyaxa-t 'rainbow, worm with two horns’. Jane Hill (p.c.) noticed that SP pi’aġu ‘centipede’ belongs as well. Both *-’akï and CN okwilin (< *okil) 'worm, caterpillar, wild animal’ and CN naka-okwil-in 'maggot, lit: flesh-devourer’? Both Tb and Ca suggest a final consonant, and Azt has final -l. [kw1’,kw2k,kw3l] [NUA: Num, Hp, Tb, Tak]

1180 Aramaic gabr-aa ‘man, husband, great man’, pl: gabriin (bilabials lost as 1st C in cluster *-br- > -r-):
UACV-1422 *kïri/*kïli ‘male, old man’: B.Tep221 *kïïrii ‘male, old man’; KH/M06-kï6: TO kïli ‘mature man, elder, old man, husband’; NT kïïli ‘male, old man’; ST kilyi (pl: kïkïïly) ‘male, old man’. [1g,2b,3r] [SUA: Tep]

1181 Hebrew šmr ‘keep (commandments), watch over, have charge of, restrain (within bounds)’
UACV-2287 ***summay** ‘remember, think about’: Ch sumái ‘remember’; SP šummay ‘have in mind, think of, remember’; NP suma’yï ‘remember’; CU suməy-(’ni) ‘think of’ (but CU məy-kə-ni ‘think, believe’ and Ch məi-ni ‘think’); Mn tïsumiya ‘ponder, think about’. At M88-su15 'know’, Miller has CNum/ TSh/Sh sumpanai 'know' and at M88-su13 'heart' he has the many *sula forms and CU sumay; however, six Num languages have intervocalic -m-, not -n-/ -l- . [1s1,2m,3r] [NUA: WNum, SNum]

1182 Arabic ʕiḍḍ ‘small prickly shrubs, brambles’; sg. Arabic ʕiḍḍat would be a single prickly s.th.’; and pl ʕiḍḍaat; OSArabic ʕḍ ‘wood’; Arabic ʕiḍaah ‘fair-sized thorny shrubs’; Hebrew ʕeṣaa ‘wood’:
UACV-2296 ***wicaC (AMR) / *wiCcaC** ‘thorn, awl’: Sapir; M67-14 *wi 'awl'; L.Son332 *wica 'espina, aguja'; CL.Azt167 *wic ‘thorn’, 202 **wi ‘awl’; M88-wi5 'awl': KH.NUA; KH/M06-wi5 *wicaC (after AMR): Mn wíti ‘awl’;
NP wïccï ‘awl’; Kw wiya-ci ‘awl’; CU wiyú-ci ‘awl, large needle’; Cp íwye-l ‘spine, thorn’; Ca wíya-l 'pencil cactus'; Ca ’íwya-l 'thorn, sticker'; Ls wíyáá-la 'quartz crystal'; Sr wihaaţ 'thorn, needle'; Ktn wiha-č ‘cholla cactus’; Eu wecát; Wr wehcá 'needle, thorn'; Tr we’cá / wi’cá ‘needle, thorn’; Tr wičá*ka 'type of

bush'; Yq wíča; AYq wičakame ‘thistle’; My wiča; CN wic-tli ‘thorn, spine’. Add SP wii 'awl' and Sapir himself also compares SP wii”/wii-ci ‘knife’; in fact, NUA (SNum, Tak) *wiya- and TrC *wica align well. However, Tak *’ïvi does not equate to Tak *wiya. Manaster-Ramer includes this set in his article "A Northern UA sound law: *-c- > -y-" listing My wicca and other forms above to demonstrate NUA *wiya < PUA *wica. Sapir ties these above with Tep *gisu 'cactus sp.' (< *wicu) and CU wiyú-ci agrees, i.e., has the same vowels. Note Ca wíyal 'pencil cactus' and Ca ’íwya-l 'thorn, sticker’, the latter showing a pattern of CVCV > VCCV, like CN sometimes does. UACV-2296 reflects a possible sg while the vowels of UACV-359 reflect the pl of the same. [NUA: Num, Tak; SUA: Tep, TrC, Azt]

UACV-359 ***wicu** 'prickly pear cactus’: ST gisuly; TO gisoki ‘the purple-fruited prickly pear cactus or its fruit, Opuntia’; the vowels of CU wiyú-ci ‘awl, large needle’ agree with Tep and Hebrew pl -oot. [1’2,2s4s4]

1183 Syriac mḫy / məḫa’ ‘to strike, smite, wound, and wound (with an arrow)’

UACV-2314 ***mu’a/i** / ***mu(k/h)V** ‘shoot (arrow)’: M67- 373 *mu 'shoot'; BH.Cup *muh-’ 'shoot'; L.Son152 *mu ‘flechar’; M88-mu5 'shoot'; KH.NUA; KH/M06-mu5: Tb(M) muu’at / ’umuu’at ~ ’uumuu’ ‘shoot’; Tb muu’išt 'gun, shooter, hill'; Tb(V) ’uumu’~’uumuu’ 'shoot'; Ls mu’án 'shoot with a bow'; Cp muha / muháán / mumhane / múxane 'shoot with a bow'; Ca múx/múh/mú 'shoot'; Gb muhú 'tirar'; Sr mu|i 'shoot'; Sr muum 'shoot (more than once)'; Ktn mu ‘shoot, throw, grind’; Hp mï’a 'shoot, sting, fasten (by piercing)'; TO mummu 'shoot at'; Eu mumú 'flechar, tirar con flecha'; Wr muhíba 'tirarle con arma'; Cr ra-a-tá-mwii 'he shot it with an arrow'. Add Tr muhubu ‘tirarle a algo (proyectil)’; Tr u’mu ‘asaetear, flechar, tirar a algo’; Tr ohi-mea ‘acertar, atinar’; Yq múuhe ‘flechar’; My muhhe ‘shoot’; Nv mu’u ‘flechar’; PYp muuhu ‘shoot, vt’. Perhaps Aztecan CN mii-tl 'arrow'; CN miina 'shoot arrows, pierce with arrows; Pl miima 'shoot with an arrow' (miin-ki pret.); Pl mii-t 'bow and arrow’. [k/x/h/’ ?] 1m,2h2,3’ [NUA: Tb, Tak, Hp; SUA: Tep, TrC, CrC, Azt]

1184 Syriac(P) qaššet ‘shoot an arrow with a bow’; Hebrew (Aramaic loanword) qošɛṭ ‘archery’; Perhaps denominative verb of qešt-aa ‘bow’:

UACV-2321 ***kwaCti** 'shoot': I.Num77 *kwahti/*kwïhti 'shoot'; M88-kwa10 'shoot'; KH/M06-kwa10: Mn kwati/qwati (<*kwatti) ‘to shoot’; NP kwati (<*kwatti); TSh kutti; Sh kwïttih; Cm kwïïhtikïrï ‘shoot’ (Miller kwïhti-). [*a > ï in CNum, but *a > a in WNum] 1q,2s1,3t [NUA:WNum, CNum]

1185 Syriac(P) qaššet ‘shoot an arrow with a bow’; Hebrew (Aramaic loanword) qošɛṭ ‘archery’; like the denominative verb above of qešt-aa ‘bow’, this may be a reduplication of that:

UACV-2322 ***kuCkwiC / *kukkwiC** ‘shoot’: Kw kukwi; CU kukwi/kúukwi (<*kukkwi). As Miller and Hill have in kwa10, these SNum forms may well tie to *kwaCti of CNum and WNum, though the first vowel and medial consonants are different, perhaps explainable with kw-reduction (*kwaC-kwaC > *kuCkwiC) for the vowel change, and/or reduplication (*kwiC-kwiC > *kukkwiC). The SNum forms are quite consistent among themselves in PSNum *kukkwiC ‘shoot, sting’. Add Ch kukwi 'shoot, sting’; SP quqqwíC- ‘shoot at’; WMU q*uh*qqwí ‘sting, shoot at’; WMU qúqqwi ‘shoot pl times’; WMU na-gúkkwi ‘fight, have war’ which all point to geminated medial *-kkw-, noting -k- instead of -g- in Kw, Ch, and CU. [NUA: SNum]

1186 Akkadian ṣamaadu ‘tie together, yoke’; Arabic ḍmd ‘bind (especially a wound)’; Hebrew ṣmd in quttal form: ṣummad ‘strapped on’: Aramaic(J) ṣəmad ‘join, attach, harness’:

UACV-2331a ***suma** 'tie': M88-su17; M67-439 *suma 'tie'; KH/M06-su17: Hp soma 'to tie s.th.'; Hp somi 'thing tied up'; My summa ‘amarrar’. Add Yq súma ‘atar, amarrar’; AYq suma ‘tie, vt’. Add Yq súma ‘atar, amarrar’; AYq suma ‘tie, vt’. [NUA: Hp; SUA: TrC]

1187 Aramaic l- ‘to/for’; Aramaic le ‘to/for him’:

UACV-2346 ***li** 'to, for': Sapir: Sapir suggests CN -li- / -lia 'to, for' and SP ŋkï 'to, for' (< *li-kï). [Azt; Num]

1188 Hebrew ygʕ ‘grow weary, labor, struggle’; Arabic waǧiʕa ‘have pain, suffer’; noun or f pfv: yagʕa:

UACV-2342. ***-yowa** 'suffer': CN tla’yoowa 'to suffer, to fast'; Nv dodoa ‘cansar’; Nv t’igi dodoa ‘padecer’. The -g- likely lost in a cluster: *yagʕa / ya’wa > yowa. [no *w > g in Tep ’] [1y,2g,3’2] [SUA: Tep, Azt]

1189 Hebrew ygʕ ‘grow weary, labor, struggle’; Akkadian eguu ‘to tire, be careless’; ‘be weary/tired’ is common to both Semitic and UA, and ‘weak/tired’ underlies ‘trembling, being dizzy’; noun or f pfv: yagʕa:

UACV-1932a ***yowa** ‘shake’: Yq yóa ‘temblar, sacudir’; My yoowa ‘temblar’; Wc yúa ‘shake, move, vi.’; Wc yúi-tïa ‘hacer moverse’. Yq and My *yo(w)a ‘shake’.

UACV-1932b ***yuyi / *yuwi** ‘shake, be weak, dizzy’: M88-yu25; KH.NUA; KH/M06-yu25: Ca yúyi ‘quiver (legs, etc. from weakness); Sr yuuyk ‘be/get dizzy’. Add SP yoi-ġa-N ‘flutter, shake rapidly’. These may relate to *yowa/i above, and perhaps to *-yu/yo(k) further above. [NUA: Tak, Num; SUA: TrC, CrC]

UACV-678 ***yuyi** ‘dizzy, weak, shaky’: KH.NUA: Ca yúyi ‘quiver (legs, e.g., as when climbing down a steep slope)’; Sr yuuyk ‘be/get dizzy’. Add Kw yuyuwe’i ‘faint, v’ as redupl of Kw yuwe’e ‘be not, absent’? These sets should have been combined in the UACV. [NUA: Tak]

1190 Syriac ’aykaa ‘where’:
UACV-2538b ***haka** ‘where’: Sapir: Sh hakka ‘where? somewhere’; TSh haka-pan/pa’an/ttuh ‘where’; Cm hakaapu ‘which way, where to’; Kw ha-ga ‘what? where?’; Ch hagá-va ‘locative’; SP aġa ‘what?’; WMU aġá-va ‘where?’; Wr ahká ‘where? someplace’; Wc hake ‘donde [where]’; Wc hakée-va/pai ‘adonde’. [1’,2k] [Num]

1191 Syriac ’atar ‘place’; Syriac ’atr-aa ‘place-the’; Syriac ’atar d- ‘place where, wherever, where’: Wc -tïré ‘lugar de [place of, place where]’; Tr číri ‘que? [what?]’; NT túídïïrï ‘en que parte?’

1192 Syriac **’aynaa** ‘who, what, m’; Syriac **’aydaa** ‘who? what? f’ (< ***’ayn-taa**); Syriac ’aynaa d- ‘he who’; Syriac ’aydaa d- ‘she who’; Syriac ’aynaa-w < *’aynaa-hu:
UACV-2525 *hayn-ta ‘what?’; I.Num39 *hii ‘what, who’; CL.Azt188 *tla- ‘what’ < 287 **hita; M88-in2; Munro.Cup136 *híí-ča 'what, something'; KH/M06-in2; KH/M06-ta50 *tahV (after AMR): Tb **haayn** ‘what’, acc: haaynt / **haaynta**; Hp hin ‘how, in some manner’; hin-ta ‘be some way’; Hp himï, acc. hìita ‘what’; Sr hiit, acc. hiiti ‘s.th., what’; Ls híí-ča, acc. hí-š, ‘what?’; Ls hík ‘how much?’; Ls híí-ŋay ‘why?’; Cp hi-š ‘what, s.th.’; Cp hinqax ‘how’; Ca híč'a / híče'a / híčaxa ‘what’; Tb haainda ‘what, nothing’; Eu hat/hit, gen. híte, acc: hitá ‘que [what]’; Tbr hatep-, haték-; Sr hiit; Ktn hit; Yq híta; My híta; CN tle ‘what’; Wr ihtá. The unusual Ca forms, as Munro states, may be derivatives of accusatives or other inflected forms. Given Sem-kw devoicing of glottal stop, these fit Syriac ’aynaa / **’aydaa** (< ***’ayn-taa**) very well, as Tb haayn is nearly identical. We also see accusative -ta clearly in Tb. Cupan *hiča instead of *hila means the t is clustered with another C (*-nt-), because a lone intervocalic *-t- > -l- in Cupan. The tendency of V > *i* before alveolar consonants in UA, and here, two such alveolar consonants, may explain the first vowel *i* in most forms, though *a* appears in one Mn and SP form, and in Tb, Tbr, and Eu. Note also Mn himaa ‘what’ (of people, things, living and non-living)’; Mn heeti(sa’) ‘what’ (on non-material objects, like ideas, words)’; CU ippïsappa ‘whatever’. The Numic languages more clearly isolate *hani / *hini ‘what’: Mn hani’í-tu ‘what kind?’; NP hii ‘what’; Sh hiin, acc. hina; WSh hiin, acc. hinni ‘what, s.th.’; Cm hina/hini; Kw hini; SP inni- ‘who? what?’; SP annia ‘what? (obj)’; CU iniisappa ‘whoever’. [NUA: Num, Tak, Tb, Hp; SUA: TrC, Azt]

1193 Hebrew haC- ‘the’; often UA languages have a prefixed a- that could be from Hebrew haC- ‘the’: Ls -wí’ ‘fat, grease, oil’ but noun/adj is Ls ’a-wí’ ‘fat, n and adj’; with UA *matta ‘tick’, Ls ’amáča ‘tick’ may have the same prefix; Ls ’a-wól-vu ‘adult, elder’ would be ‘he is grown-one’ in NE terms ’a-wól-vu (the-grown-he is). Hill also identifies a similar prefix in *a- ‘that’:
UACV-2671 ***a-** ‘that’: KH/M06-dm6: Hp a-/áá- (pl. aamï) ‘third person pronominal prefix’; Sr ama’ (acc. amai; pl. a:m) ‘that one, he, she, it’; Sr a- ‘third person sg. pronominal prefix’; Ktn ’ama’ ‘that (distal’. It seems that this is in Opata also? [NUA: Hp, Tak]

1194 Hebrew mšš ‘feel, grope’; Arabic mss / massa (perf pl: mass-u, impfv: ya-massu) ‘feel, handle, touch’; or Syriac mwš ‘touch, feel, grope’:
UACV-2377 ***masu** 'touch, feel': Wr imasú 'feel, probe (by feeling)'; Tr masu- ‘feel (with hands), look for (with hands)’ (Brambila supposes ma- ‘hand’). Perhaps Cp míse 'guard with hands’ (< *mosV). [1m,2s1] [NUA: Tak; SUA: TrC]

1195 Arabic qimma(t) ‘top, summit, peak’:
UACV-2368 ***kumisa** 'top, tuft, crest': L.Son105 *kumisa 'copete'; M88-ku24 'copete'; KH/M06-ku24: Eu kumísa 'plumero, plumaje, penacho'; Op kumi-to 'plumaje'; Tr kumisa/gumísa-ri 'copete, penacho, cresta’; Yq kumsa-kam; My kumsa-m 'cejas’. Sem-p *t > s ? [p1q,p2m,p3t] [SUA: TrC]

1196 Hebrew ngʕ / ti-ngaʕ ‘she/it touches’; Aramaic t-ngʕ :
Hp toŋo(k-) ‘come into contact with, touch, reach’ [kw 2g,3’2]

1197 Hebrew ʕaaqeeb ‘heel, hoof, footprint’:
UACV-2392 ***woki / *woku’i** ‘track, footprint’: M67-257b *wok 'leg'; L.Son348 *woki 'pie'; B.Tep47 *gookui-i 'track, footprint'; M88-wo3 'foot'; KH/M06-wo3: TO gooki 'footprint, track'; LP goki; NT goókui; My wókki-m ‘pie’; Tbr nyokí-r 'track, foot'; Tb wïgii’ït 'make tracks'; Tb wïgii-l 'tracks, trail’. Add Yq wóoki ‘pie, pata’; Yq wokte 'seek tracks’. NT ’ and Tb ’. [*o > ï in Tb; *w > ny in Tbr] [1’2,2q,3b] [NUA: Tb; SUA: Tep, TrC]

1198 Hebrew ʕqb ‘seize by the heel, betray, deceive’; Hebrew ʕaaqeeb ‘heel, hoof, footprint’; Hebrew participle *ʕooqeb ‘deceiver’ and in a Biblical context, the snake is the deceiver:
Hp lölöqaŋw ‘bullsnake, gopher snake’. For final -b > ŋw in Hp, see ‘heart’ (1312) and ‘near’ (1008). [iddddua]

1199 Hebrew ʕaaqeeb ‘heel, hoof, footprint’; Syriac ʕaqqeb, impfv: yə-ʕaqqeb ‘to track down’; leveling of vowels yə-ʕa… > yəwa > yï:
UACV-2393 ***yïki*** ‘make/follow tracks’: M88-yï4 ‘to make tracks’; KH/M06-yï4: TO jïïkc ‘look for tracks’; TO jïki ‘track’; Wr yehki 'hacer huellos’; Tr hiyé/(h)iwé/huwe 'observar, espiar, huellear'; Tr iyé-to 'seguir la huella [follow the tracks]’. [kw1’2,2q,3b] [SUA: Tep, TrC]

1200 Hebrew g’l ‘redeem, buy back’:
UACV-2398 ***kowa*** ‘buy’: CL.Azt22 *kowa ‘buy’; M88-ko23; KH/M06-ko23: CN koowa ‘buy s.th., vt’; Pl kuwa ‘buy’; Ca ’ú’uwe ‘to buy’. [p1g,2’,3l] [SUA: Azt]

1201 Hebrew təmuuraa ‘exchange, n.f.’; Hebrew ha-ttəmuuraa ‘what is exchanged, exchanging’; Hebrew in Aramaic(J) təmuuraa ‘exchange, substitution’:
UACV-2399a ***tïmïrï*** 'buy, trade’: NP tïmï ‘buy, vt’; TSh tïmïïh ‘buy, vt’; Sh tïmïïh ‘buy’; Cm mahípïrïmïrï ‘buy for self, possess (hold in hand)’; Cm marïmïrï ‘buy s.th.’; Cm narïmïïrï ‘trade, sell to one another, exchange’. [NUA: WNum, CNum]
UACV-2399b ***na-tuwa / *tu’wa / *ru’ma*** 'buy': Ch narú-ga ‘buy’; SP naroo’ŋwa ‘barter’;
CU narúway ‘buy’; CU narúgway 'trade’; but CU taguy-naru’ay ‘be thirsty, buy-thirst’. [1t,2m] [NUA: SNum]

1202 Arabic(Wehr/Lane) ʕwr > ʕaara, impfv: ya-ʕuuru / ya-ʕwaru ‘be/make blind, go away with (s.o./s.th.)’; the causative, causing s.o. to go away with is IV aʕaara ‘lend, loan’ and could as easily be ‘sell’:
UACV-2400 ***wara*** 'sell': B.Tep37 *gagara 'he sells'; KH/M06-wa30 ‘sell’: TO gagda; LP gagara; PYp gagara;
NT gagára/gáágarai; ST ga’ara; ST gara 'sell it’. Add Tbr mará/wará ‘sell’ (*w > Tbr m). [1’2,2r] [SUA: Tep, TrC]

1203 Aramaic(S) **hwhr’** / huharaa ‘net, trap for birds or fish’ (from Akkadian xuxaaru ‘bird trap’); Aramaic(J) ’ohar-aa / hohar-aa ‘net-work, loose fisher’s net’:
UACV-2406 ***hïyaC / *hïwaC / * hï’aC*** ‘trap’: M67-444 *hewi; I.Num46 *hïya 'to trap'; M88-hï6 'to trap'; KH.NUA; KH/M06-hï6: Mn (tï)hïya 'trap, vt'; NP hïya ‘trap’; NP ahï’a ‘trap, vt’; TSh hïwa ‘trap, vt’; TSh hïwanïmpï 'trap, n'; Sh hïaC 'trap, vt'; Sh(C) hï’aC ‘trap, catch, vt’; Kw hïa 'trap, set a trap, v'; CU ’ïa-y 'trap, plant, sow, cultivate, farm'; Ca héw 'trap, v'; Ls xáwi 'trap, v' (cognate? Miller queries); Sr hïiiñ 'hunt (for game)';
Hp hïïwa 'trap s.th., vt’; Hp hïïwi 'a set trap, n'; Tb ’ïw 'trap, v’; Cm hïarï 'fish, v'; Cm hïawapi 'trapper’. The 2nd consonant variety: *hï’a / hïya / hïa / hïwa. For *hïwa are TSh hïwa, Tb ’ïw-, Hp hïïwi. The hïa forms simply lost -y- (< -r-), and the -w- in *hïwa may be excrescent. More than ample evidence in CNum and SNum also suggests a final geminating consonant. [-w-, -a/i; x/h; prefix a- in NP] [p:1h,2w,2h,3r] [NUA: Num, Tb, Hp, Tak]

1204 Hebrew ʕaab ‘item of wood (uncertain term)’; MHebrew **ʕoob** ‘beam’; Syriac ʕaab-aa ‘thicket, thick wood, thick forest’:
UACV-2413 ***wopiN*** (< *wapaC?) 'wood': Sapir; M67-15; I.Num276 *wopi(n) ‘wood’; M88-wo10 ‘wood’; KH/M06-wo10: Mn wopikusu 'woodpecker'; NP wopi 'burnt board'; TSh wopin 'pole'; Sh wo-pin 'board, vehicle'; Cm woop / wopi 'board, wood'; Kw wo-vi 'old timber, wood'; SP ovi(N)- 'wood'; My ówwo 'mata’. Sapir's inclusion of CN wapal-li 'board, small beam' with Num *wopi, is plausible as sg ʕoobat with vowel assimilation. This may tie to M88-’o2 *opi ‘awl’ at ‘awl’ in UACV. [1’2,2b] [NUA: Num; SUA: Azt]

1205 Hebrew qy’ ‘to vomit’, if impfv *-qyo’ with loss of -q- in the cluster in *ya-qyo’ or infinitive qᵊyo’.
UACV-2454a ***yo’a*** 'vomit': M67-451; L.Son359 *yoa 'vomitar'; M88-yo10 'to vomit'; KH/M06-yo10: Hp naayö’naayö’-‘vomit, v’; Eu dóda-; Op do-doa; Wr yo’a; Tr o’yó. Tb(M) wayuubat ~ ’awayuup ‘vomit, v’ is of interest. Jane Hill (p.c.) adds Gb yoyi (Merriam).
UACV-2454b ***o’a / *o’i*** ‘vomit’: Mn o’i ‘vomit, vi’; NP oa’i’hu ‘vomit, v’; Cm oo’itï ‘vomit, v’;
Tr o’a / o’o / o’awa ‘vomitar’. 1q,2y,3’ [NUA: Num, Hp, Tak; SUA: TrC]

1206 Aramaic(J) kootl-aa ‘wall, n.m.’; less likely, but instructive is Aramaic(S) guudd-aa / guund-aa ‘wall, side, n.m.’ which shows a doubled consonant leaning toward an excrescent nasal: *-dd- > -nd-.
UACV-2462. ***-kowli / *kori*** 'wall': Tr tegori 'cerca de piedra o adobe, tapia, pared' (< *tï-kori); Tr tegó-ma 'cercar, hacer cercas de piedra o adobe'; Wr isígori 'waddle and wicker wall'; Eu satékori 'pared';
Eu satékora-n 'hacer una pared'; Ca kíwniš 'wall' is interesting in that *o > Ca i and could correspond to PUA *kowli, yet we would expect q vs. k. [1k,2w,3t,4l] [NUA: Tak; SUA: TrC]

1207 Syriac sw’ / swy / səwaa’ ‘to long, desire’; verbal noun Syriac səwaay-aa ‘desire, longing-the’:
UACV-2468a ***suwaC*** 'want': Sapir; I.Num185 *su(h)wa’i want; M88-su14 'want'; KH/M06-su14: NP sugwai-dï ‘want’; Sh suai, suani 'want, vt’; Cm suwaai 'want, desire'; My súale 'creer'; My suáya 'cuidar’. To these can be

added TSh suwaC ‘want, desire, think, feel’; TSh suwan ‘want to, feel like, auxiliary v’; NP sugwa’i ‘like, vt’; Ch suawa-ga(i) ‘want, v’; SP šuya-ŋwa 'would that ...'. Other words (below) show *sVwa or *sïwa (> *suwa). Sapir ties CN seya/siya ‘to consent’ and SP šuya-ŋwa 'would that ...'. Tb(H) šooyi-n ‘his wife’ is not out of the question, which means, it is in question.

UACV-2468b ***sïwa** 'want': PYp heehega ‘want, desire’; Nv ’ï’ïga ‘querer [want], consenter [consent, agree]’; TO heegig ‘happiness’; TO heegiđ ‘agree with’; TO heegigam ‘happily, joyfully’. All words (and some from other branches) beginning with initial *su- and meaning 'want, know, recognize, remember, think, heart' need a thorough sorting, but there is a distinction between *sumaC ‘breathe’ and *suwaC ‘want, be glad’. Both Tep and Num suggest an original accent on the second syllable, as in Syriac also. [V's] [1s1,2w,3’] [NUA: Num, Hp; SUA: Tep, TrC, Azt]

Sort above and below TO hohho’iđ below and TO heegiđ above.

1208 Hebrew ***šʕʕ / šʕšʕ** ‘delight in’; Syriac šʕy / sᵊwa^{y} ‘delight, gladden, enjoy’:

UA *ta-**soa** ‘love, value’: CN tla-soaa ‘love, value, cherish’; CN -soaa in CN tlaso’-tla ‘love’ (< *tlasoaa ‘value, love, affection’); Pl tasuhta ‘love, esteem, vt’; Yq súa 'cuidar’; Cm suatïtï ‘want, desire, need, v’; Cm su’acitï ‘think about s.th., make a plan’; perhaps Sh taccoa 'take care of a child, baby sit’ with a prefix (cluster causes fricative to affricate in Sh); WMU suwáay-y / suwáy-y ‘be happy, feel good’; WMU suwáy-’ni ‘be always happy, by nature/habit’; Kw suvi-ye’e ‘be happy’; SP šuai- ‘be glad’; SP so’ai-yüi ‘is very good, feels very well’; CU suwáay ‘be happy’; TO hohho’iđ ‘enjoy, like, admire, appreciate, care for’.[1s1,2’2]

1209 Hebrew yabbɛlɛt ‘wart’; Akkadian ublu ‘wart’:

UACV-2481 ***upuliwa** ‘wart’: TO upulig ‘wart’; Nv upurhiga ‘verruga’. Probably *upuli-wa with wa as a separate morpheme, an old article morpheme. [1y,2bb,3l] [SUA: Tep]

1210 Hebrew qwm, prfv: **qaam** ‘rise, stand up’:

UACV-2504 ***kam** ‘water to rise, make wave’: Eu káme ‘encharcarse el agua, v [inundate]’; Yq bahekam ‘ola(s) [wave(s)]’. [1q,2m] [iddddua] [SUA: TrC]

1211 Syriac šilaaš ‘weasel’:

UACV-2506 ***sïsïka** ‘weasel’: Fowler83 *sïsïka 'weasel': TSh sïsïka / yïsïka ‘weasel’; Kw sïsïga ‘weasel’. [Num]

1212 Hebrew kəmoo ‘like, as’:

UACV-2529 ***kïm** ‘how’: CL.Azt86 *keem ‘how’; M88-in4; KH/M03-in4: CN keen, keenin, keme’ ‘how’; Pl keen; HN keenihki. [SUA: Azt]

1213 Hebrew **mii** ‘Who?’ but also occasionally in place of maa ‘How? What?’

UACV-2530a ***mi** ‘wh-base’: BH.Cup *mi ‘when’; eliminate M88-mu22, as it is a subset of the same forms in M88-in6; KH/M03-in6 ‘wh-/qu- formative interrogative or indefinite’: Cp mi- ‘wh-base for postpositional locatives’ e.g., Cp mipa ‘when?’; Ca mípa ‘when?’; Ca mi’ = mi’vi, pl. mivim ‘which’; Ls mičá’ ‘where?’; Ls mičát ‘which?’; Ls míikiŋa ‘sometimes, when?’; Gb meyí’ ‘what?’; meyíha’ ‘how?’. Add Wc mï’áne ‘who, what’; Sr hami’ ‘someone, anyone, who’. [NUA: Tak; SUA: CrC]

1214 Hebrew **mee-’ayn** ‘from where?’; Arabic min ’ayn ‘from where?’ > Tb **maa’ayn** ‘where from’!

1215 šrq ‘whistle, hiss’; Hebrew **wayyišroq** ‘he whistled, hissed’; wayyišroq-uu-hi ‘whistled-they-him/it’

UACV-2542 ***wisuko** ‘whistle’: Mn wisïqohi ‘whistle, vi’; SP uššuC-qqi ‘whistle’. [1s1,2r,3q] [NUA: Num]

1216 Hebrew qaane ‘reed, stalk’

UACV-2553 ***kana** 'willow': M67-461 *ka/*kan 'willow tree'; M88-ka12 'willow'; KH/M06-ka12: Kw kahna-vï 'sandbar willow'; SP qanna-; CU kaná-vï; Tb haa-l ‘willow’; Ca qáankiš 'desert willow'; Hp qahavi ‘willow’. [*k > Tb h] [1q,2n] [iddddua] [NUA: Num, Hp, Tb, Tak]

1217 Semitic **qalal** ‘be small, contemptible, despise’; Arabic qll ‘be little, few, insignicant, inferior’; Hebrew **qillal / qillel, -qallel** ‘declare accursed, consider bad, contemptible’; the preceding qittel form suggests the basic form also means ‘cursed, contemptible, bad’:

UACV-104 ***’alal** ‘bad, wrong’: Ca ’eléle- 'bad, wrong, not right, adj.'; Ca 'elél-kw-iš 'bad person/thing'; Ca 'elél-kw-imal 'ugly person'; Ls 'aláxwi 'be bad'; Ls 'aláxwi-š 'bad'; Ls 'aláxwi-laka 'ugly'; Wr na'ála-ni 'be bad'; Wr na'ála 'damage, danger’. Same root as 982 Hebrew qll ‘be small, insignificant’ > UA ***ali** ‘little’ and with initial q- missing in both sets, and *a* > *e* in Ca also points to Sem-kw 1q,2l,3l [Tak; TrC]

1218 Hebrew npɧ ‘blow, breathe’, f.sg.perf: naapɧaa; Akkadian napaaxu; OSArabic npx; Arabic npx ‘to blow, puff, breathe’, impfv: ya-npuxu; Arabic **napxat** ‘blow, puff, breath, gust’; from the noun form and as is typical, the bilabial -p- as first consonant in a cluster disappears (4.3, 294-300)—napxa > nïka:
UACV-2560 ***nïka** ‘be windy, blow’: I.Num119 *nïe 'wind, blow (of wind)'; M88-nï12 'wind'; KH/M06-nï12: TSh; Sh nïai ‘blow (wind)’; Cm; Kw; Ch; SP; CU. [*k > ø] [p:1n,2p,3x] [NUA: SNum, CNum]

1219 Arabic hauğaa’ ‘hurricane, tornado, cyclone’, pl: huuğ; Sem-p (because *g > k, not ŋ, and ’ > w), from Sem-p haugaa’ > hugaw:
UACV-2558 ***hïka / *hïkawa / *hïkwa** 'wind, blow': Sapir; M67-462 *heka; I.Num41 *hïkwa 'blow (of wind)'; L.Son59 *hïka viento; M88-hï2 'wind'; KH/M06-hï2: Mn and NP *hïkkwa-pï; Tb(M) ’aakawaal 'wind, n’; Tb(M) ’aakawaa’ït ~ ’aakawaa’ ‘blow (of wind)’; Tb(V) ’ïhkowa’ 'wind blows'; Mn hïkwápe; NP hïggwapï; Tb ’ïhkowa’ ‘wind blows’; Eu v/bahéka; Yq héeka; AYq heeka ‘air, wind, n; blow, v’; My heeka; Wr ega-ní/egi-má; Tr eká/iká; iwigá; Cr eeka; Wc 'eekáa; 'éká ‘blow’; CN eheeka-tl ‘wind, air, bad spirit’. Cr éeka / háaka / wá-’aaka 'it is windy'; Sapir also cites Gb qahika-. Eu and Wc show a prefixed syllable *pa-’ïka. Note highly different V’s in the two Tb dialects. They may be key to them: *hVkawa > *hïkowa > hïkwa? I doubt Hp v: hïïhïkya; hïïkyaŋw, though if possibly belonging, Hp final -ŋw for Semitic final -’ like for spider (1409) Aramaic kuuky-aa′ > Hopi kookyaŋw. [Tb V assim] [1h,2w,3g] [NUA: Num, Tb, Tak; SUA: TrC, CrC, Azt]

1220 Syriac qrš / qəraš ‘become chilled, frozen’; Syriac qariiš ‘chilled, cold, coagulated’; Syriac **’etqaraš** ‘to **shade, put in the shade**’; Arabic qarisa ‘be severe (the cold)’; Arabic II qarrasa ‘freeze, make torpid, numb (the cold)’; MHebrew qrš ‘become hard, solid, frozen’; Ugaritic qrš ‘what is fixed’ is one of the proposed definitions; Gesenius and von Soden connect Semitic qrš and qrɧ, which both mean ‘freeze’:
UACV-1922 ***hïkka / *hïkya** ‘shade’: M88-hï1 ‘shade’; M67-367 *heka ‘shade’; I.Num44 *hïpa/*hïka ‘be cool’; L.Son58 *hïka ‘sombra’; B.Tep346 *’ïkagï ‘shade, shady’; KH/M06-hï1 *hïïka (AMR) ‘shade’: Cm hïkki ‘shade, brush arbor’; Cm hïka-h ‘cool off, v’; WSh hïki ‘shade, shadow’; Hp hïkya ‘cool off, vi, become set in a fixed position’; TO ïïk ‘get in the shade’; TO ïïka ‘bec. shaded’; TO ïïkeg/ïïheg ‘shade, n’; TO ïïkđag ‘shade, shadow’; LP ’ïïkïg; NT ïïkágï; ST ‘ïïka’; Nv ’ïkada ‘sombra [shade]’; Eu hekát ‘sombra’; Eu hekawa ‘sombra’; Wr ehka ‘haber sombra [be shade]’; My hékka ‘sombra’; CN e’kawyoo-tl /e’kau’yoo-tl ‘shadow, shade’; CN ekawiil-li ‘shadow, shade’; CN e’kawi ‘to shade’; Pl yeekah-yu ‘shadow, shade, n’. Also AYq hekka ‘shade, n’; PYp eekega ‘shade, shadow’; Tr ká/kára/kábora ‘shade’; ST ïpgidya’ ‘dar sombra [give shade]’; ST ïïkaya’ haber sombra’.

While we have the truncation (shortening) typical of longer forms, Syriac ’etqaraš > *(h)ekka is striking; with another vowel syncopated (taken out of the middle), Syriac ’etqaraš > *’etqraš > *(h)ekya. Note also the identical sets of meanings in Semitic ‘be cold, shade’ and UA ‘cool, shade’. As mentioned, some tie Semitic qrš and qrɧ, and the latter may better align with Aztecan and Tepiman forms, though Syriac etqawrar ‘to cool’ fits Azt e’kauyoo-tl rather impressively.

Note that Hopi hïkya ‘cool off, vi, become set in a fixed position, vi’ shows Hopi -kya- < -qra-, and also from Semitic ‘cool’ and ‘what is fixed’ are Hopi ‘cool’ and ‘be in a fixed position’. Considering the unusual pair of meanings ‘cool’ and ‘be fixed/set’, it is rather extraordinary to find both ‘cool’ and ‘be fixed/set’ in the Hopi term, which also matches phonologically!

SP païqqaC ‘ice’ undoubtedly has pa- ‘water’ as a first morpheme, and may be of the same form, or the -ïqqaC also fits an unattested huqtal form or Hebrew *huqraš ‘hardened, frozen’ of the same root. [1’,2t,3q,3r,3s] [SUA: Tep, TrC, Azt; NUA: Hp, Num]

1221 Arabic ḍirs ‘molar tooth’ < Arabic ḍrs ‘to bite’
UACV-2367 ***cara** 'molar': Eu cará-tamit ‘muela’; NT taamúsaragai ‘la muela’; Cr sï’ï-tame ‘muele’. [-r- > -’- in Cr] [p1s4,p2r,p3s] [SUA: Tep, TrC, CrC]

1222 Arabic ṣpr ‘to whistle, hiss, chirp’
UACV-2559 ***ciporika** 'whirlwind': B.Tep195 *sivorika-i 'whirlwind'; M88-ci17; KH/M06-ci17 ‘whirlwind, remolino’: TO siw(u)lok*i*; NT šivóliki; ST šivool^{y}ik. [1s4,2p,3r] [iddddua] [SUA: Tep]

1223 Hebrew dkk/dky ‘crush’; Hebrew dakke ‘crush’ (qittel of dky); Arabic daqqat ‘beat, thump, hammer, n’
UACV-1092 ***takki** ‘mano for metate’: M67-274; Munro.Cup132 *tááki-š ‘tool’; KH.NUA: Ls tááki-š ‘stone for smoothing pottery’; Ca táki-š ‘mano’; Tb takii-l (< *takkii), Tb(H) takkii-l ‘muller for metate, mano’; Sr taikţ ‘mano (for metate)’; SP taqqiu ‘reduce to small pieces’; perhaps Ca téx ‘grind and make flour’. [*-kk-] [Tb k] [NUA: Tak, Tb]

1224 Aramaic(S) ’arqə-taa / ʕarqə-taa ‘fluke worm’; Aramaic(J) ’arqə-taa ‘a parasite worm in the bowels, perhaps fluke worm’; the unattested f. sg. without definite article would be *’arqaa
UACV-2593 ***wo’a** 'worm': I.Num272 *wo’a 'worm'; M88-wo8; KH/M03-wo8: Mn wo’ábi ‘worm, maggot’; NP wo’aba ‘worm’; TSh wo’api; Sh wo’a-pin; Cm wo’api; Kw wo’o-vi. For Kw vowel leveling, note Kw momo’o for *mama’u 'woman’, and -rq- > -’-, as -rn- > -’- at 1058 ‘cocoon’. [V leveling in Kw in worm, woman, and water] [NUA: Num]

1225 Hebrew ’abaal ‘truly, indeed’ (later it means: but, however):
Tr abe ‘yes, an emphatic’. [1’,2b,3l] [Sem-kw with lack of rounding for the ’aleph and a > e/_l]

1226 Aramaic(CAL) šʕyn-’ / šəʕiin-aa ‘mud-the’:
UACV-765 *pa-sakwinaC ‘mud’: I.Num141 *pasïhkwi(na) 'mud'; M88-pa16 ‘mud’; KH/M06-pa16: Mn pasïkwinábï; NP pasaggwabï; TSh pasakkwinappï; Sh pasakwinappïh; Sr pääkwiñit. Add Cm sekwipï 'mud’. The meanings are identical, and if -ʕ- > -w- > -kw- (which most often happens in WNum), all else matches well, though Jane Hill (p.c.) notes this could be *pa ‘water’ + -sa- ‘mud’ + kwiya ‘earth/mud’. [-Ckw-] [1s,2’2] [NUA: Num, Tak]

1227 Arabic farṭaħa ‘flatten, broaden’; Hebrew ptħ / Arabic ftħ / fataħa ‘open’; Arabic fṭš ‘make broad, compress, flat and spread wide (nose)’; Hebrew paṭṭiiš ‘forge-hammer’; several roots with 1st consonant p and 2nd consonant -t- exist, and a great variety of UA forms need sorting yet, but a correlation with some is likely, excluding Eu at 293:
UACV-904 ***patta** (> pata at times) ‘flat, level, smooth, slippery, bare, naked, bald, uncover, open up, blossom’ (Stubbs2000a-2) yields considerable semantic variety:
UACV-904a ***pata / *patta** (> *pita / *pala) ‘flat, spread, i.e., flatten/smooth, vt’: M67-410 *pata ‘spread’; I.Num142 *pata ‘spread, straighten out’; CL.Azt192 patla(awa)-k 'wide': M88-pa32 ‘spread’; KH.NUA; KH/M06-pa32: Mn patanuyu ‘straight (of long narrow obj)’; Mn tunapaatï ‘straight (one)’; NP capada (< *cappata) ‘spread out s.th. thin like a blanket’; WSh cappata ‘spread out by hand’; Sh pata ‘spread out s.th. of cloth’; Kw patta’nimi ‘erect, straight’; SP para ‘straighten out’; Sr paţk ‘lie down flat, as on one’s stomach’; Ca pálaa ‘be flat’; Ca palpála ‘be flat (leaf, rock, etc.)’; Ls pálvun-la ‘a plain, valley, level ground’. Add Ktn vačk ‘flat and wide or circular’; AYq patalai ‘flattened, crumpled, formless’; AYq vetala(i) ‘flat, even, smooth’; Yq bétalai ‘plano’ (Yq bétala ‘boca abajo’); Hp pïïci ‘wide, broad, long and flat’, since NUA c < *t/*tt or other consonant besides *c. Besides the preceding, some languages have 2nd form that may tie by a different route: Sr väächï’|q ‘be flat, flattened’; CN patla-čoaa ‘flatten, press, crush, vt, bec. flat, collapse, vi’. Tb payaawat ~ apayaau ‘be spread out’. CN alaktik / alastik / alaawak ‘s.th. slippery, crumbly’; CN alaawa ‘slip, slide s.th., vt’ in contrast to Aztecan at 1168: CN patlaawa 'widen'; CN patlaawak 'wide'; Po patek; Te patlowak; Za pataawak; Pl pataawa ‘extend, widen’ at . Note CN forms with and without *p. [*-t- > -l-, -c-]
UACV-904b ***sikki-patta** ‘flat’: Mn sikibadagi; NP sikipatadï (< *sikkippattatï) ‘flat, adj’; probably Cm sïïpetï. A compound with *-patta. [NUA: WNum]
UACV-904c ***hi-patta** ‘flat’: TSh hippatta; Sh hippatta; if not a reduction of *sikipata above, it obviously contains at least a common morpheme *-patta, which stem is prominent in TrC. With vowel changes, I would have to consider the following probable as well: PYp hepelik ‘flat, lowlands’; Ls hivé-li ‘flatten’; Ls hivél-vi-š ‘flat, wide’.
UACV-904d ***patta / *patti** ‘bare, smooth’: Mn padagwinigi ‘be naked, vi’; NP patakwïnï’a (< *pattakkwïnï’a ‘s.th. smooth’; Sh pacciC ‘smooth, shiny’; Sh(M) pacci ‘smooth, shiny’; Cm pahci bapikatï ‘bald’; Cm pahciketï ‘slick, smooth’; NP copata kwa’ama ‘bald’; perhaps TO wađađk ‘bald’ if t > đ. [Num]
UACV-904e ***pici** ‘naked’: Tr biči; AYq viiči. This likely relates to *patta/patti above with assimilated vowels: *patti > paci > pici. Ls pála ‘put out sprouts, come into leaf’.
UACV-904f ***pïci / *pVcV < *pat(t)a/i** ‘flat, prone, flatten, widen’: Tr peči ‘cama, tendido para dormir [bed, stretch out for sleeping]’; CN(RJC) pečtik ‘flat, flat-based, wide’; CN(RJC) pečiuhki ‘flat’; CN(RJC) pečia ‘underlie s.th.’ If *-t- > -c-, Hp pïc- may tie to CN *pac… or CN *pat...: Hp pïc-qa ‘flat < wide-extended’; Hp pïc-lawï ‘be widening s.th. linear’; CN patlačoaa ‘become flat, collapse, flatten, press, crush s.th.’, v.refl, vt’; CN patlaawa ‘widen/ensanchar(se)lo angosto y estrecho, vi, vt’; Hp pïcqata ‘be flat, v, flat area or surface, n’; CN paacka ‘wring out, squeeze liquid out’.

1228 Hebrew pṣʕ ‘wound, injure’; Hebrew pṣʕ ‘wound, especially one which has been caused by bruising’; MHebrew pṣʕ ‘squash, slit, wound’; Arabic faṣaʕa (< *pṣʕ) ‘to squeeze out’;
UACV-904g ***pacu** ‘squeeze, smash’: CN paacoaa ‘bruise s.th., mash (fruit), crush s.o.’; CN paac-tik ‘s.th. dripping wet, juicy, bruised, mashed, soft’; in compounds CN paac- ‘liquid (perhaps squeezed out); CN paacka ‘squeeze liquid out of s.th., wring out, press out, give forth liquid’; Tr pačunti / pačuinti ‘hacer gotear [make drip], exprimir a gotas [squeeze drops]’; NP capicuna ‘pinch’ (if ca- prefix meaning ‘do with the hand’); Mn -wïpizizihi ‘squeeze, vt’. The *pacu forms and the *pïc- of the others may all be related, especially since we see a vowel change of *pacu > picu in one of the *pacu forms (NP), and fronting and raising of vowels is common before alveolar consonants in UA. [1p,2s4,3’2] [NUA: Num, Hp, Tak, Tb; SUA: Tep, TrC, Azt]

1229 Hebrew śii^{a}ħ < *śiiħ ‘shrub, bush’; MHebrew *śiiħ ‘growth’; Arabic šiiħ ‘shrub, bush’; Ugaritic šḫt ‘shrub, bush, bushes, shrubbery’:
UACV-907a ***sï’aC** (NUA): BH.Cup *ṣə ‘bloom’; I.Num196 *sï’a(h) ‘blossom,grow (of plants)’; KH.NUA: NP sïa ‘plant, v’; Sh sïaC ‘grow, v’; Cm sïa ‘grow, v’; SP šï’ïC/šï’ï-ppï ‘blossom’; CU si’i ‘bloom, flower’; Cp -šé’a ‘flower’ (poss’d); Cp šé’e ‘bloom’; Ca se-l / sé’i-š ‘flower’; Ca sé ‘bloom, v’; Ls ṣóó’- ‘bloom, v’; Ls -sóó’ ‘flower, blossom’ (poss’d only); Gb sóyn/swin ‘flower’; Sr sï/sïï ‘flower(s)’; Sr sïï’ ‘bloom, v’; Ktn -šï; Hp sihï. Add Ch(L) sï’ipï / sï’icï ‘flower’ and Mn sï’a ‘sprout’. SP, Sh, Ch(L) show final -C.
UACV-907b ***sïwa** (SUA): L.Son252 *sïwa ‘flor’; Eu séwa/sewá-t; Tbr sewa-rá-t; Yq sééwa; My sééwa; Wr sewá; Tr sewá; Cr šúúšu’u ‘flower’; CN išwa ‘sprout, germinate’.
UACV-907c ***siso-ciwa** ‘flower’: B.Tep67 *hiosigai ‘flower’; *sïsoci/hïsoci-ta(i) ‘flower, v’ and *sïsociwa ‘flower, n’ may fit TO hïosig ‘blossom, flower, n’; TO hïotap ‘bloom, v’; NT yooštyai ‘florecer,vi’; NT yoošíga ‘está florecida’; NT yoošígai ‘la flor’; ST yoota; ST yooši flower’; LP(B) hioškam. Add PYp hiosga / hios ‘flower’; PYp hiosia ‘flower, vi’; PYp totsigar ‘sprout, n’; Nv ’ï’osiga ‘flower’.

1230 Hebrew šoošaan / šuušaan / šoošanaa(t) ‘lily’; Arabic sausan / suusan ‘lily of the valley’; the Hebrew word is derived from the Egyptian word, which becomes in Coptic šošen:
UACV-907d Azt ***soci** ‘flower’: CL.Azt63 *šooči ‘flower’, 231 **sïyotu ‘flower’; CN šooči-tl ‘flower, n’; CN šoočiyoaa ‘blossom, v’; CN iiššoowa ‘blossom, burst forth, v’; CN išwa ‘sprout, germinate’; Pl šuuči-t ‘flower’; Pl -šuuči-w (poss’d). L.Son 252 equates *sïwa with Tep -siga- in Tep *hio-siga-i, though Tep s < *c usually. Pl suggests *(i)soo-ci-wa > Tep *ihosiga > hiosiga. Note how both CN šoočiyoaa ‘blossom’ and Tep *hihosiga could derive from *hisociwa. [1s2,2y,3x] [NUA: Num, Tak, Hp; SUA: Tep, TrC, Azt]

1231 Assyrian mtq ‘be sweet’; Ugaritic mtq ‘sweet’; Arabic mṭq ‘smack one’s lips’; Hebrew *maateq ‘be sweet, pleasant’; Hebrew maatooq ‘sweet, pleasant, adj, and sweetness (of honey), n.m.’ (e.g., Judges 14:14,18); Hebrew motq- (< *moteq) ‘sweetness’ (= Akkadian mutqu) takes suffixes: motq-o ‘its/his sweetness’; motq-i ‘my …’; motq-aa ‘her/its sweetness’, etc; the cluster -tq- would likely appear most like the 2nd consonant, and after the UA reduplication, note the k/g/h in Kw, Op, Eu, Wr, Tr, Tb:
UACV-918 ***mumu**h/kV ‘bee’: M67-31 *mumu/*meme ‘bee’; L.Son156 *mumu ‘abejas, panal’; Fowler83; M88-mu11 ‘bee’; KH/M06-mu11: Kw muukucize ‘hornet’; NP pimumui ‘humming noise (as bees)’; Hp momo ‘bee’; Hp momo-s-pala ‘honey’; Op mumugo; Eu mumúgo; Eu mumúhuo; Wr momohá ‘honey (comb)’; Tr umugá ‘panal de avíspas negras’; Yq múumu; My muúmum ‘abeja chiquita’; My mumu bá’awa ‘honey’; CN mimiawa-l ‘bee/wasp’s nest’; Pl mimiyaawa-t ‘wasp’s nest’; and Fowler includes a probable Tb toomoogal ‘bumblebee’. Add Nv mumuva ‘abejas de panales’, Wc mïïmïi ‘kind of wasp’, whose vowel agrees with *mumu (*u > Wc ï), as do Hp o (< *u) and Aztecan i (< *u); and PYp mumur ‘bee’ belongs too.
UACV-917 ***muhu-pa** ‘fly’: B.Tep156 *muuvari ‘fly’; Fowler83: SNum *muhu may reflect Semitic *mutqV: Fowler (1983) cites Kw muhuvaa-vi ‘mosquito’; Ch muhuwa-vï ‘mosquito’ or Ch(L) muhua-vi. Might those and Tep *mupa be loans from s.th. like My mumu bá’awa? TO muuwal; LP muuvil; PYp muuvili; NT nuuváli; ST muuvaly. Add PYp mumuva ‘bee, n’. Note Wc ’ïcimïpéé ‘sp. of bee’, which matches Tepiman *mupa ‘fly’ in the segments *-mupV. Jane Hill (p.c.) notes Ca muhúli-l^{y} ‘mosquito’ only with a different suffix to *muhu-. [1m,2t,3q] [iddddua] [NUA: Num, Hp, Tb, Tak; SUA: TrC, Tep, CrC, Azt]

1232 Arabic bakara ‘set out early’:
UACV-1021 ***pakay(N) / *pakiN** ‘walk (away), sg’: Kw pagi ‘walk, sg’; Kw pagi-nii ‘walk around’; Ch pagí ‘walk, pl’; SP pagiN ‘walk’; WMU paġáy’kwe-y / paġáy’-we-y ‘walk, sg’; CU paġá-’ni ‘walk around’, CU paġáy-’way ‘walk’. WMU often shows nasalized vowels, which align with SP’s underlying nasal from -r. The final nasalizations in SP and WMU match a final liquid. [p1b,2k,3r] [NUA: SNum]

1233 Arabic ʕdw / ʕadaa ‘run, dash, race, pass’
UACV-1024 ***wata** ‘run’: Hp wari(k-) ‘run’; Hp war-ta ‘run fast, run well’; Cr watïn ‘to run’ ; Tbr wota / wuta-ná- ‘to run’; Tb wa’ad~’awa’at ‘run away’. Hp a loan from Tb? [t>r/d] [1’2,2d] [NUA: Hp, Tb; SUA: CrC, TrC]

1234 Hebrew zəroʕ ‘arm, forearm, power’; Arabic điraaʕ ‘arm, forearm’
UACV-1124 ***toC** ‘with the hand, instr. prefix’: KH/M06-ip3: Mn to- ‘with an instrument’; NP to- ‘with fist, shoulder, hoof’; Sh toC- ‘with hand / fist, away from the body (instr prefix)’. [p:z2,2r,3’2] [iddddua] [NUA: Num]

1235 Hebrew rp' / raapaa' 'to heal'; Hebrew niqtal impfv: ye/te/'e-raape' 'be healed, whole' (-r- > -y-); unattested Hebrew yoqtal ***yurpa'** '(be caused to) be healed'; or harroope' 'the-healer':
UACV-1158a ***yowa / *yopa** 'cure': M67-116 *yo / *yowa / *yoya 'cure'; L.Son362 *yowa 'curar'; M88-yo6 'cure'; KH/M06-yo6: *yopa > Tep dowa: TO doa 'get well'; LP doa; NT duduáádyidyi, doá-di; ST duañdya, dodya; Add PYp do'a 'alive'; PYp do'a-lim 'be born, get well'; PYp do'a-r 'give birth'; PYp do'a-ter 'cure, vt'. Might PYp degevin(ad) 'cure, save, vt' be relevant in its showing the consonants *y-w-p? [SUA: Tep]

1236 Hebrew rp' / raapaa' 'to heal'; Hebrew niqtal impfv: ye/te/'e-raape' 'be healed, whole'; Hebrew hit-rappe' (m)/ **hit-rapp'aa** (f) 'have oneself healed':
UACV-1158b ***hitowa** 'medicine': M88-hi4 'medicine'; KH/M06-hi4: Tbr hitoá-t 'medicina'; My híttua 'remedio'; Yq hítto 'curar'; Yq híttoa 'medicina'; AYq hittoa 'medicine'. M67 rightly suggests that Wr may be borrowed from Tep: Wr i'óa 'take medicine'; Wr i'oé 'cure, vt'; Wr i'ói 'medicine'; Tr owí / owé- 'curar, invitar, perseguir'; Tr 'owáami 'medicine'; Wr hí'iyowa 'medicine'. TO i'ówi 'sweet, tasty'.
[*hittoa, *topa or yowa] [1r,2p,3'] [SUA: TrC]

1237 Hebrew rp' / raapaa' 'to heal'; Hebrew niqtal impfv: ye/te/'e-raape' 'be healed, whole'; Hebrew hit-rappe' 'have oneself healed'; Hebrew participle roope' 'physician, healer'; it best fits Aramaic participle but with Canaanite vowel change ***roop'-aa** 'healer', but unattested as far as I know:
UACV-1161 ***toŋa** 'cure, administer to': BH.Cup *téŋ 'to doctor'; M88-to25 'to doctor'; KH/M06-to25: Cp tíŋele; Ca tíŋ'ay 'cure, doctor s.o.'; Ls téŋal 'to cure, doctor with herbs'; Ls téŋala-š 'medicine'; Ls téŋalka-t 'herb doctor'. Tb dzowaa-l 'shaman'. Note the glottal stop in Ca, as if another consonant in a cluster is involved.
[1r,2p,3'] [NUA: Tak, Tb]

1238 Hebrew bayt-aa 'house-toward, inside-to'
UACV-1241 ***paca** 'put in': B.Tep254 *vaasa 'to put into' and *vai 'he put into'; M88-pa4 'put in, enclose'; KH/M06-pa4: PYp vaasa 'insert'; LP vaaša; NT váása; ST vaasa; Wr pahcá; Tr bač-á 'meter [put in], encerrar, encarcelar'; My kibáca 'meter'. Tr pacá 'dentro, adentro' may be a loan from Wr. perhaps TO waša 'covered basket' (that one puts things into). [1b2y,3t] [SUA: Tep, TrC]

1239 Aramaic(CAL) yall-aa' 'lizard'; Aramaic(CAL) yarl-aa' 'lizard'
UACV-1370a ***yul** 'lizard, sp.': BH.Cup *yu ... l 'lizard, sp.'; M88-yu15; KH.NUA; KH/M06-yu15: Cp yú'e-l 'a large lizard'; Ca páyul (pá- 'water'); Ls yulú' 'lizard, sp'. Ls fits the consonants perfectly, even to the final glottal stop. Hill also notes Sr yu'aat 'water turtle' with these and suggests their relationship to *yu'a 'wet'.
UACV-1370b ***pa-yïl** 'lizard': TO wajelho 'whiptail lizard'; ST vadïïr 'lizard'. Both Tep forms show *pa-yïl well, which *yïl stem may be related to Tak *yul above. TO h in a cluster is sometimes simply vowel devoicing, sometimes meaningful. [1y,2l] [NUA: Tak; SUA: Tep]

1240 Arabic rağul 'man', pl: rigaal (would correspond to Hebrew rigool)
UACV-1417 ***tihoyi** 'man, attractive': Sapir; B.Tep221 *tiodi 'man, attractive'; M67-273d *tiho 'man'; L.Son281 *tihoyi 'hombre'; M88-tï9; KH/M06- tï9: TO cïoj; NT tyiodyi; ST(B) tyiody; ST čio'ñ; Wr tihoé / rihoé; Wr(MM) rihoé / tehoyé 'hombre [man]'; Tr ŕehói, pl: ŕetewi. A Kiowa-Tanoan form is Kiowa togul 'young man' and is better preserved or a possible loan source (g > h). [1r,2g,3l] [SUA: Tep, TrC]

1241 Arabic ğabal 'mountain(s)':
UACV-1455b ***kaipa / *kaapa** 'mountain' (I.Num49 *kaipa): NP kaipa; Kw kee-vi; Ch kaiv*a*; SP qaiva; WMU qaava / gaav*a*; CU káa-vi. Kw and CU reinterpreted the final -va as an absolutive suffix, but NP, Ch, SP, and WMU show that it is part of the stem. [NUA: Num, Tak; SUA: TrC]

1242 Hebrew rbṣ 'lie down (often of animals)'; Hebrew rebɛṣ 'resting place' with suffixes ribṣ-o 'resting place-his'; Arabic rbḍ 'lie down, rest (animals, with chest to the ground)'; Arabic rabaḍ, pl: arbaaḍ 'place where animals lie down to rest'; Akkadian tarbaṣu 'cattle-pen':
UACV-1518a ***tosa** 'nest': Eu hitósa; Yq tóósa; My toosa; Tbr tuesá-r.
UACV-1518b ***ta'so** 'nest': Wr ta'só; Tr ŕasó.
UACV-1518c ***tapa'sol** 'nest': CN tapa'sol-li 'bird's nest'; CN pa'sol-li 'briarpatch'; CN tapasol-loa 'to tangle s.th.' Words for 'nest' occur with some consistency in SUA, while NUA languages show little of diachronic substance, in having no sets or recently derived compounds. These words found in CN and most TrC languages show enough in common for a relationship among them, perfect clarity pending. Eu and Cah show *tosa, while Tr and Wr show *ta(')so, the two pairs being similar except for a V metathesis. Tbr and

CN may provide keys in that CN actually shows a bilabial and Tbr shows a round vowel among non-round vowels that may suggest a former bilabial in cluster with other consonants, like Spanish déuda 'debt'; and see b > ø/_C, 4.3, p. 124. If originally *tapa'so, then a sequence like the following is natural enough, but hardly certain, of course:

*tapa'so > *tap'so > *taw'so > *ta'so (Wr, Tr)
> *tosa (Eu, Yq, My) [1r,2b,3s4] [SUA: TrC]

1243 MHebrew prq 'remove, take away'; Nabatean prq 'let out, liberate, redeem';
Arabic *paraqa 'to separate'; Syriac prq 'separate from, depart, go away':
UACV-1586 ***pa'ku** 'out': Yq pá'aku(ni) 'afuera'; AYq pa'akun(i) 'outside'; My pá'aku 'afuera';
Cr pwa'akïéh 'afuera'; Wc vaka 'take out'. Tak, with different first vowel, perhaps a quttal form: Sr puraq-q 'go out, come out, urinate, v'; to urinate, one goes away / out or separates oneself from the abode/group;
Ktn purahk-ïk 'come out, go out, set out for a place, vi', but no r > y ? [p1p,p2r,p3q] [SUA: TrC, CrC; NUA: Tak]

1244 Semitic prq 'remove, separate'; Arabic *prq III 'separate oneself, withdraw, depart, leave, quit':
UACV-1300 ***piyaC / *pï'aC** 'leave, save': Sapir; B.Tep273 *ví'ia/i 'to stay'; M67-256 *pia 'leave'; I.Num174 *pïya 'leave (behind, over)'; CL.Azt81 *piya 'have, ñ'; 248 **piya 'keep, leave'; L.Son192a *pi 'quedarse, faltar'; L.Son192b *pi-a 'dejar'; M88-pi10 'leave/dejar, quedarse'; KH/M06-pi10: Sh pïaC 'leave'; Cm pïa 'leave, forsake, quit'; SP piyai-: piya'ŋwi 'be left over'; CU piyaay 'be left, remain behind'; TO wi'i 'stay, remain'; TO wi'ikam 'be one left, a remnant; be an orphan, one left by himself'; Eu vié 'faltar, quedar'; Eu vía / ví'a 'dejar'; Tbr wipia 'seguir'; Yq bé'e 'faltar, guardar'; Yq yeubé'ene 'dejar afuera' (Yq yeu 'para afuera'); AYq ve'e 'be lacking, left over, vi'; AYq ve'a 'save, reserve'; My be'a 'dejar aparte'; Wc pi 'quitar, dejar'. CN, HN, Pl *piya 'have, guard, take care of'; WMU piyé-y 'be left over'. Among Tep UP wia; LP vi'i; NT víía; ST vii; ST vidya 'leave left overs'; NT viééyi, víídyi 'dejar'; TO wi'a 'leave s.th. behind', NT and ST show d, as if underlying *y, while other languages show medial glottal stop. Probably with additional causative suffix: Kw piine'e 'leave, vt'; NP pinai 'last one, one that is left'. [medial *' / *y] [kw1p,kw2r,kw3q] [NUA: Num; SUA: Tep, TrC, CrC, Azt]

1245 Hebrew śeeʕaar 'hairiness, body hair, hairy covering'; Ugaritic šʕr 'hair'; Akkadian šaartum 'hair, goat hair, pelt'; Syriac səʕar 'hair'; Syriac saʕr-aa 'hair-the'; Syriac saʕr-aa d-arnaabaa 'hair of a hare';
Arabic šaʕara 'understand intuitively, perceive, sense, feel'; Arabic šaʕr / šaʕar 'hair, fur, pelt';
Arabic šaʕaaraa^{y} 'goats, pl'; the Semitic nouns are often 'body hair' or 'fur' with occasional shifts to 'hairy animals' as in Arabic 'goats' or in UA 'jackrabbit':
UACV-1759 ***su'i / *suwi** 'jackrabbit': M67-335 *sui ; BH.Cup *su'ic; HH.Cup *su'iš; Munro.Cup66 *su'i-š; M88-su10 'jack-rabbit'; AMR1993a *suu'it; KH/M06-su10: Hp soowi; Tb suu'it/ šuu'it; Sr hoii't; Ktn hwi't; Gb su'ít; Ca sú'iš; Ls ṣu'í-š; Cp sú'iš/sú'ic; CN si'-tli. ['/w] [1s2,2'2,3r] [idddua] [NUA: Hp, Tb, Tak; SUA: Azt]

1246 Hebrew śəmool 'left'; Hebrew ha-śmool 'the-left'; Syriac simaal-aa 'left-the'; Arabic šamaal / šimaal 'north'; Old Canaanite **sim'al** 'left' or **hassim'al** 'the-left':
UACV-1307 *si… 'left': Tb 'aašiyan / **aašiŋan** 'left side'; Hp sïy-ŋakw 'from the left side, left-from'. In Old Canaanite sim'al, the m may be lost as first element of a cluster: sim'al > si'al / siyal, resembling Tb and Hopi, but best of all, the one Tb alternate **aašiŋan** < ***has-sim'al** has all typical UA changes, final liquid > n, and the cluster -m'- > -ŋ-. [1s2,2m,3',4l] [NUA: Tb, Hp; SUA: Tep]

1247 Hebrew tly 'hang'; ***yutla** (hoqtal) 'be hung'; Aramaic(J) tly / talaa 'swing, lift up, suspend, hang'; or perhaps Arabic dll 'suspend'; Hebrew dll 'allow to hang down', (hoqtal) yudlal:
UACV-1128 ***yula** 'hang': Ca yúlaa 'to hang'; Ls yóóra 'to swing, hang in the air'; we would expect the Ls vowel to be u also, but *u-a > o-a is frequent. [*u-a > o-a] [SUA: Tak]

1248 Arabic qasaṭa 'divide up, measure'; Hebrew qəśiiṭaa 'ancient weight, used as money, n.f.';
MHebrew qəśiiṭaa 'a coin, a weight, lamb'; MHebrew qəśiiṭaa 'a standard value, jewel, lamb';
Syriac(S) **qesṭ-aa** 'measure, n.m.':
UACV-2016 ***koCta** 'bark, shell, money': M67- 21 *ko 'bark of tree'; L.Son90 *koci 'camarón'; M88-ko6, ko10, ko21; Munro.Cup118 *qééči-la 'shell'; KH.NUA; KH/M03-ko6, ko10: Ls qéš-la 'seashell'; Ls qéš-la ka-š 'skull';
Gb (a)-xóxoc '(su) cáscara'; Cp qíči-ly 'money, silver'; Ca qíč-ily 'money' (pl: qišlyam); Sr -qöč 'hide, bark';
Sr qöčaaviam 'money'; Cr kúcape'e (Cr u < *o) 'cáscara'; Cr kuhca'ana 'type of tree with useful bark';
Cr ra-ká-kuhca'an 'he is skinning it'. Ken Hill adds Ktn koco 'shell (of turtle), peel, skin'. Nv koska 'concha de nácar [mother of pearl, nacre]' belongs (Nv s < *c; cf. Tbr koci-kal 'camarón') and it may be loan source for CN kooska-tl 'jewel, ornament, necklace' and not belong at 632. [p1q,2t] [NUA: Tak, Num; SUA: Tep, TrC, CrC]

1249 Arabic qasaṭa ‘divide up, measure’; Hebrew qəśiiṭaa ‘ancient weight, used as money, n.f.’; Middle Hebrew qəśiiṭaa ‘a standard value, coin, weight, jewel, lamb’;
Syriac(S) **qesṭ-aa** ‘measure, n.m.’; Hebrew qaśqeśɛt ‘scales’; or possibly Syriac qrṭ(’) ‘acacia shell’; Arabic quraidis ‘shrimp’:
UACV-577 ***pa-koCci** ‘shrimp’: My baa koóčim; Yq ba’akoči; AYq vaa koočim; CN akosili / akosilin. CN has its expected loss of initial *p (from *pa- ‘water’), though the s < *c is open for explanation. These languages devoted this cognate to ‘shrimp (shell)’: ***koCti** ‘shrimp’: L.Son90 *koci ‘camarón’; Wr kohcí ‘camarón, canqui’; Tbr koci-kal ‘camarón’; and My kóči kapá’ora = baa kóočim ‘camarón’. [SUA: TrC, Azt]
UACV-2015 ***koyo** ‘shell’: L.Son100 *koyo ‘concha’; M88-ko21 ‘concha’ and ko10; KH/M03-ko10: Eu kodó(k) ‘concha’; Op kodosi ‘ostia’; Yq koóyo; Wr ko’oyó ‘caracol’; My koyóole ‘cinto de campanitas’; Pl kuyul ‘coyol palm tree’; Tb kooyoo-t ‘turtle’. Jane Hill (p.c.) adds TSh koyoto-cci / kwiyoto-cci ‘mussel, clam, seashell’ and also notes Chumash q’oy ‘olivella’. Miller has here NP kota ‘crayfish’ and NP kotyottï ‘white shell necklace’. The *koyo and *koCta/i forms have often been combined. My koyóole (above) and NP kotyottï, short of a missing -t- in My, offer substantial resemblance, and shells being a trade item may mean that many of these are loan possibilities, as well. [SUA: TrC, Azt; NUA: Num]

1250 Aramaic(S) šrg / šrq ‘slip, slide’; Syriac šrʕ ‘slip, slide, glide’; Arabic zaliqa, -zlaqu ‘glide, slide, slip’; or Egyptian šddr ‘lowland, slope’?
UACV-2037c ***siro** ‘slide, slip’; Hp sirokna ‘slide it’; Tr sisíro- ‘patines, deslizaderas [skates]’ or Tr saráame ‘resbaloso [slippery]’; Ktn sirïhr(-)ïk / siđïhïrïk ‘play slide (down a hill on a hide)’; Tb šida’yat~’išiday’ ‘to slide, slip’; Tb šido’dot~’išidoot ‘to slither’. Miller includes Pl šiipinawai ‘to slide, slip’, but for Azt, CN šoloaa ‘slip, v.t., v.refl.’ is a better candidate, showing the medial liquid with possible assimilation of the first vowel to the second: *silo... > solo... In fact, CN š rather than s may suggest the same in light of CN’s other V assimilations in sand, etc. Ktn (haru’)haru’y ‘slip’ may have *s > h; Cr watasírï’ïpeka ‘se resbala’ (whose middle portion corresponds to *-siru’u-). This morpheme may be in *sïrpV (Hp sïrpa ‘slip suddenly’); TO heelwua ‘slide’; TO heelwuisk ‘slide’; Pl šiipinawai ‘to slide, slip’) at smooth. Other slip/slide terms follow, not necessarily cognate.
UACV-2037d ***si’ta**: Tr sitá ‘deslizante, que se desliza, que resbala’; Wr si’tá ‘be smooth, slippery’ (fut: si’taré-ma); Tb šida’yat~’išiday’ ‘to slide, slip’; Ktn šïtk ‘bald’.
UACV-2037e ***cita’ / *ci’ta** ‘slip(pery)’: AYq čitahko ‘slippery, smooth’; My číta(h)ko ‘smooth, slippery’.
UACV-2037f ***cito** ‘slide, slip’: Eu čitóvake ‘deslizarse’; My čítohte ‘se resbala’; Eu citóke ‘smooth’; Eu citó-da’a ‘slip’; Yq čitóhte ‘slide’; AYq čitohte ‘slip’; TSh (tac)cituhi ‘slip’. Note the variant 2nd V a/o in Cah.
SP si’yu ‘slide’; SP šiu’ ‘slip’; CU siyú-kway ‘slide’.
If a liquid was lost in a cluster, the two below ought to be considered:
UACV-2037a ***siko(h/’)i** ‘slide, slip’: I.Num190 *siko(o) ‘slide’; M88-si10 ‘to slide’; KH/M06-si10: Mn siqo ‘slide, vt’; Mn siġoġohi ‘slide, vi’; NP sikoi; Sh sikuhiC / sikoo ‘slide, vi’; Kw šigo’i.
UACV-2037b ***taC-sikohi** ‘foot-slip’: Mn tasiqohi ‘slip, vi’; TSh taccikohi ‘slip on one’s feet’. Add also WMU t*ah*ssíikwa ‘slip, vi’. The cluster of *-Cs- produced another instance of the c/s dichotomy in Mn tasiqohi and TSh taccikohi. [s/c, t/l] [1s,2t,2l,2r,2d [NUA: Num, Tb, Hp, Tak; SUA: Tep, TrC, CrC, Azt]

1251 Hebrew qaw / **qaaw** ‘string’; Syriac(KB) qəwee ‘woven’, pl: qəwayyaa / **qəwiin**; the Aramaic pl -iin on Semitic qaw would yield **qawin**:
Ls **qááwina**-š ‘bowstring’

1252 Arabic taffa (< *tappa) ‘to spit, spew’; Aramaic(J) tpp ‘spit out’, twp / tuup-aa ‘spittle-the’:
UACV-2122b ***cupa / *top** ‘spit, vi’: Sr cöv-kin ‘spit, v’; the -cuba of Wr a’kacuba ‘spit, v’. [1t,2p] [NUA: Tak]

1253 Syriac šaaq-aa ‘leg, shank, branch, stem, stock’; Hebrew šooq ‘thigh’:
UACV-2156 ***co(k/’)i / *cuC-ki** ‘trunk, base, stem, stalk’: M67-66; M88-co9; KH/M06-co9: Tr čokí 'extremidad inferior, tallo [stem, stalk]'; Tr ču’kí / čo’kí / ču’rí ‘tallo’; Tr čo’ki-su ‘a shoot’; Hp coki ‘upright plant, tree, bush’; Wr cohkí 'stem, trunk’. Ken Hill adds Wc cutïa ‘base, fundamento’. [1s1,2q] [SUA: TrC, CrC; NUA: Hp]

1254 Syriac səqaʕ, impfv -sqaʕ ‘to crouch, squat’; Syriac saqqaʕ ‘crouch down, cower’; Syriac saaquuʕ-aa ‘one who squats, crouches’: or Hebrew ṣʕy ‘be fettered, cower, tilt, lie down’; Arabic ṣġw / ṣaġaa ‘to bow, incline, bend, lean’; infinitive or verbal noun **ṣaġwu** ‘bowing, leaning, inclining’:
UACV-2197 ***cuku** 'stoop, bend over': L.Son46 *cuku 'agacharse'; M88-cu13; KH/M06-cu13: Op cuk; Eu cú-cuku; cuko; Wr cuhkú; Tr cukú/čogó 'be on all fours, stooped, bent over’. [1s3,2q,3’2] [SUA: TrC]

1255 Hebrew sgd, impfv: -sgod ‘bow down’; Arabic sağada, impfv: *-sgudu ‘bow down, bow to worship, prostrate oneself’; Aramaic (J) sgd ‘bend, bow, worship’; Syriac səged ‘bow, do reverence’:
UACV-943 ***coko** ‘knee, kneel’: L.Son37 *coko ‘knee’; M88-co12; KH/M06-co12: Tr cokóba-ra; Tbr soko ‘kneel’; Tbr mo-sokó-l ‘rótula’; Tr čokó ‘kneel’; Wr(alto) cohkópo ‘knee’. [SUA: TrC]

1256 Egyptian(H) wn ‘sein [be], existieren [exist]’:
But not Hebrew ʕalaa ‘he stood up, arose’, pl: ʕaluu ‘they stood up, arose’; see below 1257, 1258
UACV-2158 ***wïnï** ‘stand’: VVH161 *wïlï 'to stand'; M67-411 *wene; I.Num287 *wïnï/*wïhnï 'stand (durative)'; M88-wï6 'to be standing'; KH.NUA; L.Son343 *wïrï/*wïr-i 'pararse'; KH/M06-wï6: Mn wïnï; NP wïnï; TSh wïnï; Sh wïnï; Cm wïnï; Kw wïnï 'stand, stop, sg'; SP wïnï; CU wïní ‘be standing’; CU wïnï-wi ‘get up, stand up’; Tb ’ïwïnït ~ ’ïï’ïïwïn 'stand up'; Tb wïnït 'be located, exist'; Tb(H) wïnnï ‘be’; Hp wïnï 'be standing, sg'; Ca wéwen 'stand up, be standing, stop, stand still'; Ca wén 'put in place/order'; Ca wen-et ‘s.th. that is there’; Cp wé’ ‘there it is’; Ls wón 'be at a place'; Gb wó 'there is/are'; Sr wïn/wïnïi 'be in a place, lie (mass/pl)'; Sr čöno’-wïn resultative of čöno’-k 'stand up, stop, sg'; Eu wéhra 'parar'; Wr werí; Wr(MM) wela / wera / wer- ‘parar, poner parado/a [put standing]’; Wr(MM) weri ‘estar parado/a [be standing]’;Tr wiri-mea; Tr wer;
My wéyyek; My wéyye 'caminar'; AYq weyek ‘be standing, sg’. [e1w,2n] [NUA: Num, Hp, Tb, Tak; SUA: TrC]

1257 Hebrew ʕaalaa ‘he stood up, arose’, participle: ʕoole, pl: ʕaluu ‘they stood up, arose’:
Tb(H) oolït ‘get up’ vs. Tb(H) wïnnï ‘be’ from Egyptian wn / wnn ‘be’;
1st from Hebrew ʕalaa, but 2nd could not be, but aligns with Egyptian wn/wnn or Semitic ẖny. Tb oolït may reflect the participle Hebrew ʕoole ‘arising, ascending, getting up’ [1’2,2l,3y]

1258 Hebrew plural: ʕaluu ‘they stood up’; while the two forms of Tbr were / welo ‘estar, estar en pie’ align with singular and plural, the Tepiman forms align with a reduplicated plural ***wïwïlu-** of the two in singular Hebrew ʕalaa ‘he stood up, arose, masc singular’ and plural: ʕaluu ‘they stood up, arose’:
UACV-2159 ***wïwïlu-ka > Tep gï(g/r)uka** ‘stand, pl’: B.Tep48 *guguka 'to stand, pl’; M88-wu1; KH/M06-wu1: TO gegok 'be standing, pl’; UP gïgukï (B.Tep); PYp gerok ‘be standing, upright, pl subj anim’; NT gúúka; ST guguuk 'standing, pl’. The PYp form suggests that this is a pluralizing reduplication of *wïlï above, i.e., *wïwïlu with final -u instead of ï, like the one Tbr form of Tbr wele / welo; thus, *wïwïru > wïwru-ka > Tep *gïgruka > *gïguk / guguk. Note the two forms of Tbr weré/welo, the latter matching the pl stem, the former matching *wïlï above for sg. [1’2,2l,3y] [SUA: Tep]

1259 Hebrew brk ‘kneel down, bless, praise, adore’, impfv: CV-**brok**; this is a Sem-kw contribution, as obvious in Ca, less obvious in Hopi, and loss of w in Cahitan bw > b:
Ca kwéy’eqi ‘stoop down, vi’; My beyúk ‘se agachó [stooped, bent over]’; Hp yok-ta ‘be nodding off, be bending or stooping over repeatedly’ of impfv **-brok** with loss of -b- in the cluster. [kw1b, kw 2r, kw 3k]

1260 Hebrew brk ‘kneel down, bless, praise, adore’:
UACV-2202 ***po’o-ta / *poro-** ‘bend over, stoop over’: AYq po’ola ‘stooped over’; AYq po’okte ‘bend, stoop, double over'; Cr áh pú’utawí’isï 'se inclina [lean, stoop]; with *o > Cr u, AYq and Cr match. In both Cah and Cr we see liquids r/l > -’-. [p1b,p2r,p3k] [SUA: TrC, CrC]
UACV-2200 ***luka** ‘stoop’: Ca lúku ‘bend the body forward’; Cp áwluke ‘set (of sun), v’; Ls lóóqa ‘stoop’; *u-a > o-a may explain Ls o, and Cp has a prefix; otherwise, good. [NUA: Tak]

1261 Arabic šdd ‘to be firm, solid, hard, strong’:
UACV-2219 ***sïCï > *sïï** ‘strong’: Sh(C) sïttawïtti ‘strong, muscular’; Cm sutena ‘forcefully’ (< *suttVna); SNum forms are likely of another source: Kw sïï-ga-dï ‘one that is strong, of trees’; SP šïï- ‘strong’; SP šüű-ġa-ntü; WMU süű- / süű-ġa / süű-ġa-tt*ü* ‘strong’; CU süű-a-ġa-tü ‘strong’. Note *-tt- in CNum. [NUA: Num]

1262 Aramaic dakar ‘remember’; Hebrew zakar ‘remember, mention’; Arabic đakara ‘remember, think, mention’; Tep may have m sg obj oto: đakar oto ‘think on it’:
UACV-2286 ***tïkay** ‘think’: TO čegito 'think'; PYp tekito ‘think, need’; Hp tïïqayi ‘learn, hear, heed’;
Hp tïqàypi ‘temple, side of forehead’. [1z2,2k,3r] [SUA: Tep]

1263 Hebrew šlk ‘throw, dispose of, throw away’ and ‘be thrown to the earth’ (hoqṭal)’;
*šillek-aa (qittel with suffix):
UACV-2318 ***sïk** ‘beat, throw (with power, furry)’: Ca séqay 'whip'; Ca pe-séqay 'whip, throw (one's power at s.o. to kill him)' and CN šookoaa 'hurl s.o. or s.th. down in scorn’. CN assimilated V’s from *sïk. [1s1,2l,3k] [NUA: Tak; SUA: Azt]

Below are three forms in a row aligning with various forms of Semitic tpr ‘sew together’:

1264 Hebrew tpr / taapar, impfv: -tpor, cohortative *-tpora < *-tpura ‘stitch together’;
Hebrew qittel impfv: -tapper (< ***-tappir**) ‘sew together’; Aramaic(J) tpr ‘join, sew, mend’:
UACV-2332a ***tappiCta** ‘tie’: M67-438 *tapi ‘tie’; M88-ta24; KH/M06-ta24: NP tappi ‘tie’; Kw tapiči ‘tie’; SP tavičča 'tie'; CU tapíc’a-y ‘tie’; Cr tápi-’i 'he is tied to the stake’. Eu **hitápura** ‘make a knot’ and Eu hitápuri ‘knot’ highly resemble Hebrew hit-qattel—**hittapper**— or a similar form is a niqtal infinitive—hittaper—though Eu -p- may suggest a doubled *-pp- as in the first, which is also more likely or more common. An intensive (Hebrew qittel *-rabbiṭ or Arabic II) of Semitic rbṭ (Arabic rbṭ ‘bind, tie up’) would yield similar forms, but tpr with final r clustered with t would yield similarly: *-rt- > -č-.

1265 Hebrew quttal (passive of qittel impfv above) would be ***-tuppar** ‘sown together’:
UACV-2332b ***tuppa** ‘tie(d)’: NP tupaga (< *tuppaka) ‘tie with’, Mn wïtopisa (<*wïC-toppisa) 'tie a knot in’. An intensive (i.e., Hebrew qittel or Arabic II) of Semitic rbṭ (Arabic rbṭ ‘bind, tie up’) would yield similar forms to this and the above, but Semitic tpr seems more likely. Ls túúča/i- ‘be tied, vi, tie, vt’ with loss of p in a cluster is a less clear possibility from quttal of either tpr or rbṭ

1266 Hebrew tpr / taapar, impfv: -tpor, cohortative *-tpora < *-t**pura** ‘stitch together’; Hebrew qittel impfv: tapper (< *tappir) ‘sew together’; Aramaic(J) tpr ‘join, sew, mend’:
UACV-2330a ***pura/i** 'tie': VVH97b *puli/*pula 'to tie'; M67-437 *pul 'tie'; L.Son221 *pura, pur-i 'amarrar'; B.Tep285a *vurai 'he ties up'; 285b vurisa 'to tie up'; 285c *vuu 'he tied up'; CL.Azt173 *ïlpi; M88-pu2; KH/M06-pu2: Tb puunat~’umbun 'tie a knot'; TO wuud; wudakud 'rope, strap'; TO wul 'be tied together'; wulim 'bale, bundle'; Nv vurha ‘atar’; PYp vuura ‘fasten, tie’; NT vúli ‘está amarrado’; NT vupúúlčapai ‘amarrar (animal), vt’; NT vupúúrai ‘amarrar, vt’; ST vulyi’ ‘amarrar’; ST vuraak ‘lo amarró’; Eu búra/vúra; Wr pula/puri; Tr burá/buri; Wc hïa 'amarrar'; CN ilpiaa 'gird oneself, tie s.th./s.o. up'; CN piloaa 'hang s.th./s.o./self up'; Pl pilua 'hang, wear about the neck’. What of Ls póta/i ‘fasten, pin’? Or Semitic kbl ‘fetter, bind’? [SUA: Tep, TrC, Azt, maybe NUA: Tb, Tak;]

1267 Hebrew ʕml ‘exert oneself’; Hebrew ʕaamel ‘burdened with grief, worker’; unattested huqtal 3rd m sg *yuʕmal ‘be tired’; Arabic ʕml / ʕamila, impfv: ya-ʕmalu ‘to do, work, take pains, exert oneself’:
UACV-2341 ***yu’ma** 'tired, worn out': Tbr yum- ‘cansarse [get tired]’; Yq yúume ‘cansarse [get tired]’; My yuúme ‘se está cansando’; Ch yum’á 'tired, suffer, drunk, dead, pl’; Tb yu’mat~’uuyu’m 'worn out'; Tbr yu-nium-ká-m 'anciana’ (-ni- = Tbr ñ < *y, thus < *yuyum). [1’2,2m,3l] [NUA: Num, Tb; SUA: TrC]

1268 Hebrew maʕ[a]le ‘rising, ascent, climb’; Hebrew maʕal ‘above’;
Hebrew maʕ[a]laa ‘upward movement, stair, upwards’:
UACV-2444 ***-mo-** ‘up(ward)’: Wr i’móla 'stairs'; Eu mówa ‘arriba’; Tr mo- ‘encima’; Tr -mo-ba 'encima de'; Tr nemo(nó) 'mount on'; Tr mowi ‘subirsele, encimarsele’, pl: himo; Wr i’mó- ‘climb’; Wr mohéna- ‘climb’; Wr mo’tepú- ‘climb up s.th., vt’; Eu hámu ‘subir’; Eu hámudau ‘subida’; Kw mo’osï ‘rise, vi’; Hp mó’o’-ta ‘be piled high in a mounded shape’; Hp mo’ola 'pile up, make mound’, but Hp V should be ö. [1m,2’2,3l] [NUA: Num, Hp; SUA: TrC]

1269 Hebrew *na-r’ey ‘be seen, appear’:
TO neid ‘be seen, appear, find out’ vs. TO neiđ ‘see, discover, visualize, realize, perceive’:
UACV-1905 ***nï(r) / *nï(r/y)’i** ‘see’: B.Tep177 *nïida ‘to look’; M67-366 *ne ‘see’; L.Son174 *nï ‘ver’; M88-nï1 ‘see s.th.’; KH/M06-nï1: TO nea, ne’a ‘look, see’; TO neiđ ‘see, discover, visualize, realize, perceive’; TO neiđa ‘seeing, s.th. seen, sight’; UP ñïidï; LP nïij; NT nïidyá; ST nïidya; Wr ne’né ‘verlo’; Tr né’ ‘mirar’; Tbr nyeré, nyera ‘mirar’; Hp nïpcawi ‘one who stares out of curiosity’; Hp(Albert, Shaul) nïkcawi / nïpcawi ‘stare at, be easily attracted’; Cr ha-tá-nyee ‘he is awake’; Pl neesi ‘appear, look like’. Ls nóóli ‘see, look, read, visit s.o.’ is crucial to the medial consonant, as l > s in Azt adjacent to voiceless C. Note also Tr newá ‘visible’; Tr ne’ná ‘admire’; SP nayava / naya’pa ‘seem, look like’; Tr e’né- ‘see, look’; Tr e’náwa- ‘be admired’; and CN neesi ‘appear, reveal oneself, become visible’. In his NT dictionary in progress, Bascom lists NT ñeéyi ‘see, vi’; NT ñídyi ‘see, vt’. Tr newá- ‘present, perceptible, realized (used with other verbs rather than alone)’ is noteworthy. [l/r > y/d/s; w > v in Num] [SUA: Tep, TrC, CrC, Azt; NUA: Num]

1270 Hebrew (*bayin >) been ‘between’; Arabic bayna ‘between, among’; Syriac bainai ‘between, among’:
UACV-2565 ***kwan** ‘with’: NT abáána ‘junto a, junto de, junto con [together with]’; ST baan ‘con (apartado)’. [kw1b,2n] [SUA: Tep]

1271 Hebrew naaš-iim ‘women, pl’ (suppletive plural of ’iššaa ‘woman, sg’); Syriac nešaa ‘women’:
UACV-2574 ***nos-tu** 'old woman': BH.Cup *néc 'old woman'; M88-no11 'old woman'; Munro.Cup140 *nééči-la; KH.NUA; KH/M03-no11: Cp níču 'grow old (of women)'; Cp níšlyuve-l 'old woman'; Ca níšlyuvel 'old woman';

Ca níšl^{y}uvuk 'bec. old (of women)'; Ls néé̌cu 'bec. an old woman'; Ls néš-la / néš-ma-l 'old woman'; Sr niihtavï^{r}ţ 'old woman', pl: niniihtavï^{r}m; Sr niihtavï^{r}ţu' 'grow old (of a woman), become an old woman, v'. Ken Hill notes the 1st V is likely due to Ca influence. Sr nïïht 'woman' also exists. Ken Hill adds Ktn nohtat, pl: nonohtam. Note Serrano's four terms—Sr naašt 'girl', Sr nääht̨ 'young woman', Sr nïïht, pl nïnïïm 'woman', and Sr niihtavï^{r}ţ 'old woman' (tav < *rab 'great'). [NUA: Tak]

1272 Arabic qšr 'to peel, shell, derind, debark, skin, husk', f. impfv ta-qšir:
UACV-2019a ***asi'a** 'bark, n' (SNum): Kw 'asi'a; Ch 'asi'a; CU sí'aa-vi. [loss of initial vowel in CU]
UACV-2019b ***si'a** 'hull, shell, peel, v': BH.Tak *si'a 'hull, v'; M88-si6; KH/M03-si6 'to shell, hull, v': Cp si'ay 'to hull acorns'; Ca si'ay- 'to peel (fruit, bark of a tree, etc.), vt'; Ls ší'awiš 'shelled acorns'; NP tasi'wa 'to crack pinenuts'. The semantics are identical, and the forms fit the rare (i) vowel of the impfv, and NP even shows the 3rd f prefix *ta- as at 561. The glottal stop may reflect a consonant cluster at the morpheme boundary, a morpheme perhaps resembling what is visible in Ls and NP -wa. [NUA: Num, Tak]

The next few items are relevant to the Aramaic-leaning of the Semitic-p language, discussed later.

1273 Aramaic ***-t-aa** 'the' (f. suffixed definite article, often part of citation form, drops when possessed): *UA ***-ta** 'absolutive suffix (dropped when possessed).
UACV-2678 ***-ta** 'non-possessed/absolutive suffix': Whorf1837b; BH.Cup*-ta/*-la/*-ca 'absolutive suffix'; Miller1983,120; KH/M06-ns1: TSh -tta 'accusative'; Sh -tta (obj form); Tb -l, -t; Hp -t(a-) 'non-possessed accusative singular'; Sr -t(a-)/-ç(a-)/-č(a-) 'singular'; -t(a-) 'non-possessed'; Ca -t/-l/-l^{y}/-š/-č; Cp -t/-l/-l^{y}/-č; Ls -t(a-)/-l(a-)/-š/-ča; Gb -t/-r/-y; My -ta 'accusative'; Op -ta 'accusative for class I verbs in Op (Shaul 1990, 563); TO -t, -č; CN -tl/-tli/-li < PUA *-ta. Relevant to this is that in some Aramaic dialects, the definite noun form is more often the citation form or equivalent to UA's absolutive. [NUA: Num, Tb, Hp, Tak; SUA: Tep, TrC, Azt]

1274 Hebrew kookaab 'star'; Aramaic(S) kookb-aa' / kookəb-aa' 'star-the'; Syriac kaukab 'star'; Syriac kaukb-aa' 'star-the':
Sr kupaa' 'to shine (as of the stars)'; another verbalization of a noun, even showing the final glottal stop. Everything is as expected: (1) vowels generally rise from Sem to UA (o > u); (2) Aramaic's suffixed definite article causes the last two consonants to cluster, and Sr -p- (vs. -v-) shows a cluster underlies it, such as -kp-; (3) all vowels and consonants are as expected, even the final glottal stop of suffixed article -aa'. Even Syriac itself denominalizes the noun to a verb: Syriac kawkeb 'to cover with stars'. [1k,2k,3b]

1275 Syriac ħaql-aa 'field-the, open country-the':
UACV-1830 ***oka** / ***('/h)oka** 'sand, earth, rock': Sapir; M67-355a *'o 'rock'; I.Num11 *o(o)h 'pebbles'; M88-'o9; Munro. Cup38 * ééxa-la or hááxa-la 'earth/land/sand'; KH.NUA; KH/M06-'o9: Sr 'öö^{r}q-ţ 'sand'; Gb 'óxor 'earth, land, dirt'; Gb 'ohét 'sand'; Ls 'éx-la 'earth, land, dirt'; Ca í'exi-š 'desert' and Cp háxa-l 'sand'; Sapir lists Gb öxa-r 'land' and Fernandeño öxa-r 'land' which also suggest a 2nd vowel of *a* (*oka); Ktn 'oka' 'sand, sandy area'; Ktn 'a'-oka' 'arroyo, canyon'. Most interesting is Ls 'éx-la 'earth, land, dirt' whose e < *o, shows a rare -la instead of the more common -l and -t, which -la is most often motivated by a clustered nasal or liquid like an underlying *okl-la. These may tie to CNum *ok(w)aiC 'flow, river' at river, though Sh om-pin 'talus rocks, scree' and Sh okwaiC 'flow'; Sh okaiC-pin 'river' show different looks. A shorter *oC / *oN seems to underlie Mn pa-'oo' 'gravel'; NP pa'oppï 'streambed gravel'; Sh om-pin 'talus rocks, scree'; SP oC-, uC- 'round object'; Hp owa 'rock, stone' pl: o'wa (vowel is wrong). Hill adds Ch ompi 'almagre [red ochre]'; TSh ompin 'small water-worn pebbles or gravel'; TSh oŋkompin 'small water-worn pebbles or gravel'. Let's separate the preceding *oC- / *oN- from the following (perhaps *oka / *oNka). Questionable is Wr o'sé 'pedregal' unless it has another morpheme. 1h2,2q,3l [NUA: Num, Hp, Tak; SUA: TrC]

1276 Aramaic talg-aa 'snow-the'; Syriac talg-aa 'snow-the, n':
UACV-2077 CNum ***takka** 'snow': Sh takka-pin 'snow'; WSh takka-; TSh tahapi. [1t,1s1,2l,3g] [CNum]

1277 Hebrew rbṣ, impfv: -rbaṣ 'lie down, rest'; Arabic rbḍ, impfv: ya-rbiḍu 'lie down, lie, rest (animals, with their chest to the ground'; Aramaic(J) rbʕ 'lie down'; Syriac -**rbaʕ** 'lie down':
UACV-1319 ***po'o / *po'i** 'be lying down': VVH130 *po'i/*po'o 'be lying down'; M67-260 *po 'lie down'; L.Son208 *po, *po-i 'acostarse'; M88-po3 'be lying down'; KH/M06-po3: Ls pé-t, -pe' (poss'd) 'bed'; TO wo'i 'in a prone position'; Eu voó 'acostarse uno [lie down]'; Eu voí 'acostado [lying down]'; Wr po'í 'estar acostado [be lying down], sg'; Tr bo'í 'estar acostado, sg'; My bó'oka 'acostado'; My boo'-te 'acostarse'; AYq vo'o-te 'lie down'; AYq vo'o-ka 'be lying down'. Tep: PYp vo'o/vohopo 'be lying down, sg/pl'; NT vóópoi 'acostarse'; NT vóídyagai 'el acostarse, verbal n'; ST vooda' 'acostar (anim obj); ST vo' 'estar acostado'; ST vo'ya' 'acostarse'. Miller adds NP pukkwa 'be lying down, pl'—maybe, if compounded. [1r,2b,3'2] [NUA: Num; SUA: Tep, TrC]

1278 Syriac ḫmʕ ‘to ferment, leaven, mix’; Aramaic(S) ḫmʕ ‘to ferment, leaven’:
Hopi homo’-ta ‘be mounded, bulged, convex’. The leaven of a bread causes it to rise, mound, bulge, be convex. Hebrew/Semitic ṣ > ʕ of Aramaic is similar to UA s > Numic ’.

1279 Aramaic(J) yəgar (< *yagar) ‘hill, heap of stones’; Syriac yigar, yagr-aa ‘heap of stones, barrier’; Biblical Aramaic yəgar ‘stone monument’:
UACV-1546a ***yakaC / *yakaR** (AMR) ‘nose, point, ridge’: Sapir; VVH110 ya$_s$ka ‘nose, end’; M88-ya3 ‘nose’; M67-308 *yaka ‘nose’; B.Tep11 *daaka ‘nose’; L.Son350 *yaka ‘nariz’; CL.Azt117 *yaka ‘nose’; KH/M06-ya3 *yakaR (AMR):
Hopi yaqa ‘nose’, combining form yaqas-; Eu dakát ‘nose’; Tbr níki-so-r (UA *y > Tbr ny > ni); Yq yéka; My yekka; Wr yahká; Tr a’ká. Remember, the Tepiman branch (next 5 languages) has the sound change UA *y > d: TO đaak ‘nose’; LP(B) daak; PYp daaka; NT daáka; ST daak; Wc yéekaráu ‘beak’; CN yaka-tl ‘nose, point, tip’. Miller notes other cognates of varying semantics: Mn yoqa ‘nasal mucus’; SP yaġaa ‘edge, end’; Tb yahaawi-t / yahaawi-l ‘summit, point’. SP and Tb semantically align with CN. Sapir lists Tr yaxka and Ca yeka, though I can find neither in my sources. A fairly clear NUA-SUA distinction for ‘nose’ emerges in NUA *mu-pi and SUA *yaka (except Hp yaqa with SUA), though, as Miller shows, other reflexes of *yaka in NUA have related meanings (e.g., SP yaġaa ‘edge, end’). As Tbr typically shows a palatalized nasal ñ/ny for y, then Tbr níki-so-r ‘nose’ is also a reflex with both vowels assimilating toward y/i: *yaka > nyaka > nyka > niki. The final -s in Hp’s combining form is noteworthy. The other semantic group is below in b:
UACV-1546b ***yaka** ‘side, ridge, point’: Kw yïga/yagaa ‘side’; CU yaġáa-vï ‘side, also side of the body’; SP yaġaa ‘edge, end’; Tb yahaawit / yahaawil ‘summit, point’. This is in all eight branches.
Hopi, Tb and SP show most nearly the original meaning. R > s in Hp, as in buzzard, etc, so I am impressed with AMR’s reconstruction of *yakaR. [1y,2g,3r] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1280 Aramaic(J) mooq ‘felt-sock or stocking’; Aramaic(S) **mooq-aa** ‘shoe-the’; Syriac muuq-aa ‘shoe, slipper’; Aramaic pl *muuq-aya ‘shoes’:
UACV-1958 ***moko** ‘footwear’: Mn móqo ‘shoe’; Mn moqoya ‘wear shoes’; NP sogo-moko ‘moccasin’. [1m,2q] [NUA: Num]

1281 Syriac pant-aa’ ‘upper leather of a shoe, instep of the foot-the’;
Aramaic(S) ’appant-aa’ / pant-aa’ ‘upper part of a shoe-the, n.f.’;
UACV-1957 ***paNca** ‘shoe’: TSh pancan ‘shoe, moccasin’; Kw paca-vï ‘shoe’; Ch pacáciv*ü* ‘moccasin’; SP pačča ‘moccasin’; WMU pač ‘shoe, sandal, n’; WMU p*ah*ccá-n ‘my shoe’; CU páca ‘shoe’. [NUA: Num]
UACV-1960 ***pïta** ‘footwear’: My bera’abotčam ‘sandals’; My petatíom ‘(kind of) sandals’; Yq bera’a boočam ‘sandals’; AYq vera’a voočam ‘sandals; Yq béra’a boočam ‘huaraches’; Tr péreara ‘sole of shoe’. Note -n- in Tb. [SUA: TrC]

1282 Aramaic(S) ʕaṭmaa ‘thigh, n.f.’, pl: ʕaṭmee; Syriac ʕaṭmaa ‘thigh, n.f.’, ʕəṭamtaa ‘thigh-the’:
UACV-946b ***uma** ‘thigh, upper leg’: TO um ‘thigh’; Nv ’uma ‘thigh’. Also
UACV-946a ***om** ‘lower leg’: M88-’o24 ‘leg’; KH/M06-’o24: Sh oon/oom-pin ‘lower leg’; Cm oomo ‘leg, usually whole leg’; Ca -’i ‘leg’; Ls ’e-t ‘foot, leg’. Some nasals in Tak would be nice, but Ls’s absolutive -t does suggest a consonant. Jane Hill (p.c.) astutely observes that this stem appears to be at ‘bone’ for WNum and SNum, but here means ‘leg’ for CNum (1477). [1’2,2t2,3m]

1283 Aramaic(J) ramš-aa’ **/ ruumš-aa’** ‘evening-the, n.m.’; Aramaic(J) ramšiit / ruumšiit ‘last night’; Syriac rmš ‘become evening’; Syriac rəmiš ‘evening’, ramš-aa’ ‘evening-the’:
Sr **ruma’**q ‘become dark’; Sr rumaaruma’n ‘be dark’; Sr **ruma’**-cï’q ‘be very dark, awfully dark’. We often see the verbalization of a noun form in the Semitic to Uto-Aztecan tie, and outside of loss of š in a cluster, which is common, this Sr form is identical to the Aramaic form, having exactly the same vowels and even preserving the glottal stop of the suffixed definite article. 1r,2m,3s1

1284 Hebrew daawɛ (< *dwy), fem: daawaa ‘faint, sick, or mentstruating’; Arabic dawiya ‘be miserable’; Eth dawaya ‘be sick’; Ugaritic dw ‘be sick’; Aramaic(S) dwy ‘be miserable’ and **dəwaay-aa** ‘grief-the’:
UACV-1978 ***tïwoya / *tï’oy / *tï’mo** ‘sick(ness)’: M88-tï21: KH/M06- tï2: NP tïoiyai ‘sickness in body’; Sh tïwoi ‘sickness, disease’; Sh(M) tïmmai ‘be sick’; Hp tïïya ‘sickness’. We can add Cm tï’oi-pï ‘long illness, invalid’; Cm tï’oi-katï ‘be ill for a long time’; Sh(C) tï’ïmmai/ tïmmai ‘be sick’. Cm tï’oi, NP tïoiyai and Sh tïwoi match very well, and Hp belongs as well with either vowel loss (tï_ya) or assimilation. Forms with -m- likely involve another morpheme. Yet agreeing in the first three segments with Sh tïmmai is CN teemooš-tli ‘sickness’. Note also Sr tomaahan ‘be very sick’. [1d,2w,3y] [NUA: Num, Hp; SUA: Azt]

1285 Hebrew daawɛ, fem: daawaa ‘faint, sick, or mentstruating’; MHebrew **madwɛ / madvɛh** ‘menstrual blood flow’; Aramaic(J) dəwaa’ ‘feel pain, groan’; Syriac dəwaa’ be sad, wretched, grieve’;
Syriac madwəyaan-aa ‘afflicting, reducing to misery’ > Ktn mïyvï’ ‘menstruate’ if d > đ > y.

1286 Semitic -a ‘accusative suffix’
UACV-2683 ***-a** ‘accusative suffix’: Langacker (1977a, 82-3) considers the accusative vowel *-a to have been the regular accusative suffix in PUA and he mentions it still being productive in Tb, Southern Numic, and Shoshoni. For example, Kw -a ‘accusative’ (Zigmond at al 1991, 41). John Robertson first noticed the two—Semitic accusative -a and UA -a—first in Eudeve and others. [NUA: Tb, Num; SUA: TrC]

1287 Hebrew *na- of the niqtal in UA’s mainly reflexive role came to mean ‘the two’ from ‘each other’:
UACV-2621 ***na-** 'twice, double': M67-514a *na 'twice, double'; M88-na25; KH/M03-na25: NP naapahi six (pahi three), as well as in most of Numic; Hp naalöyöm ‘four’ vs. Hp lööyöm ‘two’. See *na-wakay ‘four’ and *na-pakay ‘six’. na- is a plural marker in some Kiowa-Tanoan languages as well. [iddddua] [NUA: Num, Hp]

1288 Semitic -i ‘one/someone/something from (an area/place or group of people)’:
UACV-2702 ***-i / *-ya** ‘person from’: Langacker 1977, 45 *-ya ‘person from’: Langacker lists examples from Tr -i and Ls -ya- though others exist. [NUA: Ls; SUA: Tr]

1289 From unattested Hebrew šgʕ ‘be raging, mad’ appears Hebrew məšuggaʕ ‘raging, mad’:
CN šiikoaa ‘ser celoso [be jealous], estar enojado [be angry], enfadarse [be displeased]’ (Simeon).

1290 Arabic šibl- ‘lion cub’ or Arabic sabʕ- / sabuʕ ‘beast of prey, lion’—either could underlie
Wr tehsebori ‘baby mountain lion’ if teh- is ‘rock’ or other, and -ri ‘noun suffix’. [1s,2b,3l]

1291 Arabic šakka ‘to pierce, prick, stab’; Arabic šikkat ‘weapons’; Hebrew sek ‘thorn’;
Hebrew sukkaa(t) ‘barb, spear’:
SP siġi / siki ‘spear’; SP sixi-tona ‘to pierce, stick’; perhaps Tbr ali-sik ‘ant’; Tr sikuwi; Wr sekwi, etc.

1292 Hebrew śyb ‘be grey-headed, old’; Arabic šyb ‘become old, white-haired’; Hebrew śeebaa ‘grey hair, advanced age’:
Wr ahseba ‘reach or be so many years old’; SP siu- ‘light grey’. Wr has a prefix, perhaps Hebrew haC- ‘the’.

1293 Hebrew hiśkiil, hiśkal- ‘to understand, comprehend, have insight, to make wise, insightful’:
CN iskalia ‘ser discreto, prudente [be discreet, prudent]’ (Simeon). [1s2,2k,3l]

1294 Arabic rɦl ‘to set out, emigrate, V to wander, roam’ > Tb tooiy ‘to travel about’. [1r,2h2,3l]

1295 Hebrew ṣnʕ ‘to be modest, humble, retiring’:
CN -cinoa ‘a verbal suffix of respect or love’ [iddddua] [1s4,2n,3’2]

1296 Hebrew ṣll ‘to become dark or black’; Arabic ẓll ‘be black’:
Tr čona ‘to be or become dark or black’ (if -ll- > -n-). [1s4,2ll]

1297 Hebrew prk ‘to crush’; Aramaic(J) pərak ‘to crumble, crunch’;
Arabic frk < *paraka, *-pruku ‘to rub, crush’ (or Semitic prq ‘tear off, split’):
SP puruqqwi ‘to break to pieces’. [1p,2r,3k]

1298 Hebrew pry / paraa ‘to bear young, to bear fruit’:
SP pia ‘mother, female’. [1p,2r]

1299 Syriac ṣrɦ ‘groan, cry out, crackle (of fire, lightning)’; Arabic ṣrx / ṣaraxa ‘cry, yell’: Akkadian ṣrx:
UACV-2072 ***ïsotoN-(kV)** / ***ïsoroN-(kV)** / ***osoroN(i)** ‘snore’: Tb šoloon ‘snore’ (pfv of oššoloon);
NP ïsodododoi ‘snore’; TSh *osotoŋwa < osoroŋwa ‘snore’; Sh ïsotoppai / ïsoroppai; Cm ïsorokiitï;
Kw ’osoroni ‘snore’; SP ossoroŋwi ‘snore’; WMU söörii ‘snore’; PYp sorkia; NT soróókai ‘snore, snort (animals)’; ST sorkia/sarok (present). Curiously, sneeze and snore remain so pervasively intact. This Sem-p form contrasts with 83 Sem-kw form. [ɦ>ŋ in Sem-p] [p1s4,p2r,p3h2,p3x] [NUA: Num, Tb]

83 Hebrew ṣrɦ / ṣaaraɦ ‘shout’; Akkadian ṣaraaxu ‘weep, cry, complain, sing a lamentation’; ESArabic ṣrx; Ethiopic ṣarxa ‘shout, cry out, v’; Sem-p would have x, so UA rounding of pharyngeal is Sem-kw:
UACV-1972 ***cayaw** ‘shout’: Tb caayaau ‘yell’; My čaaye / cáyye ‘gritar’; Yq čáe/čái, Tbr cai-/ca- ‘gritar’.
Perhaps Hp(S) caalawï ‘announce, call out’ as some y < liquids. [l > y?] [kw:1s4,2r,3x,3h2] [SUA: TrC; NUA: Tb, Hp]

1300 Hebrew **mɛlɛk / malk-** ‘king’; denominative verb **mlk** ‘to rule, be king’; thus, the participle Hebrew **moolek** ‘king’; Aramaic (J) mlk ‘to lead in council’, ni-mlak ‘be led, take council’:
Hp **moŋwi** ‘chief’ is of interest since collapse of the second vowel is common in UA and liquid > nasal in NUA, then liquid + velar = velar nasal ŋ, with the rounding of the o extending past the cluster: *mulek > mulk/munk > muŋi > moŋwi (PUA *u > Hp o). Note Hp moŋaqwa ‘from a point in front’; and because the king/chief is number one or in front, consider non-clustered Cp muluk ‘first’ and Cp mulu’nuk ‘first’;
Cp mulu’-we-t ‘the first’; Ca muluk ‘first, at first, for the first time’; Ca mulu’-ku / mulu’-nuk ‘first, at first, for the first time’; Seiler and Hioki (1979) propose that Ca muluk may contain a morpheme division of mulu-k, which may well be, though the fact that all of the compounds also contain a glottal stop where the k would have been, when clustered with a following consonant, recommends k > ’ and thus underlying *muluk is as likely as not. [NUA: Hp, Num, Tak]
UACV-1860 ***moNki / *muŋi** ‘lead(er), chief’: Sapir: Hp moŋwi ‘leader, head, chief’; SP moi- ‘lead, act as chief, v’ (< *moŋi says Sapir, and thus nasalizes following C as if moi-N). The SP term is either cognate with the Hp term or borrowed from it, for its nasal vowels are the residue of the nasal consonant. Perhaps Tb(H) mïškït ‘to lead, vi’; Tb(H) mïškip ‘in front’ if -l- devoiced next to voiceless -k. [medial -ŋ-] [p1m,p2l,p3k] [NUA: Num, Hp]

1301 Aramaic(J) mlk ‘to lead in council’; passive ni-mlak ‘be led, take council’; melek ‘leader in council, chief, king’; Aramaic(J) muul / mool ‘border, front, in sight of’:
UACV-1547c ***mul / *muluka** ‘first’: BH.Cup *mul ‘first, before’; M88-mu12 ‘face’; M88-mu14 ‘before, first’. Ken Hill correctly combines M88-mu12 and mu14 in KH/M03-mu12: NP mui ‘first’; Cp múluk ‘first’; Ca múluk ‘first’;
Ls ’amú-(la) ‘first, previously’; Hp mòoti ‘first, before’; Hp mòope(q) ‘in front’; Hp moŋaqw ‘from a point in front’; Hp moŋwi ‘leader, head, chief’. Hp ŋ may suggest that the original morpheme included the three consonants in Cp and Ca, since Hp ŋ is a nice reflex of an -lk- cluster, after loss of the intervening vowel, then showing a velar nasal for the nasalization of the liquid (*l > N) plus a velar in a resulting cluster: *muluka > *mulka > *muŋa. Tb(H) muluuka’ït ‘herd together’; Ktn namumuk ‘first’; Ktn pamukit / pamukpit ‘first, ahead’; and Ktn lamumuk ‘first’ show 3 separate prefixes (na-, pa-, la-) to -mu(mu)k, similar to 2 of the 3 in Tr bumblebee: Tr napári, ŕapára, wapára. After -lk- cluster, Tb mïškït ‘to lead’; Tb(H) mïškip ‘in front’ [syncope to cluster; Hp -p- < *-CC-] [NUA:Num, Hp, Tak, Tb]

1302 Hebrew pʕl ‘to do, make, accomplish’;
Arabic fʕl < *pʕl ‘to do, act, have an effect on, have an influence on’: Hp powa-ta ‘to cure, tame’;
Hp powà-l-ti ‘cured from sickness, tamed’ (powà-l-ti ‘cure-stative-resultative’) [1p,2’2,3l] [iddddua]

1303 Hebrew plk ‘to be round’; Hebrew pelek ‘whirl of a spindle, circle’:
(in UACS-357) Hp pölà-ŋ-pï ‘round as a ball’ (globular shape-?-resultative) [1p,2l,3k]

1304 Arabic *pgr ‘to cleave, break up’ II ‘to split, cleave, explodes (s.th.)’;
Aramaic(J) pgr ‘break up, destroy’:
UACV-1080 ***piŋa** ‘grind’: In contrast to *poŋ, several *piŋ forms also exist: Sr piŋai ‘crumble, pulverize, grind into powder’; Ca píŋ ‘get ground, pulverized’; and add Ktn piŋan ‘crumble, vi’; Ktn piŋi’ ‘ground finely’; Hp piiŋi ‘get ground fine, break into bits, shatter’; Hp piiŋya ‘pulverize, grind finely, crush, shatter, vt’; Hp piŋyanpi ‘grindingstone’; and perhaps CN pinol-li ‘flour, s.th. ground’ and Ktn vihŋ-ïk / vihiŋ-ïk ‘break, crumble, vi’ may be a non-initial form of the same. [kw1p,kw2g,kw3r] [NUA: Tak, Hp; SUA: TrC; Azt]

1305 Hebrew sbb ‘to turn self around, go around, surround’ > Ca suvuvey ‘to whirl around’ [1s3,2bb]

1306 Hebrew nś’ / naśaa ‘to lift, carry, take’; passive niqtal ‘be lifted up in vision’ > SP nonosi ‘to dream’ [1n,2s2,3’]

1307 Hebrew nes ‘flag, standard, ensign’ > Hp na’ci / naci ‘standard outside kiva when not in use’. [1n,2s3]

1308 Hebrew nɦl / naaɦal, -nɦal ‘to maintain as a possession, take possession’; Hebrew naɦ^{a}lat ‘inherited property’; Arabic nɦl / naɦala, impfv: - nɦalu and OSArabic nɦl ‘to present’:
TO nolawt ‘buy, buy from’ (Saxton 1983). Medial ɦ > o as in Egyptian nɦbt > TO nopi (188).

1309 Arabic nb’, II nabba’a ‘to tell, inform, let s.o. know about s.th.’; Arabic naba’ ‘news, report’:
Hp navo-ta ‘to know, learn by hearing’. [1n,2b,3’]

1310 Hebrew ngd, hiqtil: higgiid ‘propose, announce, inform’ (KB) ‘to tell, declare’ (BDB);
Hebrew infinitive: haggiid, impfv: yaggiid ‘he tells’; taggiid ‘she tells’; ’aggiid ‘I tell’:
TO ’aagid ‘to tell s.o. s.th.’; Hp ki-ta ‘say (following a direct quote)’. [1gg,2d]

1311 Hebrew mwg / muug ‘to melt, soften, dissolve, faint’:
TO moik(a) ‘to be soft’; TO moik(a)d ‘to soften, make s.o. weak’; Hp(S) mïkïy-ti ‘to thaw out’.

1312 Hebrew *hal-lebb ‘the heart’ > Hp ïnaŋwa ‘heart, life, battery’ [1h,2ll,3b]

1313 Hebrew knʕ > yi-kkaneʕ ‘be humbled, humble oneself’; hi-knaʕ- ‘to humble s.o.’:
CN iknoa ‘to be humane, compassionate, tender’; CN ikno-teka ‘be humble, make humble’;
CN ikno-nemi-tia ‘to live a humble, simple life’. [kw1k,2n,3’2]

1314 Hebrew kly / kalaa ‘come to an end, be completed, finished’; from that verb is
Hebrew kəliiy ‘untensil, tool, weapon, vessel, receptacle’. Of the four meanings associated with the Hebrew stem—1 complete, 2 tool, weapon, 3 container—note that UA has three:
1 Hp kïïkïyva ‘ceremony concludes’; Hp kïkïyi ‘to emerge, appear, complete one’s appearances’;
2 Tb kïyii-l ‘arrowhead’; 3 Hp kïyi ‘liquid in a container, any liquid’. Perhaps kli > kyi > kïyi. [kw:1k,2l,3y]

1315 Hebrew kly / kalaa, impfv: yi-kle / ti-kle < *tV-kle ‘stop, come to an end, be completed, finished’:
Ca -tek-lu- / -teklu- ‘1 be quiet, still, 2 stop (of rain, wind, etc)’; Ca -teklu-ne (causative) ‘leave s.o. alone/in peace’.

1316 Hebrew yayin / yain / yen ‘wine’ > Wr yena ‘strong (of liquor)’ [1y,2n]

1317 Aramaic(S) ṭrḫ ‘take the trouble’; Hebrew ṭoraḫ ‘burden’; Hebrew ya-ṭriiḫ ‘burden s.o.’;
Arabic ṭrḫ ‘to throw, toss, discard, throw away, V drop to the ground’:
Wr ceriwe ‘to be sorry or sad about s.th.’; Wr cerewa ‘basura, trash firewood that is scavangered, not cut’;
CN cayawi ‘to spill on the ground (grain); fall (of snow)’. [1t2,2r,3h2]

1318 Hebrew ygr / yaagor- ‘to be afraid’; unattested, but not at all unlikely, participle Hebrew ***yooger** ‘afraid’; Arabic wağira ‘to fear’: Ca **yuki** ‘get scared, be afraid’. [p:1y,2g,3r]

1319 Hebrew ṭbl ‘to dip s.th. into, immerse, dive, plunge’; unattested *-ṭabbel ‘dip, immerse’:
CN cakwaa ‘to soak (e.g., clothes)’ Sem-kw with -bb- > -kw-. [kw:1t2,2b,3l]

1320 Hebrew ṭbʕ ‘to sink down’ or less likely Hebrew ṣbʕ ‘dye’; Akkadian ṣapuu ‘to soak, steep, dye’;
Arabic ṣbġ / ṣabaġa ‘to dye’; Syriac ṣbʕ / ṣəbaʕ ‘to dip, moisten, dye’; both roots (ṭbʕ and ṣbʕ) have similar meanings (dip, sink, soak) and have similar correspondences in UA:
Hp(S) civohkya ‘quicksand, quicksand area, swampy sediment’; Hopi civookya ‘flood plain, alluvium deposit’; Hopi civok-ti ‘get covered with mud, get stuck in mud, bogged down, mired’. [1t2,2b,3’2] [iddddua]

1321 Hebrew ḫargol ‘type of locust’; Arabic *ḫargal / *ḫurgul ‘locust’:
Tr urugi-pari ‘type of grasshopper’. Tr -pari is suffixed to many insects and birds; thus, Tr urugi-, with a separation of the -rg- cluster, is a nice reflection of ḫargol with initial pharyngeal. [kw1h2,2r,3g,4l]

1322 Hebrew ḫrr / ḫaaraa ‘burn’, ḫaaruu ‘they burned’; Ethiopic ḫrr ‘be hot’;
Arabic ḫarra ‘be hot’, impfv: ya-ḫurru ‘it’s hot’; Arabic ḫaruur-u ‘hot wind’:
UACV-1208b ***uru** ‘hot’ (SUA): Eu urúe- ‘hacer calor’; Eu urúce- ‘tener calor’; Op uru; Tr uurí ‘tierra caliente’. Intervocalic -t- or an actual -r-, as in **UACV**-1208a below:
UACV-1208a ***ïtï** / ***ïrï** ‘hot’ (NUA): M88-ï11 ‘hot’; M67-236 *ete ‘hot’; I.Num26 *ïtï(h) ‘(be) hot’; L.Son26 *’uru ‘hacer calor’; KH.NUA; KH/M06-ï11: Mn ïdï’ï; NP ïdïtï (<*ïtïttï); TSh ïtïi-; Sh ïtïi; Tb ’ïïdïï’-ït~’ïïdïï’; Hp ïtïhï’ï; Sr ïţï; Gb ’oró’. Hill adds Ch arïï ‘it’s hot’ and WSh ïtïin. Note also Ch(L) arïh / arïrïh ‘it burns! Ouch!’ (said only of heat pain); WMU arűü ‘hot! Ouch, it’s hot!’; Kw ’atüü ‘ouch!’; SP atturooci ‘hot (of water)’.
[NUA ï = SUA u] [NUA: Num, Hp, Tb, Tak; SUA: TrC]

1323 Hebrew ḫpz ‘make haste’; Arabic *ḫpz ‘to urge, press, to hasten, incite’; Egyptian ḫfd ‘eilen [hurry]’
UACV-2540 ***wïpaC / *wïppaC** 'whip': Sapir; VVH17 *wï$_s$pa 'to whip'; M67-456 *wep 'whip'; I.Num283 *wïh- instr. pref. 'whip'; B.Tep50 *gïvai 'to whip'; M88-wï5 'to hit'; KH.NUA; KH/M06-wï5: Mn wï 'with whipping motion, with sideways motion of long object'; NP wïpagita (< *wïppakitta) 'spank'; Sh wï" 'with a long instrument or the body'; Kw wï- 'with an instrument'; SP wïC- 'with the length of a long obj'; Tb wïbat 'to hit, whip'; Tb wïbišt 'a whip'; Cp wéwva 'hit with a stick'; Hp wïvaa-ta 'be hitting, striking'; Hp wïvaapi 'a whip'; TO gew(i) 'strike, hit, v'; TO gewitta 'whip, n'; Nv gïbï ‘azotar [whip]’; PYp geevi 'whip, hit, beat'; NT gïvai; ST gïv;
Wr wehpa-ni/wehpi-ma 'hit'; Tr wepá, wipi-mea 'azotar'; Tr wipisó- ‘azotar, golpear, pegar con palo’;
Pl witeki ‘punish, whip, beat, hit’. Tbr wewá/wiwá 'whip' is related to *wïpa ‘whip’ by consonant harmony, as would be Eu véwa ‘azotar’ and Eu hivévira 'whip, n'. Note also Mn wïpacugi ‘switch, whip’; TSh wïppai ‘spank, whip, pound, hit with long instr, vt pl’; Tr newe(ba) ‘azotar, flagelar, chicotear’; and perhaps *w > kw in Kw kwipa 'whip, hit, beat, vt, fall down, vi' and Ch kwipá 'whip, hit, fall'; Cm (tï)kwibukitï ‘lash (as rain/hail), switch, whip’. Sapir also lists Cr ve 'schlagen, werfen, schiessen, treffen'. Evidence of a 3rd C exists. These UA forms fit a qittel well: *ḫippaz.
[1h2,2p,3z] [iddddua] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1324 Hebrew henaa ‘hither, toward here’; Arabic hunaa ‘here’:
Wr ena ‘come’; Tr enai / ena ‘here’. [1h,2n]

1325 Hebrew hinné ‘behold!’; Arabic ’inna ‘behold, verily, truly, a particle of emphasis, topicalizer’:
Tr ne ‘an adverb of emphasis or admiration meaning “Look!”; TO nee/ne ‘look, see, so then, finally, a connective word to call for attention or indicate conclusion of a topic’. [1h,2n]

1326 Arabic dariga ‘rise, advance step by step’; Arabic darag ‘way, route, flight of stairs’; Arabic daraga(t) ‘step, stair’; Hebrew madrega(t) ‘foothold in the rock, mountain thoroughfare’; MHebrew madrega(t) ‘step, terraces’; Syriac drg ‘step forward’; another root very similar phonologically and semantically is Hebrew drk ‘to tread’; Phoenician drk ‘walk’:
UA *tïy(k) ‘climb, step, make thump noise’: TO(M) čïïčiđ(k) ‘climb, rise, reach the top’; TO(M) čïḍ ‘make a muffled, thumping noise’ (in walking is the example); TO(M) čïḍkï ‘make a muffled, thumping noise (repeatedly)’; TO čïḍïni ‘thump on, hit’; Wr te’ke ‘to step on’; Wr te’kere ‘track, footprints’; Wr te’ki ‘descend’; Wr te’kilaci ‘foothill’. [1d,2r,3g] [SUA: Tep, TrC]

1327 Arabic tbʕ ‘follow, trail, observe’ > Tr tibú- ‘watch, take care of’

1328 Hebrew ’ak ‘surely, entirely, yet, but, only’ > CN ok ‘still, yet, for now, first, in addition’ [1’,2k]

1329 Hebrew ’ap ‘(denotes addition) also, yea, even’:
TO ep ‘again, also, too, another one, somebody else’. [1’,2p]

1330 Hebrew ’lp ‘to learn, accustom oneself to, to be tame’; Arabic *’lp ‘to be familiar with, keep, cleave to’; Arabic II ’allapa ‘to train, domesticate’:
TO oiop ‘to be around, to stay around a place (of animals)’ [1’,2l,3p] [iddddua]

1331 loanword from Sumerian engar to Akkadian ikkaru ‘farmer’ and into other Semitic languages: Arabic ’kr / ’akara ‘to plow, till, cultivate (land)’ and Syriac ’kr ‘to plow’; Arabic ’akkaar ‘plowman’ and Syriac ’akkaar-aa ‘farmer-the, ploughman, tiller of the ground’; Hebrew **’ikkaar** ‘agricultural worker’:
UACV-672 ***wika** 'digging stick': B.Tep42 *giika 'dibble stick, plow'; M67-326 *wika 'planting stick'; L.Son334 *wika 'coa'; M88-wi2 'dibble, digging stick'; KH/M06-wi2: Wr wíka; Tr wiká; TO giiki; NT giikai; ST giik; My wí’ika; Cr vi’iká; CN wik-tli; Hp wiikya ‘ancient wooden hoe. In addition to CN wik-tli, other CN terms also meaning ‘digging stick’ are CN wekpal-li and CN we’kol-li. We might also consider Mn wagii ‘dig a ditch, vi’; Mn wagii’i ‘tend ditches, keep them clear’. [p1’,2k,3r] [SUA: Tep, TrC, CrC, Azt; NUA: Hp, Num]

1332 Arabic ’ğl (< *’gl) ‘to hesitate, wait, linger’:
Tb wiih ~ iiwihï ‘to wait’; Tb(H) wiihït, perftv iiwih ‘wait for, look after, take care of, watch over’. [1’,2g,3l]

1333 Hebrew m’n ‘refuse’:
Hp meewan- ‘forbid, warn’ (-w- not > -l-, from geminated -ww-, like raʕwa > taawa). [p:1m,2’,3n]

1334 Hebrew naaš-iim ‘women’, but Syriac nešaa ‘women’:
UACV-87 *nïsa ‘aunt, mother's older sister (mos)’: BH.Cup *nəṣ 'aunt, maternal'; M67-501 *ne 'aunt'; M88-nï7 'aunt'; KH.NUA; KH/M06-nï7 ‘aunt, mos’: Cp neṣ 'mos'; Ca nes 'mos'; Ls núṣ 'mos'; Ls nuṣmay ‘nephew, niece’; Sr nïm ‘mos’; Wr nehsá 'mos'; My né’esa 'tía’; Ktn nïhma ‘aunt of a certain type’. PUA *nïsa may be compounded with diminuitive *-mara. Ls, Ktn and Sr suggest *nïsma, perhaps < * nïsVma. [Ls u, but expect o < *ï] [1n,2s1] [NUA: Tak; SUA: TrC]

1335 Semitic ’aɦad ‘one’, Hebrew pl: ’aɦadiim ‘a few, some’; ’aɦadee ‘some of …, ones of …’:
Tr ahare / ohare / wahare / hare ‘some, certain ones, others’. Initial w- is Sem-p, but ɦ > h. [p1’,p2h2,p3d]

1336 Hebrew tašleeg ‘it is snowing’ (hiqtil impfv) or Arabic taqrasu / II taqarrasa ‘freeze’
UACV-514a ***ta’asïC** 'freeze': Mn tï’asï 'be frozen'; NP tïasï 'icy, slippery'; NP ggïggï tïasïggï ‘freeze feet, v’; NP tïazïpï 'frozen'; TSh tïasï ‘freeze, tingle (of body part when asleep)’; TSh tïasïppïh ‘frozen, pp’; Sh(M) tïasïC ‘be frozen’; Sh(C) tïasïC ‘be frozen’; Cm tï’asïitï ‘freeze (liquid), v’; Kw ta’asi ‘freeze, v’; Ch tï’ásï ‘freeze, v’; CU tï’ási ‘freeze, vi’.
UACV-514b ***pa-ta’asïC** 'ice, water-freeze': TSh paa tïasïppï 'the water is/has frozen'; TSh patïasï(tai)ppïh ‘ice’; Kw pa-ra’asï-pï; Ch pa-rïasï-pï; Ch(L) pa-rï’asï-pï ‘frozen water, ice’; CU pará’si-pï 'ice'; and perhaps Tbr tusa-ne-y 'se congela'; Tbr ba-tá tusa-ne-y ‘ice’. [unaccented V] [1t,2s1,2l,2g] [NUA: Num; SUA: TrC]

1337 Hebrew ’ayil ‘mighty tree, oak’ (see discussion at 599); this Semitic stem ’yl ‘mighty’ is used for both big trees and large animals (ram, deer), and like the alternate vowelings of Arabic ’ayyil / ’iyyal ‘stag’ the vowelings i-a or a-i both exist for the same word. Of the below, consider certainly b, possibly a, if w > kw:
UACV-1556b ***wi’a(N) / *wiya(N)** ‘acorn, oak’: M88-wi9 ‘acorn, oak’; I.Num281 *wiya(h) ‘acorn’; BH.Cup *wi’a ‘oak, sp. ‘*wiw ‘acorn mush (but see below)’; HH.Cup *wi’a ‘oak, sp.’; KH.NUA; KH/M06-wi9: Mn wiyaC ‘acorn’ (generic term); NP wia; Kw wi’a-(m)bi/wiya-(m)bi; TSh wiampippï; Kw wi’a-(m)bi; Tb wiiwat ‘to leach acorns’; Cp wí’a-t ‘live oak’; Ls wi’á-t ‘oak, sp.’; Ca wí’at ‘canyon or maul oak’; Sr wi’aht. This UA *wiyal ‘oak’ is of Sem-p vs. 599 *iyal ‘oak’ of Sem-kw, though both show the consistency of the same voweling option and the same meaning. [p:1’,2y,3l] [NUA: Num, Tak, Tb, Hp]
UACV-1556a ***kwi(N)** ‘acorn, oak’: M67-1 *kwi/*kwini acorn; BH.Cup *kwínila(?) oak sp; Munro.Cup81 *kwíiyi-la ‘oak sp.’; Fowler83; M88-kwi9; KH.NUA; KH/M06-kwi9: Perhaps -w- > -kw- in Ktn kwïyač ‘acorn sp’; SP kwiya- vü ‘scrub oak’; WMU kwíya-vï ‘oakbrush’; CU kwia-ppï oak tree; Tb wa’ant ‘type of oak tree and its acorn’ (wrong vowel, but perhaps a-a < *i-a); Cp kwíni-ly ‘Black Oak and its acorn’; Ca kwíñi-l; Ls kwíí-la; Gb kwar ‘bellota’ (vowel is wrong); Sr kwiih-ţ; Hp kwiŋvi oak (brush); Hp kwiŋvi-tïva ‘acorn’. Tb wiŋiyaa-l ‘acorn’ should be considered.

1338 MHebrew kbl ‘to fetter’; Syriac kbl ‘to bind, fetter’; Arabic kabala ‘to bind, braid’; Akkadian kabaalu ‘to bind, fetter’; Aramaic(J) **məkabbal ‘bound, tied up**’ (passive participle):
UACV-115c ***muka** ‘carry a bundle, carry on the back (with a mecapal or carrying net)’: CN **mekapal**-li 'tumpline, a rig for carrying a load on the back supported by band across the forehead'; Kartunnen divides CN meka-pal- ‘cord-by means of’, which may be; however, the other SUA forms show only *muka, perhaps a shortening of *mukapal and verbalization of it, as CN meka-tl means only ‘cord, rope’, not ‘mecapal’ nor ‘carry on the back’; Tr muke-ma 'cargar cosas a la espalda por mecapal [carry things on the back with a mecapal’; Tr muka 'mecapal'; Wr muké-na/ma 'carry on the back or shoulders'; Eu múke’e 'llevar a cuestas, cargar en las espaldas'; Eu mukede-n 'cargar, echar carga'. The *muka reconstruction works well for CN (*muka > mika > meka-) and for the others (*muka > *mukï). [1k,2b,3l] [iddddua]

1339 MHebrew šippaa ‘to make smooth’
UACV-1892 both ***sipa** and ***sippa** ‘scrape, shave’: VVH70 *si$_s$pa ‘to shave, scrape’; M67-364 *sipa ‘scrape’; I.Num192 *sipe / *sipa ‘scrape, shave, whittle’; L.Son244 *sipa/sip-i; M88-si5 ‘scrape’; KH.NUA; KH/M06-si5: Mn siba; NP sipa ‘scrape’; Sh sipe ‘scrape’; Cm sipe ‘shave off, scrape off’; Kw šivi ‘whittle, peel, shave, scrape off hair from’; SP siva ‘to whittle’; CU wəsívay ‘whittle, peel, shave’; Hp sìipan-ta ‘peel it’; Hp sispa ‘scrape it, shave it’; Tb šiip~’išib-’isïbiinat ‘shave, whittle’; Cp síve ‘shave/peel off’; Cp sípate ‘strip off, as bark’; Ca sív ‘shave’; Ca -če-sípi ‘scrape, peel off’; Ls şíva/i ‘be peeled, scraped, vi; peel, scrape, shave, vt’; Sr şiiv ‘shave’; Ktn šiv ‘plane, carve, scrape’; TO hiw ‘rub’; TO hiwkon(a) ‘shave, scrape’; Wr siba ‘raspar’; Tr sipá / si’pá /sipí ‘raspar, rebanar’; Cr ra-’an-tyí-sii-či-’iri-’i ‘he cut it off of him’; CN šipewa ‘to flay, skin, peel s.th.’; Pl šiipeewa ‘peel, remove skin, bark, shell’. Add PYp hiv- ‘scrape’; ST hiiva ‘raspar, escarbar’; NT ivííšumai ‘brush, scrape, take off’; Eu siswa/sisba ‘to brush’; Nv hiva ‘raspar’; Nv hivi ‘cosa raspada’. We find a wə- prefix in CU wəsívay and TSh wïsipeh ‘scrape, peel off, whittle’. Some languages definitely show geminated *-pp- (Hp, CN, Pl) while others show *-p- (SP, Kw, CU), and others show both (Cp, Ca). Also note Sr şiikw(a) ‘skin, peel, vt’ vs. Sr şiiv(a) ‘shave’; and Ls şívi ‘shave’ vs. Ls şíwi ‘to peel fruit, to skin the hides from animals’. [1s1,2pp] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1340 Arabic pqħ / paqaħa ‘to open the eyes, to blossom’; Syriac pqħ ‘to bloom’; Hebrew pqħ / paqaħa ‘to open the eyes’: Ls páqa- ‘to sprout through the ground, of plants, v.i.’; Ca púqi ‘bloom’
UACV-1581 ***paka** ‘open’: CU paqá-tií ‘open, break open’; CU paqá-kï; TSh kïsapaaha ‘open up, come open’ (*kïsa ‘yawn/open mouth’); Sh kïsappax ‘yawn’. Sem-kw in lack of rounding for q and ħ. [1p,2q,3h2] [NUA: Num]

1341 Hebrew rʕm ‘to rage, roar’; (hiqtil) ‘to thunder’; MHebrew (hiqtil) rʕm ‘to make a noise, thunder’: SP tom’mu ‘to make a big noise, thunder’ (vs. SP tommo ‘winter’).

While Miller separates a (M88-ta7) and b (M88-ta46), some overlap exists among the groups, all showing initial t, round vowels, glottal stops—a difficult sorting task, if even related.
UACV-2328a ***taw** 'thunder': BH.Cup *táw 'thunder'; M88-ta7; KH.NUA; KH/M06-ta7: Cp táwşenve’e-t 'thunder, autumn'; Ca táwva 'thunder, n'; Ca táwvalu 'thunder, v'; Ls táwşuŋva 'autumn (found only in BH)'; Sr taüü’ţu’ 'thunder, become cloudy with thunder clouds, vi’ (ü = high central retroflexed V); Sr taüü’ţ 'thunder, thunder cloud, cloud’ (vs. Sr tamöä’ ‘year’); Gb tá’or / taa’ur ‘trueno’ and/or Gb táwvar 'thunder’, poss'd: -táveyaŋa.

Hill (KH/M06-ta8) is likely right to combine ta46 and ta8, though Gb's two forms are puzzling, as Gb tá'or and Sr taüü'ţ could look s.th. like *ta'V(r), not unlike *tV'o below.
UACV-2328b ***tï'o-*** 'thunder': Wr te'ó-na 'buzz, roar, thunder'; Tr ŕe'o-ma 'thunder'.
UACV-2328c ***to'om*** 'thunder': Sh(C) to'ompaix, toom-picci, toompai-piccï 'thunder'; Cm tomoyaketï 'thunder'; Ls tóóma-wu-t 'thunder, n'; Mn tooyaga 'thunder, v'; TSh tooyakaiC 'thunder, vi'. Might the Num forms suggest *to'om-yaka 'thunder/cloud-cries', from which WNum reduced to *tooyaka, yet Sh shows the glottal stop; and Cm tomoyak... approximates WNum *tooyaka, with extra m. The similarity in forms for 'cloud' (*tomo) and 'thunder' may recommend a tie but less likely 'winter' *tommo. In some languages the forms for 'cloud', 'winter', and 'thunder' are similar: Mn tooC 'cloud'; Mn too 'winter, year'; Mn tooyaga 'thunder, v'. Yet in other languages the forms are different: Tr tomóa 'be cloudy'; Tr ŕe'o- 'thunder, v'; Tr ŕomó 'winter'; Tr ŕu'rúmi- 'zumbar, ronroncar'; and Wr te'ó- vs. Wr tomó 'winter'; Wr tomóari 'cloud'. So for now let's keep them separate. We can also add SP tom'mu 'make a big noise, v' in contrast to SP tommo 'winter'. ? [m > ø in Mn, TSh] [NUA: Num, Tak, Tb; SUA: TrC]
UACV-2328d ***ta'ŋa*** 'thunder': M88-ta8 'to thunder'; KH/M06-ta8: TO tataññï / tatañigi 'thunder, n'; Wr ta'na/ta'ni- 'tronar'; Tr ra'ná 'tronar'; Eu tártare kúsa- 'tronar'. These SUA forms often have NUA ŋ correspond to SUA n; and then Jane Hill (p.c.) provides us with Tb(H) taŋ|at 'rain, vi'. [1r,2'2,3m] [NUA: Tb; SUA: TrC]

1342 Syriac guuzl-aa 'left-handed, ambidexter'; Aramaic(S) gundəlaay-aa 'left-handed':
My míko'ori 'izquierda [left]'; Yq míko'i 'zurdo [left-handed]'; AYq miko'o-tana 'on the left, adv; AYq mikkoi 'left-handed'. Often Semitic *mi(n)- 'from, of' precedes 'left', and then cluster > '.

1343 Hebrew 'ašer 'which, relative pronoun':
Tb(H) aš 'same subject subordinator, when, to, how to, in order to'.

1344 Hebrew yoore (masc) / toore (f) 'instruct, teach' (hiqtiil 3 sg impfv) > Tb(H) tooyla 'teach, vt'.

1345 Aramaic hwy / hawaa 'exist, be, become' literally: was, he/it was';
Syriac həwaa 'be, exist; be/remain/live in a place':
Ls 'ááw- 'be (in a place), live, dwell (sg animate being)' (Ls matches well because Ls loses initial h- as also in Ls 'alaláá 'exclamation of praise or pleasure' < Semitic hll: Ugaritic hll; Syriac hallel 'to praise'; Hebrew hillal- / -hallel 'admire, praise, exclaim halleluia' at 712 UA *hala);
The -hawa 'be' also appears in Tb(H) taahawat 'be summer' < Tb taa-l 'sun' + hawat 'sun-be'; at 111/112 are the impfv of the stem: Aramaic **tehwe** 'you are' **> *tïhwa** 'you sg' and Aramaic **yehwe** 'he is' > ***yïhwa*** 'that, he, she'.

1346 Hebrew 'em 'mother', 'imm-aa 'mother-her'; 'imm-o 'mother-his' > Tb(H) ïïmïï- 'mother'.

1347 Syriac qəwaayaa 'a loom'; Syriac beyt qəwaaye 'web' > Ca qaawi 'get tied, hooked, vi'.

1348 Aramaic(J) lmlm/limlem/-lamlem 'murmur' > Ls lamú-lama-xi-š 'suffering from rheumatism'. [iddddua]

1349 Hebrew dəbaš 'honey'; Syriac dəbaš 'honey'; debš-aa 'honey-the':
Wc táášaviikari 'abeja pequeña y oscura [small black bee]'; keep in mind that *-p- > ø disappears in CrC, so tVpVš > tVVš + Semitic bqr 'seek' = honey-seeker.

1350 Semitic **ṣd' / ṣdi** 'grow rusty' > Sr **ṣïrii**'k 'become red, turn red'
UACV-1776 ***sïta / *sïti*** 'red': Sapir; VVH32 *sïta 'ochre, red'; M67-343 *set 'red'; L.Son251 *sïta 'rojo'; M88-sï3 'be red'; KH.NUA; KH/M06-sï3: Ca séleklu 'bec. red'; Ca sél-nek-iš 'red'; Sr ṣïrii'k 'bec. red'; Sr ṣïriiri'n 'be red, vi st'; Sr ṣïrī'kin 'cause to become red'; TO hït-magi; TO hït 'red or white earth, red ochre'; Wr sehtá- 'be red'; Tr sitá-ka-me 'red'; Tr serána- 'be/bec red, pl'; Tr seráname 'red, pl'; Tr sitána- 'be/bec red'; Wc ṣeetá; Eu setát 'almagre, tierra colorada'; AYq sata 'red dirt'. [*t > Tak l; -ln- > -l-] [1s4,2d,3',3y] [NUA: Tak; SUA: Tep, TrC, CrC]

1351 Hebrew bqʕ 'split, cleave'; Hebrew biqʕaa 'valley'; Syriac pəqaʕ-taa 'valley-the':
UACV-1819 ***pakowa*** 'river, current': Tr bakó 'rio [river], hondura [depth], barranco [cliff, gorge]';
Tr bakowá 'barranca por donde corren las aguas [ravine where water runs], corriente turbulenta de un rio [turbulent current of a river]'; Wr pakó 'rio'; Eu vákoa 'ribera'. SP paŋqwi 'mountain valley'. Sem-p, and perhaps the nasal influence of adjacent ʕ nasalized q in SP. [p1b,2q,3'2] [SUA: TrC]

1352 Hebrew he-qiim 'lift' > Hp ki-ma 'bring, take, carry pl objs' (ki- + -ma 'progressive'). [1q,2m]

The next sets are three different syllabic shapes of the Semitic root kbd 'be heavy, honor, sweep' yet interestingly UA has the less common meaning 'sweep' but not the more common meaning 'be heavy': 1353 reflects the qal impfv ***-kbod**, 1354 reflects **hikbad-,** non-3rd person hiqtiil, and 1355 reflects **kabbed**:

1353 Aramaic(J) kbd ‘be heavy’; later Hebrew in Aramaic(J) kabbed ‘to honor, to **sweep**, make look respectable’, and hikbad / hikbiid ‘to sweep’; Aramaic(S) -kabbed ‘to sweep’ (*d > c, like in Egyptian fdt ‘sweat’); Arabic voweling of impfv -u- if the qal carried the same meaning ‘sweep’; note TO wosun(a) (< *pocuna) 'sweep’ with Arabic pl voweling; and all *poc reflect the impfv: ***-kbod**:
UACV-2254 ***poci** ‘sweep’: B.Tep275 *voisikai 'to sweep, press down' at M88-po25; KH/M06-po25; and B.Tep276 *voisikaroi 'broom' at M88-po26; KH/M06-po26: TO wosun(a) 'sweep’; LP(B) voiši ‘sweep’; Nv voska ‘barrer’; NT vóišikai; ST voššik/voška’ ‘barrer’. [p2b,3d] [SUA: Tep]

1354 Hebrew **hikbad / hikbiid** ‘to sweep’; and notice that some UA forms even show the hi- prefix:
UACV-2257 ***(hi)paca** 'sweep': Eu hipáca ‘barrer’; Eu pápca ‘barrer’; Wr ihpéci-na ‘barrer’; Tr piči ‘barrer’; Cr híča’uta ‘está barriendo’. Interestingly, this b > p because of being clustered with a voiceless consonant has *-kb- > p, though initial b > b in Eu, Tr. [p2b,3d] [SUA: TrC, CrC]

1355 Aramaic(S) kabbed ‘to sweep’; Aramaic(J) **-kabbed** ‘to clean, sweep’ (*d > c, as elsewhere):
PYp kavilteda ‘to clean house, vt’; Wr kaweruma ‘new, young, clean, good’; Wr kawé ‘good, well’; Wr kawérega ‘well prepared’. *-bb- > -kw- > Wr -w-? [SUA: Tep, TrC]

1356 Hebrew maatn-aim ‘loins, dual’; Arabic matnat-aani ‘loins, dual’ > Ls mááča-t ‘back’. [1m,2t,3n]

1357 Semitic qr’ ‘call’ to be a ‘caller, crier’; Syriac qaruuy-aa ‘reader, reciter’; words for various birds are built on this root: e.g., Aramaic(J) qooraa ‘heron, young bird’; Aramaic(J) qooree ‘partridge’; Aramaic(J) qooree’aa ‘partridge, f’; UA *kuyuŋV has much in common with such:
UACV-2421 ***kuyu’ / *kuyuŋV / *kuyuNCV** 'turkey': Fowler83; Ken Hill (p.c. 2004); KH/M06-ku40: Hopi koyoŋo; Cm kuyu’nii / kuyuníi’. Hill adds Ch kuyuita and WSh kwi’na. Let’s also add Sh(GL) *kuyuŋwi’yaa’ ‘turkey’ and CU kwiyú-tï (< *kwiyuC-; otherwise, -r- vs. -t-) ‘turkey’. Hp and Sh(GL) agree for six segments; and Cm agrees through four, then has a glottal stop plus nasal (cluster) aligning with ŋ of the others. CU lengthens y/i (*kuyu > kwiyu), but agrees well with both Cm and Hp, lacking only a late nasal, but its -t- instead of -r- suggests a cluster: CU < *kwiyuC-tï. Furthermore, Ch and CU align with the Aramaic fem noun suffix *-ta and Sh(GL) and Hopi with the masculine -aa’.
[’n vs. ŋ, unaccented vowel assimilates more easily in CU] 1q,2r,3’ [NUA: Num, Hp]

1358 Hebrew rʕy ‘to pasture, tend, graze’, impfv: yi-rʕe(y) ‘to herd’; Arabic raʕaa (< raʕay), impfv: ya-rʕiy (< *ya-rʕay) ‘to graze, to tend (a flock of animals)’; so the cluster -rʕ- > -l- quite naturally since in Hopi, ʕ > l before low vowels and then add the help of the other liquid r: *-rʕay > lay:
Hp laa-layi ‘to herd, drive (animals), vt with reduplication’; Hp laay-in-ta ‘be herding, driving’. [1r,2’2,3y]

1359 Hebrew & Phoenician ’aaraħ (< Semitic ’rx) ‘wander, journey, go’; Akkadian urxu ‘way, expedition’:
UACV-1020 ***wayak**: AYq werama ‘walk’; Eu weré ‘venir, hacerse’; Yq weye ‘caminar, sg’; Yq wéama ‘andar, sg’; My weiye ‘va caminando’; My werama ‘anda’; Hp wayma ‘to be walking along’. Judging by Cahitan (Yq, My), we may have two separate stems (*wïyï, *wïra) or recycled loans. Tb waai’it ‘fast, quickly’ is at 1515. [y/r] [1’,1’2,2r,3x] [NUA: Hp; SUA: TrC]

1360 Semitic qr’ ‘call, cry out’; not likely Hebrew gaaroon ‘throat, neck’ due to g > k, but q > q:
UACV-580b ***karu** ‘sandhill crane’: Munro.Cup15 *qarəə-t ‘bird sp’: Ls qarúú-t 'sandhill crane'; Cp kərə-t. Munro states that the raising of Ls ó > ú is not uncommon; and so if it is Cp that has changed or leveled the vowels, then Ls and thus Tak *qaru. [V’s; liquids] [p1g,2r,3n]

1361 Modern Western ṭuroyo Syriac/Aramaic(A) papuke ‘owl’:
UACV-1595 ***poko** ‘burrowing owl’: Cm pohkóo’ ‘burrowing owl’; TSh sipokko’o ‘screech owl’; Tb pogoh ‘burrowing owl’. [1p,2p,3k] [NUA: Num, Tb]

1362 Modern Eastern Swadaya Syriac/Aramaic(A) **simmora** ‘squirrel’:
UACV-2146 ***ciCmo** / ***cimo** ‘squirrel’: Tbr cimó-l ‘ardilla colorada [red squirrel]’; Tbr ci-cimó-ko ‘clase de ardilla de las casas [type of squirrel]’; Wr cimorí 'kind of squirrel'; Tr či’morí 'flying squirrel'; Wc cíímúaka/simuaka 'ardilla’. Since Wc u < *o, TrC and Wc match well through 4 segments. Tb cïmi-l 'mouse' may tie in. [1s3,2mm,3r] [SUA: TrC, CrC; NUA: Tb]

1363 Aramaic(CAL) hl(’) / hal-aa’ ‘dirt, mud-the’:
UACV-2522 ***hala** 'moist/wet soil’: Hp halasami 'moist soil' (*sami ‘wet’ UACV-2521); Tb halai’- ‘wet’.
[NUA: Hp, Tb]

1364 Syriac rgl ‘come or go on foot, step forward’; Aramaic regl-aa / ragl-aa ‘foot-the’;
Arabic rğl / rağila ‘go on foot, walk’; Arabic riğl- ‘foot, leg’; Arabic rağil ‘pedestrian’;
Hebrew rɛgɛl ‘foot, leg’, dual **raglayim** ‘two feet’; Hebrew qittel impfv -raggel ‘move away from, scout’:
Tb(H) taŋammin ‘step on, vt’; Tr ŕeke(ta) ‘step’. [kw1r,2g,3l]

1365 Akkadian agaaru ‘hire’; Arabic ’ğr ‘to reward’; Arabic ’ağğara ‘hire out’; Aramaic(J) ’[a]gar ‘hire, employ, rent’; Hebrew ’gr ‘bring in (harvest)’; Middle Hebrew(J) ’gr ‘gather, collect’:
Tb(H) waahay’ ‘work’. [p:1r,2g,3l]

1366 Syriac twh / təwah ‘be alarmed, startled’; Arabic twh, pfv: taaha ‘stray, perish, be startled’:
Sr tahitahi’ ‘hurry up, vi’. [1t,2h]

1367 Syriac mrq ‘rub off, scour, polish, cleanse, vt’:
Sr mïyï’-kin ‘1. wipe out, 2. cause to shimmer’. [1m,2r,3q]

1368 Syriac ’aṭib / ’aṭ(’)ib ‘do good, treat well’ (causative of ṭ’b; the underlying glottal stop in Syriac parallels what surfaces in some of the UA forms); Hebrew haṭṭiib ‘do well’:
UACV-1038a***attip-na** ‘good’: CU ’atti ‘good’; Cp á’či’a ‘good’; Ca áča’e ‘good, fine, well, very’. Related to these are Hp -’civa ‘accord with’, Hp a’civa ‘behave as expected, do what one can with one’s personal resources and limitations’; Hp àacipna/a’cipna ‘do as expected’. Note that Hp a’cipna and Cp á’či’a are identical in five segments (a’ci … a) except for a consonant cluster in Hp that reduced to a glottal stop in Cp, and that Hp parallels the Semitic wonderfully. Is SP’s nasal (below) a reduced -pn- cluster with nasal?
UACV-1038b***attï(N)**: SP ’attïN ‘good’; WMU á-ttü- ‘good, well’; CU ’á-tï ‘good’. [NUA: Tak, Hp, Num]

1369 Aramaic(S) kpn ‘be hungry’; Aramaic(S) kappiin ‘hungry’; Syriac kəpen / kəpin ‘be hungry’:
Gb kovii- / koviiya ‘be hungry’ (Munro 2000, 186-7).

1370 Semitic ’ay + mi ‘which who?’ > Ktn hami(c) ‘who?’

1371 Aramaic ’ay + be ‘where-at/in it?’ > Ktn hayp(ea) ‘where?’

1372 Arabic dbr ‘turn one’s back’; Arabic **dubr/dubur** ‘rump, back(side), buttocks, rear, hindpart’:
Ktn tïhpi-c ‘loin, back’ [1d,2b,3r]

1373 Arabic đrr ‘strew, spray’; Hebrew cognate zrr means ‘sneeze’:
Ktn tïyïyï’y ‘drizzle (weather)’. [p:1z2,2rr]

1374 Syriac buundəq-aa ‘ball, globule, sphere-the’:
SP potto ‘round, spherical’; Hopi poŋo(-k-) ‘encircle, form a circle’ (2nd syllable reduced -ndəq- > -Nq- > -ŋ-) [p1b,2n,3d,3q]

1375 Syriac buundəq-aa ‘ball, globule, sphere-the’:
UA *kwinu’ ‘ball’ (Sem-kw, as 1st C more prominent). [kw1b,2n,3d,4q]

1376 Hebrew ṣor ‘flint’; Akkadian ṣurru ‘obsidian, flint’ > SP čoiC ‘bead’. [kw1s4,2r]

1377 Hebrew ṣ[ə]pardeaʕ ‘frog’:
UACV-973 *sikwo / *sibo’o / *siboro ‘tadpole’: L.Son247 *siwori ‘renacuajo’; M88-si11; KH/M06-si11: Eu zivór; Tr sibóri; My síbo’ori ‘tadpole’; Yq síbo’olim. Cr šïkwá ‘frog’ and ST subaa’n ‘frog’ agree some in that Cr ï < *u and ST b < *kw, but the ST s is unexpected. Perhaps Tb šiko-l ‘lizard’. As *-r- > Cah -’-, the Yq/My sibo’o- stem (-ri noun suffix) could reflect *siboro or *sikworo, in Semitic *-rd- > -r- > -’-, and pharyngeal’s rounding. In Num *sïkï/suku ‘lizard, snake’ is found a c/s inconsistency. Hebrew ṣ > UA *s marks this as Sem-p. [1s4,2p,2r,2d,3’2] [SUA: Tep, TrC, CrC; NUA: Tb]

In contrast to Sem-p’s term which came to mean ‘tadpole (baby frog)’(1377 above) instead of ‘frog’, the Sem-kw term (1378 below) appears that a prefixed article haC- (‘the’) or such caused the first two consonants to cluster *-ṣp- > UA *kw, then when without the prefix is left initial kw-:

1378 Hebrew *ṣ[ə]parde[a]ʕ ‘frog’ or ha-ṣpardeʕ > ha-kwa’ro:
UACV-972 ***kwa’ro** (> kwara / kwaya / kwa’na) ‘frog’: M67-191 *kwa; L.Son119 *kwaya ‘sapo’; Fowler83; M88-kwa6 ‘frog’; KH/M06-si11: Gb kwá’ro’ ‘sapo [toad]’; TO bábað ‘frog’; PYp babadu ‘frog’ (Tep b = UA *kw, and *kw > bw/bo in My next); My boórók, pl: booró’okim ‘sapo’ (*kwaro’o > bworo’o); Tr barí; Tb woohnaa-l ‘frog’; in many of the following is prefixed UA *paC- ‘water’: SP paqqwan’a ‘frog, toad’; CU páqxa-kwá’na ‘frog’; CU páqxá-ci-ci ‘horned toad’; CU paqxwani ‘frog’ (in English section); Hp paakwa ‘toad’; Eu kohár

‘sapo’; CN kweya-tl ‘frog’; NT babáádai ‘frog, toad’; NT kuaáli ‘frog’; Wc kwaašaa ‘species of frog’. Fowler also lists Ls pakwari-t ‘tadpole’; Gb qwarava ‘frog’. The words for ‘frog’ are a difficult collection, yet in Gb, My, and PYp are signs of 2nd vowel o. In Gb, My, Eu, Tr are signs of a liquid in the second consonant or cluster. Besides a cluster -’r- in Gb, the -’n- in Num agrees. All together these forms show expected *l/r > n in Num and *r > d/đ in Tep and *r > y Azt. Forms like Gb kwá’ro’ are a wonderful depiction of Hebrew *ṣpardeʕ > kwa’ro’ with r > ’ as first element in a cluster, d > r, and rounding influence of the pharyngeal on the vowel which itself becomes a final glottal stop. Note, like Sem-kw Semitic ’arnavot ‘rabbit’ > UA *tavo wherein first syllable is lost, perhaps due to prefixed haC- ‘the’ creating a cluster, then being dropped. [r > y in Azt, Tep] [NUA: Num, Tak, Hp, Tb; SUA: Tep, TrC, CrC, Azt]

1379 Egyptian rʕ + mrr ‘sun-go’

UACV-2230e ***ta-miya** ‘sun, day, sun-going’: BH.Cup *tVmet 'sun, day'; HH.Cup *tamet 'sun, day'; Munro.Cup125 *tamé-t 'sun, day'; KH.NUA: Ktn tamea-t ‘sun, day, timepiece’ (< ta ‘sun’ + mea ‘go’ / mea’ with, that is, the going (time) of the sun, (being) with sun); Sr taamia-t ‘sun, day, time’; Gb támi-t 'sun, day’; Ca tami-t / tamya-t ‘sun, day, time’; Ls timé-t ‘sun, day’; Cp támi-t ‘day, sun’. [1m,2rr]

1380 from Semitic ʕqr ‘uproot, be sterile’ are Hebrew ʕqr ‘tear out by the roots, weed’; Syriac ʕqr ‘uproot, heal, be barren’; Arabic ʕaaqir ‘barren, sterile’; Arabic ʕaqr ‘sterility’; Samaritan Aramaic(CAL) ʕaquur ‘death, barrenness’; when uprooted, a plant becomes ‘dry’, ‘thin’, ‘shrivels’ or ‘dies’; ‘sterile’ is often from ‘dry up’:
UACV-720 ***waki** ‘dry, shrivel, thin’: VVH99 *waki 'dry'; M67-143 *waki; BH.Cup *wáx 'to dry'; B.Tep38 *gaki; L.Son325 *wakï, wak-i 'secarse'; CL.Azt48 *waaki; KH.NUA; M88-wa4; KH/M06-wa4: Tb waagii’ït ~ ’awaagii’ ‘be skinny'; Tb(H) waakït ‘be dry’, Tb waakinat ‘dry, vt’ Hp laaki ‘become dry, thin, v’; Cp wáxe 'dry, vt’; Ca wáx 'become dry, vi’; Ca wax-ne 'make dry, v.t./caus.' Ls wáxa 'dry up, heal, v.i’; Ls wáxni 'dry, vt’; Sr waak 'dry, vi’; Sr waaqan 'dry, vt’; Sr awaaki’ 'dry, adj’; TO gaki 'be dry, skinny, bony'; PYp gak; NT gáki; ST gak; Nv gaki ‘cosa seca’; Nv gaku ‘estar seco/flaco’; Eu wáke; Yq wakía 'dry, thin'; Yq waake 'dry, vi’; My wakía; Cr wahči 'dry, thin'; Wc vaváki 'seco, flaco, delgado'; CN waaki 'dry out, evaporate, wither’. This prominent stem is in every branch except Numic; many reflexes also mean ‘thin’, ie, dry, become thin. [p1’2,2q,3r] [NUA: Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1381 Hebrew qapped ‘roll up’; MHebrew qpd ‘close up’; Late Hebrew qpd ‘be drawn together, be rolled together’ (Klein 586); Syriac -qapped ‘be wrinkled, be curled up’:
Sr qapit-q/kin ‘break (by bending), vi/vt’(Sr -p- < *-pp-). [1q,2pp,3d]

1382 Aramaic qəpiiduut-aa ‘shrinking, shortness’; Late Hebrew quppad ‘was rolled up, made shorter, cut short’ (Klein586); Syriac *et-qapped ‘be shortened, cut off, shrunk, shrivelled’ > Sr qapöc ‘short’. [1q,2pp,3d]

1383 Arabic qaʕada ‘sit down’, impfv: -qʕudu; Arabic qaʕda(t) ‘sitting, backside, buttocks’ > Hp kïri ‘buttocks’. For intervocalic -d- > -r-, see moose (735), tail (261). [1q,2’2,3d]

1384 Aramaic -be ‘with it, in it, by means of it’ > Hp -pi ‘instrumental’ and other UA languages.

1385 Syriac qʕuul-aa / qʕuul-taa ‘expansile, expansive as the lungs’:
Cp qíqilʸve (< *qoqolVpe) ‘lungs’. [1q,2’2,3l]

1386 Syriac kty ‘laugh/weep incessantly’; but less likely Syriac qatqet ‘burst out laughing, laugh loudly’; Arabic qatta ‘misrepresent, belittle, minimize’; Syriac qətaay-aa ‘loud laughter, pause in weeping, gulp down sobs, blinking’; Aramaic(CAL) qty / qatqet ‘to laugh’; Aramaic(CAL) quθqaaθaa ‘laughter’; Ca/Ls k, not q:
UACV-1287 ***kasi** ‘smile’: Ca kaskási ‘give a half smile, vi’; CU kïsíi(’ni) ‘smile’; Mn kïsito’aqa ‘make faces’; Ls kaṣíkṣi-š ‘squinting’; Ls kaṣíí-li ‘to wink’. *kati > kaci > kaskasi [t > s] [p1k,2t] [NUA: Tak, Num]

1387 Arabic(Lane) pgl ‘be thick and soft or flaccid’:
Hp pööŋala ‘thick (in size)’; Sh pohonta ‘thick (of book, grass, etc)’; Cm pohotatï ‘thick’ (blanket is in the sample sentence, and -nt- > -t-); Sh(C) pohonan / pohanan ‘thick’. [kw:1p,2g,3l]

1388 Arabic ’ađiya, impfv: ya-’đaa ‘to suffer damage, be harmed’; Arabic ’ađaa(t) ‘damage, harm, injury’; Arabic ’iiđaa’ ‘harm, damage, hurt’:
UACV-2089 ***’ïca(C)** '(have) wound/sore': L.Son9 *’ïca 'llaga'; M88-ï2 'wound'; AMR1992b; KH/M06-ï2 *ïcaC (AMR): Wr ehcá 'llaga'; Tr čá-ka, čá-na-ri 'sore, n’; Mn ïya-ye 'have sores'; NP ïadui’hu 'wound s.o.'; Sh ïa 'sore, wound'; Kw ’ïa 'wound, hurt, v’; SP ïa-vï 'wounded'; CU ’ïa-vi 'wound, n’; Hp ïya 'sore, scab'; Tbr acá-t 'llaga, sífilis’. Add TSh 'ïa- (in compounds); Cm ï’a’ 'wound, sore, n’. Medial *-c- > NUA -y-, so SUA *ïca and NUA ïya/ïa (Num, Hp *ïya). [*-c- > -y-] [NUA: Num, Hp; SUA: TrC]

1389 Semitic *taxt-e ‘under-him/it’ or *taxta ‘under’ > Wr(MM) te’ré ‘abajo en el suelo’ [1t,2h2,2x,3t]

1390 Hebrew *bətaxat ‘in/at under’:

UACV-698e ***pïtaha** 'under': B.Tep288 *vïta’a 'under'; M88-pï12; KH/M06-pï12: LP vïta; NT úta; ST vïta’ / vuta; PYp veta ‘below, under, ground, floor’. The Tep *pïtaha forms align with Semitic *bïtaxat quite well, though better reflecting the uvular nature of -x- are My bétuku 'debajo'; Yq bétuku(ni) ‘below, down’; AYq vétuku ‘under’. TO wečo ‘under’ and Nv buto (*pïto) ‘bajo’ likely link to another morpheme. Wr witú ‘below’ may be a Tep loan.

1391 Hebrew pšṭ ‘spread out, take off clothes, stretch oneself, remove (skin)’;
Syriac pšṭ / pəšaṭ ‘stretch out, extend, spread out’; Syriac pəšiiṭ ‘straight, plain, flat’:
Tr pe-, **pesá** (irregular present) ‘tender [stretch, spread], extender una cubierta encima de algo [spread a cover onto s.th.], tender cama [spread out a bed]’:

UACV-244a ***ha-pït** 'blanket': KH.NUA; M88-ha15; KH/M06-ha15: Gb havót 'blanket'; Sr havïït 'clothes, blanket’. Ken Hill adds Ktn havï-t ‘skin, blanket, clothes’ and considers the possibility of Hp havìi- ‘sleepy’. This *ha-pït ‘blanket’ is likely related to *pïta 'mat’, below, possibly with a ha- prefix for these Takic forms, similar to TrC's *hi-* prefix: Tak *ha-pït; TrC *hi-pïta. [*ï > Gb o]

UACV-244b ***(hi-)pïta** 'woven mat': M67-277 *peta 'mat, bed'; CL.Azt194 *pətla 'woven mat’; CL.Azt 317 **pata; L.Son205 *pïta 'estera'; M88-hi2 'sleeping mat/petate'; KH/M06-hi2; M88-pï8 ‘mat, bed, petate’; KH/M06- pï8: Eu hipét; Wr ihpetá; Tr péra; My hípetam; Cr péeta 'mat, bed, petate'; CN petla-tl 'woven mat'; Pl petat; Po -pot/b'tet; Tb(H) pah-t ‘tule mat’. Cr péeta is likely a loan (as also the Azt forms), but Cr hitá-ri with the expected *p > h is a genuine CrC cognate. Takic shows a *ha-* prefix, and some TrC forms show a *hi-* prefix, while others show only **pïta*; yet all have *pït(a) in common. Miller lists many of the same forms in M88-hi2 and M88-pï8; therefore, Miller's two sets pï8 and hi2 are here combined. [Wr prefix = CN] 1p,2s1,3t2 [NUA: Tak, Tb; SUA: TrC, CrC, Azt]

1392 Syriac p’y ‘be becoming, comely’; Syriac **paayuut** (< ***pa’yuut**) ‘beauty, comeliness, elegance’
Or MHebrew p’r ‘glorify, praise’?:
Tr **ba’ó** ‘hermosura [beauty]’; Tr **ba’ó-** / **ba’óre-** / **bayóre-** ‘ser hermoso [be beautiful], lindo, bonito [pretty]’. How interesting that a cluster *-’y- surfaces as both -’- and -y-! [1b,2’,3r]

1393 Hebrew ṣnn ‘to be cold’; Hebrew ṣinnaa ‘cold, n’; Aramaic(J) ṣnn ‘be cold’:
Tb ciina-l ‘hail’. Cold-hail connections also occur in Semitic itself wherein Semitic brd means ‘cold’ in Arabic, but underlies ‘hail’ in Hebrew. [1s4,2nn]

1394 Ugaritic bʕd ‘behind’; OSArabic baʕdu ‘after, behind’; Arabic bʕd ‘be distant’; Hebrew báʕad ‘behind, through, round about, for’:
Tr bo’ó / ko’ó ‘del/al otro lado de [from/at/on the other side of]’; Tr has bo / ko variants, but not po / ko. [1b,2’2,3d]

1395 Hebrew paẖ, pl: paẖiim, pl construct paẖee(y) ‘thin plate(s) of metal’
Tr piwe- / piu- / piwi- ‘remoler bien [grind well], pulverizar fino [pulverize finely]’. [iddddua] [1p,2h2]

1396 Arabic kfr (< *kpr) ‘cover, hide’; Syriac kpr, impfv: -kpur ‘wipe clean, scour’; Hebrew kpr ‘smear (i.e., cover) with s.th. (‘pitch’ in the attested example in the OT):
Tr pora- ‘tapar [cover with a top], cubrir [cover], techar [cover with a roof]’. [1k,2p,3r]

1397 Hebrew *bayin > been / beenee- ‘between, among, with’; Arabic **bayna** ‘between, among’;
Syriac baynay ‘between, among’:

UACV-2563b ***pïna** ‘with, unite/go with friend’: TO weenađč ‘with’; PYp veena ‘with’; PYp veen-k ‘accompany, vt’; PYp veenag ‘friend, n’; ST vïïna’ ‘compañero, cónyuge’; ST vïnta’ ‘unirse, juntarse, vi (subj anim)’; TO weenag ‘brother, sister, cousin, relative of the same generation’; Eu vené-ri ‘junto [together], cerca [near]’; Eu vené ‘to, with’ in Eu amo vené ‘a ti’; ‘among/between’ objects is ‘together with’ the objects; movement to being between or among is a semantic extension. [p:1b,2n] [SUA: Tep, TrC]

1398 Hebrew bə-paney ‘on the surface of’ > Eu vepán ‘encima, sobre’; AYq vepa ‘on top of, more than’

1399 Semitic *bxr ‘test, choose, be/make choice’: Syriac bẖr (< *bxr) ‘try, prove (as silver by fire)’; Hebrew bẖr (<*bxr) ‘choose’; Hebrew na-bẖr ‘be tested (refined in fire, as metal), preferable’; Hebrew baẖiir ‘choice’; Hebrew baẖuur ‘young man (i.e., choice, in prime of life)’; Amorite bexeru ‘elite soldier’:

UA *bïhïrï ‘expensive, opponent’: My behre ‘está caro/costoso [is expensive/costly]’; My behri ‘contra [opponent], enemigo [enemy]’; Yq behé’e ‘caro [expensive]’; AYq behe’e ‘1 betray, deceive, 2 cost, be

expensive'; AYq vehe'eri 'enemy, the Devil'; My bahia 'hermosura [beauty]'; Hp pïïhï 'new, fresh'. Sem-p shows Sem b > b in Cah and x > x/h (vs. rounding in Sem-kw). [p1b,2x,3r] [SUA:Cah; NUA: Hp]

1400 Syriac baatar 'after, following' (< b-'atar, which equates to Hebrew b-'ašer); Hebrew ba'ašer 'because'; Arabic 'aθar 'track'; Arabic 'iθra 'immediately after'; these 3 language forms are cognate in Semitic, and the UA form is phonologically like Hebrew, but semantically like the more original meaning in Arabic and Syriac, i.e., 'in the track of' or 'after, behind':
AYq veasi 'behind, beside, on the other side of'. [p1b,p2',p3t,p3r]

1401 Hebrew brɦ 'flee, slip away, pass through, glide past' > My bóroh-te 'tiene diarrea' [iddddua] [p1b,2r,3h2]

1402 Egyptian **mx'** 'make fast, tie, bind'; though also possible is Hebrew maʕ^{a}ṭe (< *maġaṭe) 'covering, outer garment, mantle' (< Sem ġṭw 'cover, wrap'); Arabic ġṭw 'cover, wrap, envelop'; Arabic ġiṭaa' 'a wrap, blanket, cover, item of clothing' for CNum *mokoC-ci 'sack, bag', the UA forms fit better with Egyptian **mx'** 'make fast, tie, bind, fetter, v'; Egyptian mx' / mx'i 'loop, sling, fetter, n':
UACV-115 ***maĝo'i-*** 'bag, bind, wrap, blanket': TO mako 'connect, couple, hitch together, shackle';
ST makia 'tie up (with bridle/halter)'; Sr möóq-kin 'fold, wrap, vt'; NP mago'o 'bag'; Kw mogwi'i 'tanned hide'; WMU moġwái' / moġwé' / maĝwé' / maaĝwáy' / moĝwé' 'blanket'; CU moĝóy'a 'blanket';
TSh mokocci 'sack, bag, pouch'; Sh mokoccih 'sack, bag'. Wr mo'ke-warí 'basket' and My mo'oko 'basket' anticipated the glottal stop; Hp mooki 'bundle, parcel, sack' and Hp mokyàa-ta 'wrap up, bag or sack s.th., put into a bundle, vt' and perhaps SP piccammuqqu 'tie around (?)' and CN moka 'full of'. I have not heard the other languages, but WMU has a deep pharyngeal tap, and Sr -q- agrees. [NUA: Num, Tak, Hp; SUA: Tep, TrC]

1403 Aramaic(S) šgr 'send, make flow'; Aramaic(J) šgr 'run, flow'; Syriac **šigr-aa** 'drain, ditch, gutter-the': Hp **sikya** 'small valley, ravine, canyon with sloped sides'. [p1s1,p2g,p3r]

Note the Semitic-p examples of the pattern of Aramaic -gra > Hopi -kya in

(1130) Aramaic pagr-aa 'corpse-the' > Hp pïïkya 'skin, fur'
(1403) Syriac šigr-aa 'drain, ditch, gutter-the' > Hp sikya 'small valley, ravine, canyon with sloped sides'.

Add yet a third with the same -gr- cluster > Hopi -ky-, and a fourth of -qr- > -ky-:

1404 Syriac ɧgr 'halt, limp, be lame' > Hp hokya 'leg, stalk'; Hp hokyalmi 'to trip'. [iddddua] [1h2,2g,3r]

1405 Arabic šqr / šaqira / šaqura 'be of fair complexion, light-skinned, be blond, fair-haired';
Arabic šuqra(t) 'fair complexion, blondness, redness'; Arabic šaqra'aa'u 'Fire' (evidently the colors signified by this root are like fire, from yellow to red):
Hopi sikya- / sikyà-ŋ-pï 'yellow, yellow(ish) thing, yolk of an egg'; Hopi sikya-qa'ö 'yellow-corn'.[1s,2q,3r]

1406 Semitic r'y / raa'aa / *ra'a^{y} 'see':
Wr(MM) re'é 'parecer, verse'; Wr(MM) re'té 'parecer, verse' (reduplicated form). Though initial r > r, the reduplicated form supports how initial Semitic/Egyptian r > UA *t; otherwise, we might expect re're, but an adjacent or preceding glottal stop more resembles an initial phonological environment. [1r,2']

1407 Hebrew maɦ^{a}ne < *maɦne 'camp, people of the camp'; as in-laws become family or people of the camp, a pervasive UA word for in-law, most often son-in-law, is a phonological match. 'Son-in-law' would especially fit matriarchal societies, as they join the wife's camp or family.
UACV-2085 ***mo'ona(C) / *monna / *moCna*** 'son-in-law, male in-law': Sapir; M67-505 *mona / mo'na / mo' 'affinal relative'; I.Num94 *mona / *muna 'son-in-law'; L.Son148 *monï 'yerno'; M88-mo3; KH/M06-mo3: Sh monappï;
Kw mono; SP munna/mona-ci; Hp mö'önaŋw 'male in-law'; Eu mónwa; My mó'one; Yq mó'one; Tbr moa-saká-r; Wr mo'né; Tr mo'né-ra; Wc muune; Cr mú'u 'affinal relative'; Cr -mu'un 'yerno'; CN moon-tli 'son-in-law'. Sapir also lists Cr muna-ra. Add AYq mo'one 'son-in-law'; Ca míŋkiw'a 'son-in-law', since Ca i < *o. With glottal stops in six languages (Hp, My, Yq, Wr, Tr, Cr), the reconstruction should reflect it.
[NUA n : SUA n] [1m,2h2,3n] [iddddua] [NUA: Num, Hp, Tak; SUA: TrC, CrC, Azt]

1408 Hebrew zrɦ 'rise, shine' (< Sem *đrɦ); Syriac dnɦ 'rise, dawn, shine (sun, moon, stars)';
Syriac **dinɦ-aa** 'sunrise, light, the ascendant or predominant **star** (at birth)', i.e., horoscope;
OSArabic 'đrɦ; The -cinuN- part of UA *tacinuN-pi 'star' fits well with rounding for the pharyngeal:
UACV-2168 ***ta(C)tinuN-pi*** 'star': I.Num212 *taci 'star'; M88-ta32; KH/M06-ta32: Mn tazinópï 'star'; TSh taciumpi 'star'; Sh(C) taci'ïm-pin/ttaC 'star'; Sh(M) tacï'ïm-pin 'star'; Cm tacinuupi 'star'. NUA -c- is usually from

*-Ct-. Aramaic **dinẖ-aa'** > UA *cinuN / *ci'uN has the glottal stop in some but -n- in others, which suggests a lost cluster, and the cluster *-nẖ- explains -nu- well with the rounding of the pharyngeal and the glottal stop can be a reduction of any cluster. A final nasal from the final glottal stop which we see in other NUA Sem-p forms, like 1409. Sh(M) taci 'shining' may be a denominalized reduction. ['/w; u > ĭ in Sh] [1z2,2r,3h2] [NUA: Num]

1409 Christian Palestinian Aramaic kwkyh 'spider'; Syriac gəwaagay 'spider';
Aramaic(J) buuky-aa' / **kuuky-aa** / kuuby-aa 'weaver's shuttle, spider-the'; Aramaic(J) kəkay 'spiderweb':
UACV-2107 ***kuukya / *kukkaC** (AMR) 'blackwidow spider': Fowler83; M88-ku33; KH.NUA; KH/M06-ku33 *kukkaC (AMR): Hopi **kookyaŋw** 'spider'; Ls kúyxiŋi-š 'black widow spider'; Cp kúka-t 'blackwidow spider'; Sr kuka-ţ 'spider'; Ktn kuka-č 'spider'. Hopi **kookyaŋw** is most intriguing in that Hp o < UA *u, so it equates to UA *kuukyaŋw, which is nearly identical to Aramaic kuuky-aa' with the glottal stop of the definite article suffix showing rounding and velarization of that rounding. Ls kúyxiŋi-š 'black widow spider' anticipated -y- and unstressed vowels > i. [1g,2w,3g,3y] [NUA: Hp, Tak]

1410 Hebrew ṣlʕ 'limp, be lame'; Arabic ẓlʕ 'be lame, limp'; Hebrew ṣɛlaʕ 'a stumble, fall, plunge, n';
Syriac ṭlʕ / et-tallaʕ 'fall in a stupor, become unconscious':
UACV-834 ***culiwa** 'fall, pl': KH/M06-cu15; M88-cu15: B.Tep206a *suriga-i 'fall, pl'; B.Tep206b suuri 'they fell';
TO šulig 'fall, bow, descend, pl'; LP šulg; PYp suli; NT suulíga/suulígi 'fall, pl'; ST suulygi fall, pl'.
Add Wc šïri 'fall, pl'. [1s4,2l,3'2] [SUA: Tep, CrC]

1411 Arabic nasaga, impfv **-nsugu** 'to weave'; unattested Hebrew impfv: *yi-ssugu:
UACV-2511 ***sugu** 'sew': Wr su'ka 'sew'; Tr su 'to sew' present: su/sugú; Tr i'su 'sew' (frequentive / emphatic of su-)'. The Tr frequentive and present reflect first 2/3 and last 2/3 of Hebrew impfv. [SUA: TrC]

1412 Arabic xḍr 'be green':
Tb(H) hul'hulat 'be/become green'; Tb(H) huu'lat 'green place'. [kw1x>h2,2s4,3r]

1413 Hebrew **took** 'midst, middle, among, in the middle of, during':
UA *tok 'with, near, middle': CN tlok 'with, near'; SP toġoi-tïqqai 'in the middle of eating, about half through eating'. [1t,2k]

1414 Syriac sgy 'be many, great'; the Hopi term reflects well an unattested huqtal form *hosgay 'be made great' > Hopi hoskaya 'large, huge, enormous' [1s3,2g,3y]

1415 Semitic **rdm** 'sleep':
Tb(H) **culuumat** 'sleep, vi'; initial r- > t- > c- palatalization before a high vowel and intervocalic -d/t- > -l- as usual, and the Tb reflects an infinitive or verbal noun rədom. [1r,2d,3m]

1416 Arabic iđaa / iđan 'then, therefore, if, when, whenever' > Tb(H) tan / tanni 'if'. [2z2]

1417 Aramaic -aayaa '-the' is the Aramaic definite plural suffix:
Hopi -ya is one of Hopi's non-singular plural suffixes, yet it most often follows -a, as in -a-ya 'pl' to parallel Aramaic -aayaa. Yet even -ya is consistent with the loss of initial vowel of the other pl suffixes: pre-Hebrew *-iima > UA *-(i)ma; Hebrew *ootee > *-te; Aramaic -aayaa > UA -ya.

Liquid + ʕ cluster > ŋ, as in (737) Hebrew **ṣirʕaa** 'hornets' > UA ***saŋa** 'yellowjacket', others, and (1418).

1418 Syriac ʕry / ʕr' / ʕaraa '1 to contain, hold, 2 grasp, take hold'; Syriac feminine impfv: **te-ʕre**;
Arabic ʕr' / ʕrw / ʕaraa, impfv: ya-ʕru 'befall, grip, seize'; the final -y impfv forms in UA reflect final vowel -a rather than Masoretic -e as i: bky (560,561), ʕśy (680): i.e., *ta-ʕra' > UA taŋa':
UACV-111 ***taŋa** 'bag, sack': M88-ta45; KH.NUA; Stubbs2003-4; KH/M06-ta45 'to contain (several thingns)': Sr taŋat 'sack'; Gb taŋár 'sack'; Hopi taŋa-ta 'put in a container'; Hopi taŋa 'contents of a rigid, enclosed container'; Hp patŋa 'squash' (with pa-). Stubbs (2003-4) adds Tbr tanaté 'zurrón, mochila de cuero en que se acarrea a la espalda el ineral'; the last two syllables of Mn kusatá'ni 'sack' and Sr qawaataŋaţ 'pocket'. CN taana'-tli 'basket with a handle'; and Yq 'ía-tana 'this shore/side' (a shore contains/encloses water). Add Ktn táŋata-t 'sack, trunk, box'; Ktn hu' 'ataŋata-t 'granary'. *taŋa compounded with *pa- 'water' produces *pa-taŋa 'squash, pumpkin, gourd' (Stubbs 2003:4 and KH/M06-pa66 'squash'): Ch paráŋar(a) 'pumpkin';
SP pataŋwataN 'pumpkin'; and Hp patŋa 'squash, pumpkin' at 'squash'. Note CN final -' and the same in the Semitic root. Is this Sem-p and 1358 Sem-kw? [NUA -ŋ-:SUA -n-] [p1'2,2r,3'/3y] [NUA: Num, Hp, Tak; SUA: TrC, Azt]

1419 Syriac šagni ‘remove from its place, alter, transform, change clothing or appearance, bec different’: Hopi siiŋi ‘peel, shed skin (as of a snake)’; Hopi siiŋya ‘to strip, peel, husk (s.th. easily peeled without implement, like corn, banana, peaches), blow away clothing to reveal skin, hatch (egg)’.

1420 Arabic nwr II ‘blossom, fill with light, illuminate’; Arabic naar ‘fire’; Aramaic(J) nuur-aa ‘fire-the’; Syriac nwr / nayyar ‘set light, kindle’; in most Semitic languages is the verb nwr ‘to make/become light’ with infinitive and imperfective: -**nuur**(u), and perfective **naar**; note that UA has both in Eu and Tr:
UACV-2238 ***nur / *nar** ‘aclarar el día [to dawn, become daylight]’: Eu nurú ‘aclarar el día’; Tbr nare ‘aclarar el día’. [SUA: TrC]

1421 Arabic saḫr- / suḫr-, pl: suḫuur ‘lungs’; Arabic masaaḫir ‘lungs’:
Tb mošooha-t / mosooha-t ‘lungs’; Wr so’locá ‘pulmones [lungs]’. Wr divides these from Egyptian sm’: Tr and Wr are sister languages, usually with quite parallel forms, so Tr sonorá and Wr so’locá are a clear division, Tr sonorá aligning with the other SUA *sono and NUA *soŋo / somo, while Wr so’locá aligns nicely with this set (suḫr-), with rounding plus glottal stop reflecting the pharyngeal, and the liquid l reflects the liquid r, while Tb shows the Semitic form with mV- prefix. [1s,2h2,3r] [NUA: Tb, Num; SUA: TrC]

1422 Syriac kəmar (< *kamar) ‘be sad’ > Tb(H) hammaššat ‘be sad’ (r > s usual adjacent to voiceless C).

1423 Syriac -ai / -ay ‘me, my’ (enclitic pronoun, and possessive pronoun suffixed to pl nouns, Thackston 45-46) > Serrano -ai ‘I’m’. In Semitic, verbal nouns are very often used instead of conjugated verbs; for example, ‘my walking’ instead of ‘I walk’, in which case ‘my’ = ‘I’m’.

1424 Syriac nədaal-aa ‘fieldmouse-the, n.m.’
UACV-1465 ***tori** ‘rat’: L.Son314 *tori ‘rata’; M88-to8 ‘mouse/rata’; KH/M06-to8: Eu tori; Wr torí ‘rata’; Tr rorí ‘rata’; My tóori ‘rata’; Tbr tolí ‘rata negra’. Can this be a Sem-kw form with loss of 1st syllable and Canaanite vowel change of *aa > oo? [1n,2d,3l] [SUA: TrC]

1425 Arabic ndw / nadaa ‘invite, call together’:
UACV-609 ***nata / *nara** 'cry': L.Son167 *nara 'llorar'; M88-na10 'cry’; KH/M06-na10: Op nara; Wr nalá-; Tr narár; HN nanalka’ 'snort, bark (of dog)’. [liquids] 1n,2d [SUA: TrC, Azt]

1426 Arabic rmy / ramaa ‘throw, cast’; Hebrew rmy / raamaa ‘throw’;
Syriac rmy/rm’ ‘put, place, pour, cast, leave on the ground’:
UACV-989 ***rima / *lima** ‘throw out onto a refuse heap (which loosely piles higher)’: Hp ríma ‘cast away, throw out’; Ls líma/i ‘put on top of, pile loosely’. Note initial r- in Hopi. [1r,2m,3y] [NUA: Hp, Tak]
UACV-1405 ***limu** ‘lumpy, bumpy’: Sr rimïïmï’q ‘be lumpy’; Ca limu-límu ‘be bumpy’; Ls kuma-lúma ‘be bumpy’; AYq rumui ‘uneven’; AYq rurumui ‘rough ground’ (in other words, lumpy and bumpy); both the bilabial m and the following u could encourage assimilation of first vowel i to u. [NUA: Tak; SUA: TrC]

1427 Semitic rwḫ, sometimes voweled rawaḫ, ranges through meanings like ‘go away (in the evening) to rest, breathe, be breeze/wind (as in evening), deliver/free, separate oneself, extend, make wide/space’:
Hebrew réwaḫ ‘width, space, interval, liberation’; Hebrew rəwaaḫaa ‘break, clearing, relief’;
Arabic rwḫ ‘go in the evening; go away, depart, leave, go’ (verbal noun rawaaḫ);
Arabic rawaaḫ ‘departure, going, leaving, return trip’:
Sr rïwïrïwïh-q ‘disappear (distributive)’; Sr rïwït-q ‘disappear’; Sr rïïwï’-q ‘be gone, absent (resultative)’. [1r,2w,3h2]

1428 Syriac raa’taa / raataa ‘lung(s), n.f.’:
Cora ta’atime ‘pulmones [lungs]’; the Cora form is quite identical to the Syriac form except with a separated cluster and something resembling a masculine plural ending instead feminine plural. [1r,2’,3t]

1429 Arabic kmn ‘be hidden, concealed, latent’:
UACV-2036 ***kuman** ‘sleep’: KH/M06-ku15: Sr kuuman ‘sleep, go to sleep’; Ktn kum ‘sleep’. This may originally apply to and derive from the animal kingdom, wherein deer, etcetera, lay hidden to sleep, but jump and run only if one approaches closely enough. [iddddua] [1k,2m,3n]

1430 Arabic iġpaa’a(t) ‘slumber, nap’; Arabic ġpw / ġpy, impfv ya-ġpuw ‘slumber, doze, fall asleep’ (v.n. ġupuuw) would equate to *ʕpy in Hebrew and Aramaic, but could also fit the impfv of Sem-p:
UACV-2034a ***ïppïwi / *ïCpïwi** ‘sleep’: Sapir; M67-385 *pei ‘sleep’; I.Num24 *ïhpï’i ‘sleep’; M88-pï6; KH/M06-pï6:
In all NUA languages, *ïppïwi applies to sg vs. pl okko’i ‘sleep’: Hp pïïwi; TSh ïppïih; Sh ïppïih;

Cm ïhpïitï; pui-(in compounds); Kw ’ïpii; Ch ïpïi; SP ahpïi; WMU pwíi, pwíi’!; CU pïí; perhaps Wc húupu ‘sleep habitually’. Hp pïïwi and Numic *(ïh)pïi align well. Sapir also ties Cr hipi ‘sich niederlegen zum schlafen [lie down to sleep]’ (thus the vowels of Cr hipi correspond to Num ïppï) with Num, as both exhibit *-pp-, though I cannot find that Cr form in my sources. But the other CrC language has Wc húpu ‘dormir habitualmente’ which likely belongs as well, though the vowels do not match perfectly (normally, Wc u < *o, and Wc ï < *u). However, considering Kw ’uupuha-ga-dï ‘sleeper, sleepyhead’, which shows geminated *-pp- like Cr and all the Num languages, they also all have round vowels in common, if we consider that Num ï is often from *u, i.e., all have u or ï, and that the cluster -ġp- > -pp- doubled the consonant, a good match. [w/’] [p1g2,p2p,p3w] [NUA: CNum, SNum, Hp; SUA: CrC]

UACV-2034b ***ï’wi*** ‘sleep’: Mn; NP. Most forms in *(ïC)pï’i above contain an extra initial syllable that ends with a geminating feature, a consonant (cluster) that doubles the -pp-; and WNum *ï’wi is likely a kw-like result of the doubled bilabial cluster? [*-pp- > -’- in WNum] [NUA: WNum]

1431 Hebrew lḫy / ləḫiy ‘chin, jawbone’; Arabic laḫy- ‘jawbone’:
Hopi öyi ‘chin’; Ls ’óóyi-l ‘jaw, chin’. This UA pair may not be a cognate pair because PUA *o > ö in Hopi, but *o > e in Ls. Yet it could be a UA loan into Ls from some source of PUA *oyi, and both, given loss of initial l-, resemble Hebrew lḫy / ləḫiy ‘chin, jawbone’; Arabic laḫy- ‘jawbone’, beginning with the rounding pharyngeal ḫ > ho / o. Perhaps Sem-kw in loss of initial liquid’. [1l,2h2,3y]

1432 Akkadian awiil ‘man’:
UACV-1421 ***owi*** ‘male, man’: M88-’o5 ‘male’; L.Son24 *owi ‘macho’; KH/M06-’o5: Wr oí; Tr owí; My óo’ow / o’o. Add Tbr oñwi ‘man’. Tr, Wr *owí ‘male’ and Tbr oñwi ‘man’. Yq ’óo’ou, pl: ’o’ówim may possibly tie to *otami, as intervocalic *-t- > -r- is common in UA, and -r- > -’- is common in Cah: *otami > *oromi > o’owi. [1’,2w,4l] [SUA: TrC]

1433 Hebrew ḫwš / ḫyš ‘hurry’ (impfv: *ya-ḫuuš); (hiqtil) yaḫiiš-(aa) ‘hurry, hasten (something)’:
TSh yawï(sï) ‘quickly, fast, in a hurry; hurry up!’. [p1y,2h2,3s1]

1434 Hebrew dopi ‘blemish, fault’; Aramaic(J) dopy-aa ‘damage to reputation, taint, reproach’:
UA *tïpa ‘dotted, striped, checkered’: TO čïčpa(i)mag(ï) ‘be dotted, have dots’ (Saxton 1969); Ca teveleve (< *tïpï-tïpï) ‘be checked, have stripes’; TO čïčpa’avi ‘promiscuous woman, prostitute’. UA *t > č in TO before high vowels (like ï). The Semitic semantics provide a connection for the two TO meanings that are otherwise not obviously relatable. [1d,2p,3y]

1435 Hebrew ḫaadaaš ‘new, fresh’; Syriac ḫdt ‘be new’; Arabic ḫdθ / ḫadaθa ‘to happen, come to pass’:
*uta’a ‘be’: WMU ura’a-y / ara’a-y ‘be’; CU urá-’ay ‘be, exist’; SP uru’a- ‘be’. š > ’ in 1436. [1h2,2d,3s1]

1436 Hebrew ’išaa, ***’ešet*** ‘woman’:
***wa’iC**-pï ‘woman’: TSh wa’ippï ‘woman, female’; Sh(M) wa’ippï ‘woman’; Sh(C) wa’i-ppï ‘woman’; Cm wa’ihpï ‘woman’s female kinsman’ (but example uses it as ‘woman’). Given ṣ/š > ’ in Num (see eye, fall, be 1435, woman), ’ešet > wa’iC- of CNum. [1’,2s1]

1437 Hebrew ḫyy / ḫayaa, impfv: yi-ḫye ‘to live’:
Wr ohee / ohoe ‘to live’. Rounding by the pharyngeal and compare ‘year’ (823) and ‘right’ (801) for loss of y and transposition of h to where y was. [1h2,2yy]

1438 Hebrew ṣbʕ ‘to dye’; Arabic ḍabaġa ‘to dye’, impfv ya-ḍbuġu. Given the cluster created by the impfv’s voweling and the usual loss of the first consonant of the cluster, UA *pu is expected, though finding the other consonants in say the perfect or s.th. would be nice.
UACV-736 ***pu*** ‘dye’: ST vua 'dye'; Wc hïye ‘color, form’. Both initial syllables agree with *pu, though second syllables vary. Wc hïye looks like part of Wc maïye ‘color’ which is attached to many color words, and Semitic’ ḍbʕ is also much used for words meaning ‘color(ed)’, not any specific color, but simply creating colors. [p1s4,p2b,p3g2] [SUA: CrC, Tep]

1439 Hebrew nš’ ‘lend out’; Arabic ns’ / nasa’a ‘to sell with delayed payment, grant credit’:
Hopi nasi-moki ‘borrowed thing, loan, n’; Hopi nasi-mokyàa-ta ‘to borrow’. Hopi moki ‘bundle’, but the first morpheme is of unknown meaning. [1n,2s1,3’]

1440 Hebrew ’rḫ / ’aaraḫ ‘be on the road, wander’; Hebrew ’oraḫ ‘way, path’; Akkadian urxu ‘way, expedition’ > Ch(L) ’uru^{w}a- ‘travel, go, walk’. [kw1’,2r,3x/3h2]

1441 Hebrew and Aramaic ṣpp / ṣapṣep ‘chirp, peep, twitter, squeak’; Hebrew ṣapṣaapaa ‘kind of willow’ (from rustling); Arabic ṣapṣaap ‘a variety of willow’; Arabic ṣupṣup ‘sparrow’:
UA *cap > TO šaw ‘to rattle’; TO šawikud ‘a rattle’ (-kud ‘instrument’); TO šašaw-k ‘to echo’; Wr capi ‘a small bird’. The semantic extension from rattle or make small noises to a plant that makes similar noises is seen here in Semitic and is also apparent in a similar extension of ‘rattle’ to ‘chile’ at 31. [1s4,2pp]

1442 Hebrew ʕrb (< *ġrb) ‘become evening’; Arabic ġaraba ‘go down, set (of sun)’; Arabic ġarb ‘west’; Hebrew ʕɛrɛb / **ʕaarɛb** ‘sunset, evening’; the TrC forms appear to reflect the latter: Wr ari ‘late afternoon’; Tr ariwa-ma ‘to become evening’. Note that b > w in Tr and Wr, at *kabbed > kawer… etc. [p1g2,2r,3b]

1443 Syriac ašiig ‘wash’ (aqtel pfv of šwg):
UACV-2493 ***asi / *asï** ‘bathe, wash’: M67-26*’as; VVH139*’asi; BH.Cup *’aš; M88-’a11; KH.NUA; KH/M06-’a11 *asiː Tb ’aasït~’a’aas 'bathe, swim'; Sr ’a’ah(ï); Cp áṣe; Ca ’á’as; Ls ’áaṣ(a); Gb ’ás-; Hp aasi 'wash one's own hair’. Add Ktn ’ah-an ‘bathe, vt’ and Ktn ’ar ‘bathe, vi’. [kw:1g2,2s,3l, less likely Arabic ġsl / ġasala ‘to wash’, prtcpl ġaasil] [NUA: Tak, Tb, Hp]

1444 Arabic rnn / ranna ‘cry, ring, echo, resound’; Hebrew rnn ‘give a ringing cry’;
Arabic rannat ‘scream, sound, reverberation’:
Hopi tȍna ‘voice, trachea’. [1r,2nn]

1445 Syriac bkt ‘to weave’:
UACV-2507 ***kwiCta** ‘braid, wind around’: M67-57 *kwi 'braid'; M88-kwi4 'braid'; KH/M06-kwi4: Mn kwïtta-t 'wrap, twine, wind around'; Hp kwite 'braid'; Ca kwíče’an ‘wring, wash (as clothes)’ (Wanikik dialect); Cp kwíča ‘wring out, squeeze, ball up, vt’; Ls kwííči ‘wring (as clothes)’; Sr kwicq ‘wash, vi’. Add Ktn kwirav ‘braid’. Perhaps Pl tahkwil 'braid’ with a prefix. The change *-tt- > -c/č- is common in UA, as in Ca and Cp above, and the CNum forms—Sh kwecoi/koicoi ‘wash’; Cm -koce-rï/tï ‘wash’ has one of the two meanings of Ca and Cp (wash, but not wring) and may show vowels of the Semitic plural baktu. [kw1b,2k,3t] [NUA: Num, Hp, Tak; SUA: Azt]

1446 Aramaic / Syriac **bar kəbaan**-(aa) ‘belt’ (CAL), kbn ‘gird’:
UACV-180 ***pakkaC** 'belt’: Ch náápagapï 'belt'; Ca tépaqa-l 'belt'; Ca tépaqa 'tighten (as belt), vt';
Ca tépaqa’-vi ‘have a belt on’. A possible final C is suggested in Ch -pï and note Ca’s glottal stop, but not apparent in Ca’s -l. Note Ca -vi possible possessive. [p1b,2r,3k,4b] [NUA: Num, Tak]

1447 Hebrew qrṣ ‘bite’; Ug qrṣ ‘gnaw, nip off’; Aramaic(J) qrʕ ‘bite, pinch, sting’;
Arabic qrṣ, impfv -qruṣu, v.n. qarṣ ‘pinch, nip, scratch, bite, sting’;
Arabic qrḍ, impfv: -qriḍu, v.n.: qarḍ ‘cut, gnaw, nibble, bite, eat’:
UACV-230 ***kï’ / *kï’ca** 'bite, v.': Sapir; VVH43 *kï$_{u}$('i~ï) 'bite'; B.Tep130 *kïi 'he bit'; M67-42 *ke/*key; I.Num72 *kïh ‘with teeth, by biting’; BH.Cup *kə-’; L.Son81 *kï; M88-kï2; KH.NUA; KH/M06-kï2: Mn kïC- 'by biting'; Mn kïyï ‘bite, vt’; Mn kïcoho 'chew'; NP kï- 'with mouth'; NP kïka'a ‘biting with mouth’; NP kïipï ‘bite, v’; NP kïhanni ‘biting on to loosen up’; TSh kïC/kuC/koC ‘with teeth or mouth’; TSh kïcci’ah ‘bite, vt’; TSh kïceohi ‘chew’; Sh kïC- ‘with the teeth or mouth, instr. pref.’; Sh kïC-ci'ah; Cm kïh-kka'a 'bite off a piece of s.th.'; Cm kïhka'arui; kïcïbakitï; Kw kï- 'with mouth or teeth'; SP kï'ï; kïC; CU kï'í; Hp kïïki; Hp(S) kyatkï ‘nipped, bit, took bite from’; Tb(V) kïï’-, kï’ït~'ïïgï’ ‘bite’; Sr kïï’ / kïa’; Ca ké’; Cp qé’e; Ls kó’i; TO kï’ï, kïi, kïhi; ST(B) kïi ‘he bit’; kya; Eu ké'e; Tbr ke; Yq ké'e; My ké'eye; Wr ki'cu ‘bite’; Tr ki'su/gi’su ‘bite, nibble, gnaw’; Tr ki’ca ‘chew’; Tr i’kí ‘bite’; Cr če'e-/čey-/če'i-; CN ke’coma ‘bite s.th.’ Ken Hill adds Ktn kï’; NT kïi ‘he bit’. Let’s also add Ch kï'í ‘bite, v’; Wc kée/kéi; Nv kuku(kïkï)/ku’i ‘bite’; PYp kekim ‘bite, vt’; NT kïí / kïkïïyi; NT kikííšapai; kííšaka 'have in mouth, bitten’; perhaps Cr ná’ice ‘it bit me’ (also allomorph -cei-) with na- prefix. This etymon is one of the few to have a reflex in all UA languages. It is curious that 'bite' would be so stable. Many UA languages show a reflex of *kï’ï, though Tr, Wr, and CN (*kï'c-) and other details suggest a medial cluster, perhaps *-'c-, since a glottal stop is apparent in some, medial *-c- in others, and both in a few (Wr, Tr, CN). Note that some languages (Tr, Hp, Tb) have two forms (Tb 'ahaaič and Tb kï'ït)? [cluster] [1q,2r,3s4] [NUA: Tak, Tb, Hp, Num; SUA: Tep, TrC, CrC, Azt]

The set above may be of the set from Sem-p and the below from Sem-kw:

1448 Semitic qrḍ ‘bite’ > Sr qaac ‘chew’ (vs. Sr kïï’ / kïaa’ ‘bite’); Tb(V) ’ahaaijat / ’ahaaič ‘chew it, vt’ (vs. Tb(V) kïï’-, kï’ït~'ïïgï’ ‘bite’); Hp(S) kyatkï ‘nipped, bit, took bite from’ (vs.). [p1q,2r,3s4]

1449 Aramaic plpl ‘sprinkle with blood’ (<*palpil)
UACV-260 ***païC / *pauC / *paC / *pap** 'blood, bleed': I.Num128 *païhpi; M88-ï4; KH/M06-ï4: Mn paaC- / páápi; NP bïïpi (< *pïïp-pi); TSh paoC-, paoppi; Sh pïïC-pin; Cm pïïhpi; Kw pïïC- / pïï-pï; Ch páï-pi / païwa; Ch(L) païpita; SP païC-/ paï-ppi; CU paaC- / páa-pï (vs. –vï), poss'd páa-pï-n 'my blood’. First part of Eu vávika 'bleed' aligns, but lacking much are Tbr avá 'blood’; Mn paaqa ‘bleed’; and Ls páá’ ‘to menstruate’. [1p,2l,2p,2l]

1450 Arabic **ṣbb** ‘pour, gush, flow’; Arabic **ṣabiib** ‘poured out, **blood**, sweat’:
CN(RJC) espipika ‘blood flow out’ and Sr ïçava’ ‘bleed’ maybe from *y-ṣbb or a denominalized verb from s.th. like **ṣabiib** ‘**blood’**. Much less likely ST rpukia 'bleed’. [p1s4,p2b,p3b] [NUA: Num, Tak; SUA: TrC, Azt]

1451 Syriac -ay ‘accusative pl ending’; Syriac plural noun base suffix -ay- precedes the possessive suffixes: noun-ay-suffix (Goldenberg 88):
Ktn -ay, -y, -ïy ‘accusative or object suffix’ (Anderton, pp. 95, 185,189);
Ls -ay ‘oblique case (accusative and possessed).

1452 Arabic *naṣapa > naṣafa ‘to reach mid-day, become noon’; Arabic nişf- / nuṣf- ‘half, middle’:
UACV-1115 ***nasipa** ‘half, middle’: Tr nasípa ‘half, middle’; Wr nasíba ‘half, middle’; Hp naasa-ve(-q) / naasa-va(-qe) ‘middle, center, halfway’ (in light of Tr and Wr, are the Hp morpheme boundaries correct?); TSh nasikaka ‘middle, between’. [NUA: Num, Hp; SUA: TrC]
UACV-1117 ***nappa / *napa** ‘half’: TSh napakan ‘half, equal part, in half, even, equally’; Sh nappai ‘half’ (with collapse of middle syllable); Kw na-voyo ‘half’; Kw na-vee-tü-ika ‘half of it’; SP navaia ‘divide’; WMU naváy ‘divide (in half)’; CU naváyi ‘divide in half’; CU naváy-tï ‘half’; cf. Kw’s V’s in dove and water. [1n,2s4,3p] [NUA: CNum, SNum]

1453 MHebrew and Aramaic(J) pwẖ ‘blow, breathe’; Arabic fwẖ ‘diffuse an aroma, exude a pleasant scent’; Syriac pwẖ ‘breathe, blow, exhale, give out odor’; Syriac payyaẖ ‘breathe forth, exhale’:
Tr pewa- ‘fumar [to smoke]’. Or perhaps Semitic npx, impfv -npuxu ‘to blow, puff, breathe’
UACV-261b ***puh-ki / *pukki > *pukkwi** ‘pant, blow, v’: Ls púxi; Sr poihkin; Sh puhki / puhkwi; Mn puuhi; NP puuhi’yu; TSh puuhiC; Cm puuhkitï; Ch pukwí; Ch(L) pukwi-gyah ‘blowing (with mouth or bellows, not of wind)’; SP puqqwiai-ŋqï- ‘to pant, make panting noise, v’. Most suggest medial gemination. [CN p < *p; *-c- > NUA y, > ’, > h in clusters] [1p,2h2] or [1p,2x] [NUA: Num, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1454 From Hebrew bšl ‘grow ripe’ would derive unattested Hebrew *hibbašel ‘be ripened, that which is ripened’ (niqtal infinitive):
UACV-351 ***ikwasi** 'fruit, prickly pear’: B.Tep307 *’iibahi 'prickly pear, fruit'; M88-’i5; KH/M06-’i5: TO ’i’ibai / iibhai; LP(B) ’iibi; Nv ibai ‘tuna’; NT iibí; NT ibáávorai 'biznaga, sp. of cactus'; ST ’iibai/iibai; Wr iwasí 'fruit'; Wc ’ikwáši 'fruit’. Bascom's Tep reconstruction corresponds well with the Wr and Wc forms for fruit (UA *’ikwasi 'fruit'). Tewa bee 'fruit' (*< bai/bahi) and such Kiowa-Tanoan forms are likely Tep loans. [medial *kw] [kw1h,2bb,3s1,4l] [SUA: Tep, TrC, CrC]

1455 Arabic ġazzaalat ‘spider’ for the -koso portion of the UA terms below (likely with *tuk- ‘black’):
UACV-2112 ***tokoso** 'spider': Tr ŕokosó-rowa 'blackwidow'; Ch hokóso’a-vi ‘spider’. [p1g2,p2z,p3l] [SUA: TrC; NUA: Num]

1456 Hebrew miin ‘type, kind’:
UACV-2530b ***min** ‘what kind, how’: Ca míŋki 'what kind'; Sr hamiin ‘how, anything, what’; Ktn haminat(a) ‘what, why, how, how are you’. [NUA: Tak]

1457 Arabic ṣabba ‘to pour’; Arabic V taṣabbab ‘pour forth, shed, drip, overflow, be bathed (in)’:
UACV-1766 ***cikwa** ‘rain, v’: Stubbs 2003-9: TO siibani ‘drizzle, sprinkle’ and Hp cekwekwe-ta ‘be raining big drops as at the outset of heavy shower’ (cekwe- ‘soak’) suggest *cikwa; the consonants agree, and since Hp e is the lone vowel not corresponding to a particular PUA vowel, a leveling of i-a > e-e is exactly the kind of phenomenon that often yields Hp e. Jane Hill (p.c.) notes Mn tïïkwa ‘rain, vi’ and Mn tïïkwá-pe ‘rain, n’, which may contain a prefix. Tr sikuríwa ‘rain hard’ does not correspond to *c, but in light of the frequent *c/s dichotomy, it should be kept in mind.
[med kw; V leveling; Hp e] [kw1s4,2bb] [NUA: Hp, Num; SUA: TrC, Tep]

1458 Arabic ’bd ‘be wild, untamed, shy, run away, to last, endure’; Arabic ’aabida(t) ‘wild animal, monster’; check OAss G ‘run away’; Hebrew ’bd ‘become lost, go astray, perish’;
UACV-853 ***ïkwiya** ‘be afraid’: B.Tep345 *’ïïbïïda-i ‘to be afraid’; M88-ï16; KH/M06-ïl: TO ïïbiđ; UP ’ïïbidï; LP ïïbiji; NT ïïbïïdyi; ST ’ïïbidy. Sufficiently similar is WSh kwiya’a ‘be surprised, startled, frightened’. In traditional PUA terms, we have to reconstruct *ïkwiya, though Tep b < Semitic b has this closer than it might appear. [kw:1’,2b,3d] [SUA: Tep; NUA: CNum]

1459 Hebrew yhb, imperative: haabaa > haavaa ‘come on, let’s (do s.th.), go to, grant that …’ (cohortative of yahab ‘give, grant’). From Hebrew haavaa ‘come on! Let’s … (as in do it now), note Kw ’ïïvi ‘now’; SP ïvï ‘go ahead! (hortatory adv)’; Hopi hïva-m ‘hortative particle for second person dual and plural used in commands and invitations’. Final -m is pl suffix, so Hopi hïva- matches Hebrew haavaa well. [1h,2b] [Num, Hp]

1460 Modern Aramaic(A) **šikwana** ‘ant’; Arabic zunbur ‘hornet’; Aramaic(J) zibbooraa ‘hornet’:
UACV-44 ***siku** ‘ant’: Op sikku-ci; Eu siku-c; Wr sekúi; Tr sikú-l, sikú-wi; My ere’e-suúkim 'ant'; Tbr ali-sík 'small, black ant'; CN ciika-tl 'large stinging ant’. Miller in M67-5 also lists CN aaska-tl 'ant’, which is possible, though the vowels are strange; Miller also associates Aztecan *ciika 'ant' with UA *siku 'ant'; though possible, a c/s disagreement and second vowel a/u disagreement occur. Of interest is that My ele’e siiki 'da comezón' and My ere’e-suúkim 'ant' have l vs. r in identical environments; note also My eeye 'red ant' in a possible liquid vs. y dichotomy. In addition, My -suúkim may have transposed the vowels toward the front—*siku-wi > suúki—with loss of the first. [TrC, Azt]

1461 Hebrew **śə’or** ‘sour (leavened) dough’; Aramaic(J) sii’uur / sy’wr ‘fermentation, leaven’; as for Hebrew śə’or > *civu, ś > c is common enough; the glottal stop exhibiting both of its outcomes (stop and rounding), then -’w- > -v- is natural, though more examples would be nice; see other w > v at 7.10:
UACV-231 ***cipuC** 'bitter': VVH13 *cihpu; B.Tep *sivu’u; M67-43 *cipu; L.Son33 *cipu; M88-ci1; Munro.Cup16 *čiívu-t: KH.NUA; KH/M06-ci1: Ls čiív ‘be bitter’; Ls čiivu-t ‘s.th. bitter’; Cp číva-t ‘s.th. bitter’; Sr čivu’ ‘bitter’; Sr čivu’t ‘s.th. bitter’; Ktn civu’; Cp čiv; Hp ciivo; TO siw/siwo; LP sivu; PYp civo; sivi; NT šívu; ST šivu’; Eu čipú; Yq číību; My čiibu; Wr sihpú; Tr či’pú; Wc cíwi / civi; and perhaps Cr (an)cíhivi (McMahon); Cr ancihvi’i (JM). Tr po(y)á ‘ser amargo’; Tr či’pú-ame 'amargo, amargoso'; Tr či’kórigame 'agarroso, de sabor muy astringente, quemante' are a puzzling trio for that language. The -t absolutive in Munro's Takic forms, the glottal stops in Sr and ST, and Bascom's Tep reconstruction, suggest a lost but lingering final consonant. [Wc ï < *u; medial *-p- > ø in Wc; TO, PYp o < *u; c/s in Wr] [1s2,2’,3r] [NUA: Tak, Hp; SUA: Tep, TrC, CrC]

1462 Hebrew śaapaa(t) ‘lip, speech, edge, shore (of sea), bank (of river)’ (t > s)
UACV-788 ***capa-** 'ridge, edge': L.Son28 *capa ‘loma’; M88-ca13; KH/M06-ca13: Eu zápsi (capsi) ‘loma [hill]’; Wr cahpá 'ridge, edge'; Wr cahpací 'leg, shin bone’; Tr capá-ci ‘espinilla [shin]’. [p1s2,2p,3t] [SUA: TrC]

1463 Hebrew śaapaa ‘lip, speech, edge, shore (of sea), bank (of river)’:
UACV-1981 ***sap / *sïp** ‘side’: Sr a-hïïvia ‘side, edge, shore; by, beside’; Eu sépuvai ‘de un lado’; TO hiwču ‘groin, side of the body’ (TO h < *s and w < *p); Sh sapai-pin ‘side’. [p:1s2,2p,3t] [NUA: Tak, Num; SUA: TrC, Tep]

1464 MHebrew/Aramaic ʕgl ‘make a circle, be round’; f. impfv: **Hebrew *ta-ʕgol**:
UACV-433a ***takola / *takula** ‘round, (en)circle’: Eu takóris 'circle'; AYq tekolai ‘round’; My tékolai ‘redondo’; Sr ta’kï’q ‘be round, circular’ (Ken Hill, 2001). Given AYq and My tekolai, and Sr ta’ku’k (Hill, 1994), these *takulai may be related to Tep *sikola/i, after a vowel change (a > i) and then a palatalization of *t > c (*takulai > *tikula > cikola); the scarcity of *ti syllables in UA supports that. They might also be related to *ta-kapul showing the same reduction as *ta-pol except retaining the other consonant of the cluster, retaining k and losing p instead of retaining p and losing k: *ta-kapol > takpol > takol. [Sr vowel; *u-a > o-a]
UACV-433b ***cikola/i** (> Tep *sikoLa) ‘(a)round’: VVH148 *cikuri/cikori; B.Tep190 *sikora 'round'; B.Tep191 *sikori 'around’; M88-ci15; KH/M06-ci15: TO sikod ‘round, circumscribed’; TO sikol ‘circular, round’; NT šikóra; NT šikóóraka; ST šikar. Ken Hill adds Cahita číkola ‘alrededor’. For B.Tep190 *sikora ‘round’ (NT šikóra, ST šikar), and B.Tep191 *sikori 'around' (NT šikóoli 'around'; ST šikooly, UP sikoli), note that before the vowel *a*, *r* and TO *d* appear, and before *i*, this proto-phoneme is *l*. Add Cr sikïïrara’a 'circular'; Wc šíkïrí ‘girar, caminar en círculos’; Wc šíkïï.ráïye ‘redondo’; Wc šíkïrávi ‘redondo’. CrC ï (< *u) is slightly off (PUA *u vs. *o); but schwa-like ï (vs. u < *o) may result from an unstressed vowel or assimilation (**u-a > *o-a). The CrC forms may be loans from Tep, and UACV-433a, b, c all belong given *tako > *tiko > *ciko.
UACV-433c ***ta(C)ko** ‘wrap around’: Wr ta’ko-ná 'envolver [wrap in]'; Tr tagó 'ponerse el taparrabo, vestirse (el varón) [get dressed (man), put on waist wrap]'; Tr tagótu 'estar vestido (el varón)'; TO čïkoš 'wrap around the ankle, vt'; TO čïkoš-ḍa 'an ankle rattle’. [*liquids] [1t,2’2,3g,3l] [NUA: Tak; SUA: Tep, TrC, CrC]

1465 Hebrew lqḫ, -qqaḫ; imperative forms: qaḫ and **qəḫaa**:
UA *ŋïha / *ŋïhi ‘grasp, catch’: Hp ŋï’a ‘grab, catch’; Hp ŋï’i-wa ‘get caught’; WMU güű / güű-y ‘grasp, catch, get, take, vt’; Kw ku’u ‘catch, get, receive’; Ch kwïhï ‘catch, take, receive’; SP qwïï- ‘take’; CU kïí ‘take, pick up, obtain’. Sometimes initial k can sound like either k or g to English speakers. [kw1l,2q,3h2]

1466 Hebrew mʕṭ ‘be few, be too small’; Hebrew məʕaṭ ‘a little, a little amount, n.m.’:
UACV-1362 ***mi’a*** ‘small’: Ch mi’áu-nci ‘small’; Ch mi’áu-pïciwï ‘small one’; SP mia’-C ‘small’; SP mia’-ppï-ci ‘small’; CU míi-ci ‘little (of mass)’; CU míi-pï-ci ‘small, little’; WMU mii’ič ‘a little bit’; WMU mii̱č*i* / mí’püč*i* / míppüč*i* / mii(’)püč*i* ‘little, small, short (one)’. Jane Hill (p.c.) adds NP miici ‘short’. Sem-kw with no rounding for pharyngeal? [kw:1m,2’2,3t2] [NUA: SNum, WNum]

1467 Hebrew poʕal ‘daily labor, deed, wage’; Hebrew pəʕullaa(t) ‘work, action, wage’:
UACV-566 ***puwa(l)*** 'count': CL.Azt38 *po(wa) count; M88-po19; KH/M06-po19: CN poowa 'to count, recount, relate, read'; CN -poowal-li 'twenty in the vigesimal system (the count)’; Po po; Te poa; Za powa; Pl puwa. Add the pòo- portion of Hp pòotoyla 'to count', since the long Hp word must be a compound historically, though we would expect ö for *o, but o for *u, as Pl has, unless final *a* lowered the round vowel in Azt: *u-a > o-a. Denominate verb from ‘wage’ to ‘the count, to count’. [1p,2’3,3l] [SUA: Azt; NUA: Hp]

1468 Arabic **rukbat** ‘knee’; Moroccan Arabic rokba; Maltese rkobba (Bennett 1998, 156); less likely Arabic rkʕ ‘bend the body, bow, kneel down’:
UACV-941 ***toŋa*** ‘knee’: Sapir; VVH30 *toŋo ‘knee’; M67-245; I.Num108 *taŋa ‘knee’; B.Tep227 *toona ‘knee, lower leg’; L.Son311 *tono ‘rodilla’; M88-to7; KH/M06-to7: I like Sapir's *toŋa and Bascom's SUA *toona reconstructions, which agree. In spite of the unruly vowelings, most Uto-Aztecanists would agree that these initial t and medial n/ŋ words are related; Sapir's suggestion that both *tana/taŋa and *tono/toŋo assimilated their vowels (in opposite directions), from s.th.that contained both vowels, like *toŋa, or *toŋwa would be Semitic-kw’s UA expectation for both rukbat and rVkʕa, then *toŋwa > toŋo / toŋa.
UACV-941a ***tana/taŋa*** ‘knee’: Mn tanabódo / tanobódo / tonobódo; TSh taŋappïh; Sh tanka-ppïh; Sh tanka-mmattooh ‘kneel, crawl on knees, v’; Cm tana; Kw tana-vï; Ch taŋá; SP taŋa; CU táa-vi.
UACV-941b ***tono/toŋo*** ‘knee’: Tb toŋoo-l; TO toon; PYp toni; NT toóna; ST toon; Eu tonót; Tbr tonó-r; Yq tóno; My tónno; Wr tonó ‘pie, pata’; Wr tonocíribo ‘pierna’; Tr ronó ‘pie, pierna, pata trasera’; Cr tunú ‘knee’. [kw-1r,2k,3b] [NUA: Num, Tb; SUA: Tep, TrC, CrC]

1469 Hebrew(KB) tqʕ ‘drive in (peg, stake), pitch (tent, by driving stakes), thrust in a weapon, blow a horn/trumpet, clap (hands)’; Hebrew(BDB) **tqʕ** ‘1. stick in, drive (weapon into), 2. sound/blow (horn)’: in light of the two Hebrew meanings—pierce with weapon, sound a horn—UA terms resembling UA ***takawa*** show similar meanings ‘to wound, to sound/crow (of bird)’. Besides ‘wound’ and ‘sound,’ the UA terms also mean ‘palm of the hand’, ‘lord’, and ‘body, meat, or that which is pierced/cut up, the flesh that we eat’:
UACV-2091 ***takowa***, perhaps < ***takawa*** ‘injure(d), damage(d), ruin’: Tbr takoá-t ‘dañado [harmed, injured, damaged]’; CN tlakooa / tlakoa ‘dañar [hurt, injure, damage]’; CN tlakoton ‘boil, swelling, sore, pustule’; CN i’tlakawi ‘go wrong, be ruined or corrupted, injure oneself, spoil; CN i’tlakoaa ‘damage s.th., be corrupted, spoiled, damaged, vt/refl’. [Tbr-Azt tie] [SUA: TrC, Azt]

The above reflects Sem-p q > ko/qo, but Ktn tï’ŋ-tï’ŋ-k ‘drive in a stake or nail’ reflects Sem-kw q > ŋ with anticipation of the ʕ as a glottal stop, and most impressive is its exact meaning agreement with Hebrew(KB) tqʕ ‘drive in (peg, stake), pitch (tent, by driving stakes), thrust in a weapon (as in Judges 4:21 wherein Yael drove a peg into the temple of Sisra), blow (horn/trumpet), clap (hands)’.

1470 Hebrew(KB) tqʕ ‘drive in (peg, stake), thrust in a weapon, blow a horn/trumpet, clap (hands)’:
Ktn tï’ŋ-tï’ŋ-k ‘drive in a stake or nail’; Ktn tï’ŋ-k ‘strain, put through a colander, drive in a stake or nail’. [kw1t,2q,3’2]

1471 Hebrew **tqʕ** ‘1. stick in, drive (weapon into), 2. sound/blow (horn)’:
UACV-1977 ***tokowa*** ‘crow, (animals) to make their respective noise’: Whorf1937b: Hp töq- ‘shout, cry out, scream, yell, chirp, make a characteristic call’; Tr tókowa ‘to crow, as of a rooster, v’; CN tookaai-tl ‘name’; CN tookaa-yoo-tiaa ‘name, vt, call s.o. by name’. Add My reko-te ‘crow, cackle’; Tb tokokoo’at ‘pop, v’. [NUA: Tb, Hp; SUA: TrC, Azt]

1472 Hebrew **tqʕ** ‘1. stick in, drive (weapon into), 2. sound/blow (horn)’: Besides ‘wound’ and ‘sound’, similar terms also mean ‘lord’ and ‘palm of the hand’:
UACV-1423a ***tï̈ku / *tï̈kuwa*** ‘lord, master, father’: CL.Azt107 *teekw ‘master, father’; Jane Hill 1985; M88-tï10: KH/M06-ta2: My téeko ‘patrón’; Tr tékowa / tékutuame ‘patrón, amo, jefe, señor’; CN teekw-tli / teku’-tli ‘lord, member of high nobility’. Note Tr t, not ŕ. KH/M06-ta2 rightly joins M88-tï10 with ta2, combining

*takwi ‘Takwic, a mythological figure, lightning’ and *tïku, though mixing men and gods can be unsettling for some. I also like Jane Hill’s (1985) reconstruction *tïku, and her including Cr téekwa’aran ‘dueño [master]’; Sh tekwa-ni ‘chief’; Po no-tekú ‘mi padre’; Tl i-tieko ‘su dueño’. She aligns Tak *taakwi- ‘divinity manifested as ball lightning’ with Cr takwa ‘Herr [lord], Eigentümer eines Tieres’ and Cr takwa-te ‘niederer Götter’ (-te pl suff) (Preuss 1934), but tentatively separates them from the *tïku forms, as do I, with different letters under the same number. Jane Hill (1985) also addresses the entanglement or overlap of forms, recognizing that matters are not yet entirely clear. Add SP tutukua ‘supernatural helper, manitou’. Might Numic *toko ‘maternal grandfather’ (UACV-1046) belong? [Tr t, not ŧ] [SUA: TrC, Azt, CrC; NUA: Num]
UACV-970 ***takupi** ‘friend’: SP tïgïvï- ‘friend’; WMU tagúvi-n ‘friend-my’; CU tïgïvï-n ‘friend-my’. [SNum]

1473 Hebrew **tqʕ** ‘1. stick in, drive (weapon into), 2. sound/blow (horn)’; besides ‘wound’ and ‘sound’, similar terms also mean ‘lord’ and ‘palm of the hand’:
UACV-1604 ***maC-tako(wo)** (< *takuwa) ‘palm’: B.Tep148 *ma-taka ‘palm of the hand’ (*ma = ‘hand’); M67-314 *ma-taka ‘palm of the hand’: Tbr -takoa- ‘palm’ in Tbr ma-takoa-lir, ma-takoa-ran ‘palm of the hand’ (ma- ‘hand’); Tr ma-taga-ra; My takko; NT mataka; TO matk; Eu máckora ‘palma de la mano’ (*t > c yields Eu -tko-); Ls tak; Hp mapqölö ‘palm of the hand’ with PUA *w > Hp l/_ö, and PUA *o > Hp ö; thus, Hp qölö < *kowo, losing first syllable. Interestingly, Tbr takoa means both ‘injured’ and ‘palm of the hand’. Tbr ma-tako-rá-n / ma-tako-lí-r ‘palma de la mano’. Wr matála ‘palm of the hand’. Eu and Tbr, like Hp, show a round vowel *tako and/or the labial consonant w after k, as if *takowo. Hp -p- could be excrescent from any stop with consonant harmony help from bilabial m-, or AMR (*map) could be right and all else is other things, perhaps beyond retrievability. This may be a compound of ‘hand’ and *takuwa ‘concavity, lower place where things collect’. [p1t,p2q,p3’2] [SUA: TrC; NUA: Hp]
UACV-1205 ***takuwa** (> takowo) ‘concavity, low place where things collect or gravitate to, place where a lot of s.th. is’: as in *taa-takuwa ‘tooth?-place/collection, sump, stand of (teeth?)’: TO taatko ‘jaw’ and NT taatákugai ‘jaw’. Similarly for *maC-takuwa ‘palm of hand, hand-concavity’ are Eu máckora (*-t- > --c-) ‘palma de la mano’ and Tbr ma-tako-rá-n / ma-tako-lí-r ‘palma de la mano’. Hp mapqölö ‘palm of hand’ lost first syllable as also Hp qölö ‘hole in the ground, pit’ and Hp qöl|ö ‘expanse of, place where there is a lot of, stand of, patch or cluster of’ ((ta)kowo < *takuwa). [SUA: Tep, TrC; NUA: Hp]

1474 Hebrew **tqʕ** ‘1. stick in, drive (weapon into), 2. sound/blow (horn)’: besides ‘wound’ and ‘sound,’ UA *takVwa means ‘palm’ and ‘lord’ and ‘body, meat, what is pierced/cut up, the flesh that we eat’:
UACV-1432 ***takkuwa** ‘meat’: VVH22 *tu$_u$ku ‘meat, flesh’; B.Tep234a *tuukuga ‘body, flesh’; M67-279 *tuku ‘meat’; I.Num225 *tuhku; L.Son321 *tukuwa ‘carne, cuerpo’; M88-tu4 ‘body, flesh, meat’; KH/M06-tu4 *tukuR (AMR): Mn tuku ‘flesh’; NP ddukku ‘flesh, meat’; TSh tukkua-cci/pin; Sh tukkuC; Cm tuhku; Kw tuku’aa-vï (< *tukku’aa-pï) ‘flesh’; Kw tukku-wa ‘flesh’ (-wa poss’d); SP tukkua-vi; CU tïkúa-vi (<*tïkkua-); Cp tuk’a ‘skin (poss’d)’; Ca túk’u; Ls tuká ‘muscle, lean meat’; Gb túkin ‘carne’; Hp toko ‘body, edible part of fruit’; TO cuukug ‘body, flesh, meat’; UP čuuhugï; NT tuukúga; ST tuuku’; Eu tákua (gen. takáhte, acc. takáhta) ‘cuerpo’; Tbr tikuñwá-t/tekoñwá-t; Yq tékua; My tekua; Tb(H) tukuwa ‘meat’. I reconstruct the first vowel as ***a*** in light of Eu tákua and a variety of other vowels, with most assimilating: *takkuwa > *tukkuwa. A final -wa is clear in Tep, Tbr tikuñwá-t/tekoñwá-t, Cah tekua, and Num tukku(w)a; and since PUA dipthongs are doubtful, their appearance in UA languages is usually due to intervocalic consonant loss or assimilatory influences: in this case *...uwa > ua in some languages. [’/w] [NUA: Num, Hp, Tak, Tb; SUA: Tep, TrC]

In addition to already cited 717 Aramaic / Syriac qlp ‘peel off, shell, rub away’; Arabic qlp ‘strip bark (from tree), verbal noun: qalp for UACV-1893 *kïlipi ‘shell or shuck corn, v’, we also have from Sem-kw:

1475 Hebrew glb ‘shear, shave’ > Ca ŋep ‘scrub, scrape, vt’; Ca ŋepel ‘scrub, vt’ metathesis, not kw < -lb-?

1476 Hebrew **ʕɛṣɛm** ‘bone’ (< ʕṣm ‘be powerful, countless’); Arabic ʕaẓm- ‘bone’ (< ʕaẓuma ‘be great, powerful’); this term can take either the fem or masc plural; masc pl **ʕəṣaam-iim** ‘bones of corpse’ has a very short first vowel, easily deleted, but a long 2nd vowel; the ʕ, pharyngealized ṣ, and bilabial m, could all tend to round vowels; in light of all that, ʕəṣaam-iim > comim > cumi is plausible:
UACV-273 ***cuhmi** 'bone’: CNum: TSh cuhmi/cuhni-ppïh; Sh cuhni/cuhwi-ppïh; Cm cuhni. Because *m > n is more likely in UA than *n > m, we must reconstruct *m. Hebrew ṣ > UA *c suggests Sem-kw and Sem-kw tends to lose initial guttural syllables. (Cf. 594 ‘sister’ and 597 ‘rabbit’.) [kw1’2,2s4,3m] [-m/n-] [CNum]

In 1476 above, the Semitic emphatic -ṣ- is initial and is retained as UA *c, in contrast to 1477 below from Sem-p, which better kept initial guttural syllables but reduced the non-initial emphatics to (glottal stop) -'-.

1477 Hebrew ʕeṣem 'bone' (< Hebrew ʕṣm 'be powerful, countless'); possessed form **ʕaṣm-** 'bone (of)'; **Arabic ʕaẓm-** 'bone' (< **Arabic ʕaẓuma** 'be great, powerful'):
UACV-272b ***omi** / ***ohomï** 'bone': Sapir; VVH61 *'oho; M88-'o1; CL.Azt19 *oomV < **oho-mï; KH/M06-'o1: Wc 'umé; CN omi-tl 'bone, awl'; ZN oomit; HN 'omi-tl; Pl uumi-t. Sapir and VVH are unsure what to think of the *-mi* syllable in the Azt and CrC forms; CL.Azt propose a fossilized plural suffix -mï added to *oho-* apparent in Num and Tep. However, *oomi < *ʕaẓm- is a good match, given initial rounding from the pharyngeal, loss of first consonant of the cluster with compensatory vowel lengthening. [*o > Hp ö, Wc u, Gb e]
UACV-272a ***oho / *oCo** 'bone': Sapir; VVH61 *'oho; B.Tep324 *'oo 'oi/o 'bone' and *'oo 'odï 'his bone'; M67-52 *'o/'oho; I.Num13 *oho; L.Son14 *'o; M88-'o1; KH.NUA; KH/M06-'o1: WNum: Mn óho; NP oho; SNum: Kw 'oho-vï; Ch ohóvï; Ch(L) hohovï; SP o(h)o-; WMU öő-v*ü* 'bone (of dead animal)'; WMU öő'a- 'bone (of living being, usually poss'd)'; CU 'öő-vï; but not in CNum. Hp ööqa; Hp öqala / öqal- /öqaw- 'strength, strong'; Tb 'oo-n (poss'd) and Tb ooban 'bone' (Tb oobal 'strong'); Sr öö̧; Ktn oc; Gb -én. TO oo'o; LP 'oo'o-; Nv 'o'o-di; PYp oo'or; NT óóyi/óói; ST 'a'oo; B.Tep324 *'oo'oi/o 'bone' and *'oo 'odï 'his bone': NT óódï; ST 'a'ood; UP 'oo'ojï 'his bone'. Eu hówa (gen. hóhte; acc. hóhta); Tbr ho-ta-rá-k/t; o(-la); Yq ota; My otta; Tr o'čí; Wr o'á 'bone'; Wr u'á-ni, u'aré-ma 'be strong' ('Is this related?' Miller queries, and it probably is, in light of a frequent semantic tie between 'bone' and 'strong/strength' in UA). In fact, Semitic ʕẓm means both 'be strong' and 'bone' as well. Ken Hill adds Ktn oc. At least the Num and Tep forms are consistent with *oho; and -ta (TrC) and -ka (Hp) may be fossilized affixes. Judging from the Eu forms, it appears that the *ota forms (Tbr, Yq, My, possibly Sr and others) may derive from an old accusative; and Tr o'čí may derive from a genitive. [1'2,2s4,3m]
[NUA: WNum, SNum, Hp, Tb, Tak; SUA: Tep, TrC, CrC, Azt]

1478 **Hebrew ṣar** 'enemy'; Hebrew ṣrr 'treat with hostility, attack'; Arabic ḍrr 'harm, hurt, injure:
UACV-817 ***say-** 'enemy, opponent'; M67-158 *say 'enemy'; L.Son236 *sayo, sa-i 'enemigo, enfrentarse'; M88-sa14 'enemy'; KH/M06-sa14: NP sai 'enemy'; Wr sahí 'adversary, opponent in a game'; Tr na-sayé 'enfrentarse entre varios'; My sáyyo 'enemigo'; Cr sáayu 'successor to one's ritual role'; CN tesa'say 'dangerous'; Pl sahsayti 'for one's hair to stand on end from fear'. Add Tr saye / sayi-ra 'enemy', pl: na-sayira. NT sááyu 'el enemigo, el contrario' is a loan as NT s < *c, NT d < *y. [1s4,2r] [NUA: Num; SUA: TrC, CrC, Azt]

1479 Syriac diḫl-aa 'fear, dread, awe'; Syriac dəḫel 'to fear, dread, stand in awe, reverence: or yr' hoqṭal (*tura' 'be made afraid') or Hebrew hiqṭiil (*tori'/tora' 'make afraid') with t- prefix are unattested in the Biblical text, but would correspond to UA tora/toya and *tori/toyi respectively for fem and 2nd person subj:
UA ***toya** 'fear, v': NT toodašd^{y}i 'espantarlo, vt'; NT toodákyi 'palpitar (el Corazon), espantarse';
PYp tood 'fear, n'; PYp toodim 'frighten, vt'; PYp toodk 'be afraid, vi'; and the tod- of TO todk 'snore, growl, roar'; TO todwin 'irritate, disturb.' [1r,2w,2r,3']
The following may be of Sem-kw:

1480 Hebrew naʕ^{a}raa / naʕ^{a}rat 'girl':
UACV-2586b ***na'a-** 'girl, boy': M88-na21; Mn na'ací' 'little boy'; NP naaci'i 'boy'; TSh naipi 'teenage girl'; Sh nai-pin; Cm nai'pi 'young woman'; Kw na'aa-ci; SP na'ai-N /na'ai-nci 'girl'; WMU na'áčič 'girl'; CU na'a-ci-c 'girl from five to teens'; Ktn naha-č 'older/teen girl' (vs Ktn naca-t 'little girl'); Ca ñíči-l^{y}, pl: ñíŋkič-em 'woman, female'. The reflexes in WNum mean 'little boy' but 'girl' in CNum and SNum. At 90 and 91 are items from nʕr, and this may be also with ʕ > ' and final -N < -r. [kw1n,2'2,3r] [NUA: Num, Tak]

1481 Syriac rtḥ 'seethe, bubble up, grow hot'; these compound xut 'fire' with rtḫ as in *xut-rtḫ:
UACV-1211 ***kuttutu** 'hot': Ch kutúci 'hot'; Ch kutúcaa 'hot'; CU kïtúruuci 'be hot, be feverish';
WMU q*uh*ttúruuči 'hot, be hot, have a fever'; Kw kutuu-vü 'charcoal'; Kw kutuunuhi 'make fire with a drill'; SP qwattürooci 'be warm (of inanim obj's)'. These SNum terms may tie to TrC *utu. Compounded with *ku(t) 'fire' or s.th. like Mn ku 'with heat', we see *kuttutu. [NUA: SNum]

1482 Syriac rtḥ 'seethe, bubble up, grow hot'
UACV-1212a ***tu'i; *ta-tu'i** (> *taru'i) 'hot': Kw taru'i 'to be hot'; Ch tarú'i 'hot'; CU tarí'i 'be hot weather, be hot place'; NP tu'i ddu'i 'try to warm up' may suggest a compound in the others or this may contain the Semitic conjugation prefix ta-: *ta-tu'i. The TrC forms below likely share a morpheme.

UACV-1212b ***tatta** ‘hot’: My tatta ‘hace calor’; Yq táta ‘hot’; AYq tatale ‘feel hot’; Wr tahtáni ‘to be hot’; Tr a’tará- ‘to be hot’; Tr ŕatá-ame ‘caliente, cálido’. Whether relevant or not, a great example of consonant harmony is the three Tr variants: Tr ŕata-góbutu/gógutu/bobutu ‘have a fever’. [NUA: Num; SUA: TrC]

1483 Syriac **dwr** ‘to go round’; Syriac duur ‘a circle’; Aramaic(J) ‘to form a circle or enclosure’; Hebrew dwr ‘to stack in a circle’; Arabic dwr ‘turn, revolve, move in a circle, walk or go about, roam, wander about’:
UACV-454 ***ruya** ‘roll, turn, twist’: My ro’akte ‘to roll over’; AYq roakta ‘roll up s.th., vt’; AYq roakte 'roll, vi'; Hp róya(-k-) ‘turn on an axis, twist open or loose’; Hp royaya-ta ‘be spinning, rotating, revolving, or turning on an axis’. SUA liquids often appear as NUA -y- and as glottal stop in Cah, which may suggest *rura. Additionally, Hp riya(-k-) ‘spin, rotate’ has the voweling of a hi-qtiil form. These and such instances of d > r are likely due to non-initial or intervocalic status previously. [1d,2w,3r] [NUA: Hp, Tb, Num; SUA: TrC]

Note Hopi r below (1484) of Semitic-p vs. y above (1483) of Semitic-kw. See liquids.

1484 Syriac dwr ‘to go round’; Syriac duur ‘a circle’; Aramaic(J) ‘to form a circle or enclosure’; Hebrew dwr ‘to stack in a circle’; Arabic dwr ‘turn, revolve, move in a circle, walk or go about, roam, wander about’
UA *tur ‘whirl, roll, twist’: SP turu’ ‘whirl’; CU turú-kwi ‘roll, roll over, vt’; CU turú-’ni ‘be a whirlwind, dust-devil’; WMU turú-’ni ‘be a whirlwind, dust-devil’; Hopi tori(k-) ‘get twisted’; Hopi tori-k-na ‘twist, vt’.

1485 Hebrew(KB) rḫm ‘greet with love, take pity on’; Hebrew(BDB) rḫm ‘be soft, gentle, wide, have compassion’; Ugaritic rḫm ‘be friendly, loving’; Arabic raḫima ‘be merciful, gracious’; but Arabic raxuma ‘be gentle, friendly’; Amorite rxm ‘love, have compassion’:
UACV-2391 ***(sun)-tïha** 'pity, have compassion for'; Mn (wï)sutïhai ‘pity, feel sorry for’; NP tïtïha ‘pity, vt’; NP suddïhai; Sh suntahai ‘feel sorry for, pity, save’; CU tïáa-ni 'pitiable'; CU tïáa 'space, area, room.'
The two meanings of CU tű́aa ‘open space, gap, area’ and CU tű́aani ‘pitiful, pitiable’ and the two meanings of Semitic rḫm ‘compassion’ and ‘wide’ are noteworthy in this Sem-p item (with lack of rounding for x, instead of Sem-kw pharyngeal rounding). [1r,2h2,3m] [NUA: Num]

The following uses the same root as the previously cited 886 Hebrew y-’rk ‘be long (time and space/length) > UA *yïŋï ‘be/pass a long time’ (Cp yénge ‘to last a long time, endure’; Ca yéŋ ‘pass a while (of time), stay a while’; Sr yïïŋï’k ‘be a long time, be later’), but 1486 has Num showing the prfv form, not Tak’s impfv:

1486 Hebrew ’rk ‘be long (time or space/length); Syriac ’rk ‘be long, lengthen, stretch out’; the Takic forms at 886 reflect the y- prefixed impfv stem, while these reflect the perfect:
SP wïïC ‘be long ago’; CN weeyak ‘s.th. long’ whether the final -k is part of the stem or not; Hp wïïyaqa ‘large in two dimensional space’ (but dictionary divides it wïï-ya-qa ‘big-?-extend, and may or may not be correct); Hp wïyak-naqvï ‘long ears [naqvï = ‘ear’]; Hp wïïko ‘extensive(ly), in a large area, for a long way, for a long time’; wïïyoq ‘big, large, older’ (but wïï-yo-q ‘big-nom-extent’); both wïïyaqa and wïïyoq match Semitic vowelings of the perfect and infinitive and mean much the same. [p1’,2r,3k] [NUA: Num, Hp; SUA: Azt]

1487 Syriac gšḫ ‘rub or graze the skin’; Syriac gaššaḫ ‘scratch, give a scratch, wound slightly’; Sem *x or *ḫ?
UACV-2386 ***ŋaska** ‘be rough, scratch’: Cp ŋášxa ‘be rough’; Cp ŋašxaŋášxa’a-š ‘rough, adj’; Ls ŋááxa/i ‘scratch, scrape, vi, scratch, brush against, vt’. When something is rough, it scratches; and ‘scratch’ is in both the Semitic and UA definitions. Phonologically they are identical except for a cluster in Cp being reduced in Ls with compensatory lengthening of the vowel compensating for the reduction.
UACV-2385b ***kïskia** ‘itch’: CL.Azt93 *kəškia ‘itch’; M88-kï13; KH/M06-kï13: CN kekeškia; Pl kekeš; Po koški; T kekeškIa. Perhaps the same stem as Tep *kïsa (1490), plus another morpheme. [SUA: Tep, Azt] [NUA: Tak]

1488 Hebrew maʕ^{a}le ‘causing to rise/go up’ (maʕ^{a}le is the hiqtiil prtcpl of ʕly ‘go up’):
UACV-268a ***mulV** 'boil': M67-51; M88-mu23 'to boil’; KH.NUA; KH/M06-mu23 ‘boil’: Cp mule ‘boil’; Ca múlul ‘come out steaming or bubbling, swarm out’; Ca pis-múlul ‘come out, bubble up, boil, v’; Ca múlul-iš ‘steam’; Ls múl’a/i ‘bubble up, vt, boil, vi’.
UACV-268b ***mula** / ***muna** ‘boil’: Sr munaank ‘boil, vt’; Sr munaana’n ‘be boiling’; Sr munaankin ‘cause to boil, vt’. To the above, we should add Tb mon’moonot~’omon’mon’ ‘boil’. I divide them only by letter, not number, in that Sr and Tb show medial -n-, while the Cupan languages show medial -l-, though *tul at ‘black’ shows a similar contrast between Sr and the other Tak languages. [l/n; liquids; nasals]

UACV-268c ***molo** ‘boil, waft upward’: CL.Azt18 *moloonV ‘boil, v’ < **molo ‘boil’; M88-mo9; KH/M06-mo9 ‘boil’: CN moloon(i) ‘waft, rise and drift on air currents, to effervesce’; Pl muluuni ‘dry, fly or blow away (e.g., dust, flour, chaff)’; Po molun-; T molunI; Z molooni. [*u-a > o-o; liquids] [1m,2’2,3l] [NUA: Tak, Tb; SUA: Azt]

1489 Semitic qrb ‘approach, be near’ (Semitic-kw) > Ls ŋááya ‘be close, be near’. [kw1q,2r,3b]

1490 Arabic xdš ‘scratch’, verbal noun: **xadš** ‘scratching’; Arabic xadš ‘a scratch, scratch mark’: **UA**CV-2385a ***kïca** 'scratch': B.Tep134 *kïsa 'to scratch'; KH/M06-kï19: LP kïšm(im); NT kïïsa; ST kïs; TO keš-kud ‘back scratcher’.

1491 Hebrew participle **maʕalɛ** ‘cause (smoke) to rise’ is one meaning of the causative of ʕly ‘go up’: **UA**CV-2050 ***mola/i** ‘be smoke, give off smoke’: BH.Cup *mi; M67-393 ‘smoke, n’; L.Son149 moro, mor-i ‘humear’; M88-mi2 ‘smoke’ and M88-mo8; KH.NUA; KH/M06-mo8: Cp mí’at; Ca mí’-at; Ls méyi ‘make medicinal steam or smoke by putting herbs on heat’; Sr möö^{r}’ ‘be smoky’; Sr mö^{r}aa’t ‘smoke, n’; Eu moró- ‘humear’; Wr molo / mori ‘hacer humo’; Wr morewa ‘humo’; Tr morí/murí ‘humo’; Eu moráwa ‘humo’. Ken Hill adds Ktn muahkïk ‘be smoky, v’; Ktn muaht / mua’t / mwat ‘smoke, haze’; Cr rakïsmwáát^{y}e’e ‘he is making it give off smoke’. Some may overlap with 1488. M88 also offers Pl mimilaka ‘for the fire to burn’; Pl mumuluca ‘to smoke (as a fire trying to burn)’. [1m,2’2,3l] [NUA: Tak; SUA: TrC, CrC, Azt]

1492 Hebrew mugdal ‘big’ > Ls muká-t ‘big, large’. Some question on the -gd- cluster. [1m,2g,3d,4l]

1493 Hebrew **qeraђ** ‘ice, frost, crystal’ (verbs of this root in other Semitic languages mean ‘freeze’); Syriac quur-aa ‘cold, frost-the’:
Tr koro-čé ‘cuajarse, congelarse el agua [freeze (water)]’. Less secure is Hp iyo-ho’o (rdpl: i-’yoho’o) ‘cold, adj, n.’ which Hill moves from M88-ï18 where it was with the Tak forms (Sr ’ïčï; Gb ’ocó’) and follows AMR’s article "A Northern UA sound law: *-c- > -y-" (1992), tying it to CN iic-tik 'something cold' and CN iic-tiya 'be cold,’ which works correspondences-wise, though this way works too. From possible contact, what of Cocopa qyaw ‘be cool, vi’ and Tewa ooyii ‘freeze, v, ice, n’? Is the latter a vowel metathesis of Hp iyo? [1q,2r,3h2]

1494 An oversimplified explanation of the vav-consecutive in Hebrew is that in certain narrative structures, a prefixed wa- can change imperfective (future/present) verb forms to perfective (past) and vice versa. Many Classical Nahuatl (CN) verbs form the past tense by prefixing oo- and then dropping the last vowel:

verb stem	past
petlawa	oo-petlaw- ‘undress’
neki	oo-nek ‘want’
pawia	oo-pawi- ‘chew’
posoni	oo-poson- ‘boil, bubble (of liquid)’

In Hebrew, the jussive is used with the vav-consecutive, and the jussive also drops existing final vowels in both Hebrew and Arabic, as do the CN verbs with prefixed oo-.

Hebrew impfv: yi-šbe ‘he takes captive’ > wa-yi-šb (jussive);
Arabic indicative ya-ktubu ‘he writes’ > ya-ktub (jussive)

For wa- > oo- is natural enough. We see it in UA and in Spanish:

Spanish ojalá ‘would that, let’s hope’ < Arabic wa-šaa’a-allaah ‘and God be willing’

The order of morphemes is also the same in both Hebrew and Nahuatl

Hebrew wa-pronoun prefix-jussive verb stem (dropping final vowel), as in wa-yi-šb ‘and-he-take captive’
Nahuatl oo-pronoun prefix-verb stem (dropping final vowel), as in *oo-ni-nemi ‘past-I-lived’ > oo-ni-nen

Cora, another UA language, seems also to show a similar transformation as in

Cr ce’e ‘mamar [nurse/breastfeed]’; Cr waci ‘mamó [did nurse/breastfeed]’

Yet Cora shows the complete wa-, not o-. Also is UACV-2697 below

UACV-2697 *wa- ‘perfect or past prefix’: CN oo-/o- ‘perfect marker’ (Sullivan, 54); Cr wa- ‘completive prefix’ (Casad 1984; Vazquez Soto 1994, 154). Sapir (1914, 479) observes that PUA *w appears in CN before all vowels except o, before which *wo > o, so *wa- > wo- > oo- in Azt. [SUA: CrC, Azt]

1495 Hebrew **ʕrb, hit-ʕareb** ‘be mixed up with, involved with’; the Hebrew *hit-CaCCeC is generally a reflexive or reciprocal conjugation, and the Hebrew *na-CCaC is passive/reflexive/reciprocal; the Semitic cognates in KB do not show whether Hebrew ʕ < *ʕ or *ġ; though unattested, the niqtal or *na-ʕrab is the shape that UA aligns with:
UA ***na-’rowa** 'stir': Tr na’ro-ma ‘mix, stir’; Tr na’roame ‘mixed, stired’; Wr loá-ni, loa-má 'stir food while cooking'; CN neloaa 'get mixed together, stir up s.th.,beat s.th., make a mess of s.th., v.t., v.refl.'
[-b- > -w- in Tr/Wr, and at ġrb, qrb] [1’2,2r,3b] [SUA: TrC, Azt]

1496 Hebrew **brd** ‘to hail’; Hebrew baaraad ‘hail’; Syr bard-aa ‘hail-the’; Arabic brd ‘be cold’; Arabic barad ‘hail’:
Tr bara- ‘ser el tiempo de lluvias [be the time of rains]’; My baali / baayi ‘fresco [cool]’; AYq bali ‘cool’.

1497 Hebrew ’ootii ‘me’ (object/accusative pronoun) > Tr ti ‘me’.

1498 Arabic ğy’ / -gii’ ‘come, get to, reach, arrive, bring (with b- ‘with’)’:
UACV-56b ***ki** ‘come, come to do s.th.’: Sapir ties CN ki/kiiwi 'come to do s.th.' and SP -ki- 'come in order to’. Add WMU -ki ‘come, moving this way’; Kw ki ‘come (toward), go this way’; in compounds CU -ki ‘coming this way’. Notice that CN kiiwi may show the glottal stop as well. The ki- of Hp ki-ma ‘to be bringing, taking, carrying things along’. Arabic *gy’ ‘come’ means ‘bring’ when b-‘with’ means coming with s.th. [p-1g,2’] [NUA: Num, Hp; SUA: Azt]

1499 Hebrew zry ‘to scatter, sow’; Aramaic(S) dry /dəraa ‘to winnow, scatter’; Ugaritic dry; Samaritan dry; Syriac dəraa ‘to scatter, sprinkle, winnow’, verbal noun: dəree / dərii:
UACV-1920 ***tari** ‘seed’: Tr tarí ‘semilla, grano para sembrar [seed for sowing]’; Wr ihtári ‘semillas para sembrar’. [Wr ih-] [SUA: TrC]

1500 Egyptian **prx** ‘burst into flower’; Hebrew hi-priiḫ (< *hi-priix) ‘cause to sprout, bring into bloom’; Hebrew peraḫ (< *perax) ‘bud, blossom’; Akkadian perxu ‘shoot, descendant’; Syriac parḫaa ‘flower’; Arabic farx ‘chick, shoot, sprout’; UA seems to reflect the Hebrew hi-priix, fem: hi-priixa, pl: hi-priixu:
UACV-908 ***hVpiNka** ‘bloom’: M88-hu18; KH/M06-hu18: Mn hïbiga ‘bloom, vi’; Mn hïbigá’ ‘flower, blossom, n’; TSh hïpiŋkï ‘bloom’; TSh hïpi/hipi ‘flower’; TSh hipiŋkïppï ‘flower, blossom’; Sh hïpinkï ‘to bloom’; Sh hïpinkïppïh; Kw hïvi-vi ‘flower’; Tb ’ibii’ït~’ibii’ ‘to bloom’; Tb ’ibii-l ‘flower’. [p1h,p2p,p2r,p3x] [NUA: Num, Tb]

1501 Arabic slw / sly / salaa / saliya ‘think no more on (s.th.)’; II sallaa ‘make s.o. forget, comfort, console’; V tasalla ‘to delight, take pleasure in’; Hebrew šalaa ‘have rest, be at ease’:
Hp salayti ‘become gratified, fulfilled, pleased by/from, joyful over good luck’.

Hebrew samech (s_3) and Hebrew śin (Semitic s_2) and sometimes other sibilants go to c/č in Sem-kw:

1502 Hebrew swp ‘come to an end’; Hebrew soop ‘end, rearguard’; Aramaic(J) sup-aa ‘end-the’; Aramaic šwp ‘1 crouch, crawl, 2 rub, sharpen’; Aramaic(J) **šuup-taa** ‘chip, pin, n.f.’:
UACV-798 ***cuppa** ‘point, prick’: L.Son48 *cup ‘punta’; M88-cu19; KH/M06-cu19: Wr cuhpá ‘punta aguda [sharp point]’; Tr čupí 'picar [prick]’; Pl cupina ‘sting, stab’. Note also Pl cupi ‘arse, anus’; Tr čupá/ču’á 'point, peak, snout’; Tr (wi)čubére 'tener puntas or picos [have points or peaks]’. From M88-co9, KH/M06-co9, we move here forms along the lines of ‘buttocks, point, hill’: Pl cupi ‘arse, anus’; My čobbe ‘parte trasera, posterior’, with vowel leveling (u-a > o-o > o-i) rather than at *capa ‘edge, ridge’ where Lionnet had them; and NP capu ‘buttocks’; NP(B) cabo ‘buttocks’; NP(B) caboi ‘rectum’. Add Yq čópoi ‘hill’; AYq čopoi ‘hill’; Ch(L) čupi (< *cuppi) ‘anything gathered to a point, e.g., a bunch of grass tied together at one end’. The Ch form and possibly Wr, AYq, and others suggest a doubled medial consonant. The alternate forms in Tr recommend Eu cuwat ‘aguijón de avispas [wasp stinger]’. NP’s vowel metathesis happened at ‘bat’ also (*pati > NP pita). This may be Sem-kw, as the first consonant of the cluster is doubled: *supta > cuppa. [p/w] [1s1,2pp] [SUA: TrC, Azt; NUA: Num]

1503 Hebrew ṣnp ‘to wrap up, wind around’: Hebrew ṣaaniip ‘headband, turban’; Syriac ṣannep ‘bind, roll around’:
UACV-479 ***cini** ‘cotton, cloth/clothing made of cotton’: L.Son32 *cini 'cotton'; M88-ci2 'cloth'; KH/M06-ci2:
Eu čin 'algodon [cotton]; Wr ciní ‘tela [cloth]’; Tr činí 'manta [cloak], tela blanca de algodón [white cloth of cotton]’; My cíini-m 'algodon’; Yq čiinim. [iddddua] [SUA: TrC]

1504 Hebrew ṣpy ‘keep watch, be on the look-out for’:
UA *capan ‘look for’: TO savant ‘to look for s.th.’; perhaps SP tacciqqwaa ‘to peep out’. [1s4,2p]

1505 Hebrew **yo(w)liid** ‘begetter, one causing female to bear, father’:
UACV-1418a ***yori** ‘non-Indian, white person’:L.Son361*yori‘blanco de raza’; M88-yo2‘non-Indian person’; KH/M06-yo2:
Wr yorí ‘Blanco’; My yóori ‘persona no indígena’; Op uri ‘hombre’; Eu dóri ‘hombre’; Tbr yolí-t; Yq yói / yóori; Tr o’rí / oorí / yoorí. Note the minimal pair in My with r and l in same environment: My yoori ‘raza blanca’; My yooli ‘bravo, valeroso’. Add AYq yori / yoi ‘Mexican, humanoid chapayeka mask’.
UACV-1418b ***yorïmï** ‘person, Amerindian’: My yoreme ‘indígena, Mayo’ (My a’a yoremia-k ‘lo engendró’); AYq yoleme ‘person’ (in song language); AYq yoeme ‘person, human’; Yq yoéme ‘hombre, persona, indio’; Eu dor ‘hombre, pl: dodor; Eu dohme/dohme’e ‘gente, veinte’; Eu dohmerá-wa ‘humanidad’. [SUA: TrC]

1506 Hebrew dlg ‘leap, spring over’ > TO celko(n) ‘skip’;
UACV-1252 ***coŋa** ‘jump’: Stubbs2003-27: Ca číŋay ‘hop’; Cr ticúna’i ‘jump!’; Wc cúniiya ‘gotear, saltar’. These match well, since *o > Ca i, and *o > CrC u and NUA ŋ: SUA n. [NUA: Tak; SUA: CrC]

1507 Arabic rkl / rakala, impfv: ya-rkulu / ta-rkulu ‘kick (s.o., s.th.) or rgl or
Hebrew rqʕ, inf: raqʕa- (Ezekial 25:6) ‘trample (s.th.), stamp with the feet’ (Ezekial 6:11)
UACV-1254 ***cïŋï** ‘kick’: M88-cï15; KH.NUA; KH/M06- cï15: Cp čéŋe; Ca čéŋen; Sr čiŋkin(a) ‘kick, stamp on, v’. Ken Hill adds Ktn čiŋk ‘kick, v’. [medial ŋ] [NUA: Tak]
UACV-1255 ***taŋa** ‘kick’: VVH156 *ta$_u$ŋa ‘to kick’; M88-ta44; Tb ’andaŋ (perf taŋ); SP taŋa;
NP taŋa’hu ‘sting, kick’. Miller assumes ŋ < nk, listing NP tanka’hu for NP taŋa’hu, but as many things reduce to ŋ, that should not be assumed. A palatalization by a high vowel (*ta > *cï) would unite Num and Tb *taŋa and Tak *cïŋï above. NP taŋa’hu ‘sting, kick’ < rakal-hu ‘kick-it/him’. [1r,2k,2q,3l,3’2] [NUA: Num, Tb]

1508 Syriac qmṭ ‘lay fast hold of, take’, participle **qaamiṭ**; Hebrew qmṭ ‘seize’:
Tb(H) **kamiič**|ït, pfv: akkamiič ‘to catch’.

1509 Syriac ša’p-aa / šaap-aa ‘crawling/unfledged locust’ (Syriac šaap/š’p ‘to crawl’):
Ktn šïvacïcï-c ‘body-louse’

1510 Aramaic(J) šwp ‘to smooth, rub, polish, sharpen’; Syriac šwp ‘to rub’ > Ktn šuvi’ ‘to rub clothes’

1511 Syriac šrd ‘to quake, be terrified’ > Ktn šariri’ ‘trembling, adj’

1512 Semitic xrd > Arabic xarida ‘be coy’; Ugaritic xrd; Hebrew ḫrd, impfv: yɛḫɛrad / tɛ-ḫ(ɛ)rad ‘tremble, worry’; Hebrew ḫaarad ‘anxious, frightened at, adj’:
UACV-1949 ***tiwa** ‘shy, embarrassed’: Yq tíiwe ‘tener vergüenza [be embarrassed]’; Yq tíura ‘vergüenza [shame, embarrassment]’; AYq tiwe’era ‘shy’; AYq tuisi ‘embarrassing’; AYq tittiwe ‘embarrass easily’; My tiiwe ‘tiene vergüenza’; My au tiutúa ‘se avergüenza’; Eu tivé ‘tener vergüenza’; Tr ŕiwerá ‘apenarse, avergonzarse’; Cr tí’itebi’ira ‘avergonzarse’; Cr rutébi’irah ‘está timido’. Jane Hill (p.c.) provides us a wonderful addition in Ktn ciu’ ‘be ashamed, vi, be ashamed of, vt’, as the propensity of palatalizing *ti > ci makes it quite probable, and adds a NUA branch to the set. Two things suggest Sem-kw: *ti- (not *ta-) and ḫ (not x). [V metath in Cr?, w > b in Cr; *w > v in Eu] [kw1x>h2,kw2r,kw3d] [SUA: TrC, CrC; NUA: Tak]

1513 A custom in ancient times was to slay an animal and pull out certain organs to “examine” them for signs in decision making; Semitic bḫn ‘test, prove, examine, inquire’ > UA po’na ‘pull out’;
Syriac bḫn, *-baḫḫen ‘observe / examine (bird for augury)’;
UACV-1732 ***pu’na > po’na** ‘pull out, uproot’: L.Son212 *pona ‘arrancar’; M88-po5 ‘weed, uproot’; KH/M06-po5:
TO wooni ‘pick, harvest, uproot’; LP bona ‘arrancar hierbas’; Eu pópna (< *pona) ‘pull roots/hair’;
Wr po’na ‘arrancar (de hierbas, matas, fruta)’; Tr bo’ná/bo’ní ‘arrancar, sacar a fuerzas’; My pónna ‘arrancar’; Wc huuná ‘arrancar una cosa inmóvil’; CN kopiina ‘pull s.th. out, for s.th. to pull itself loose, remove from a mold, copy’; Pl kupiina ‘pull out, tear out, tear off’. Add NT voopónai ‘arrancar’; NT voóñïi ‘arrancar’; ST takvuna ‘uproot, pull out’; ST voopñia ‘pull out (weeds, hair)’; AYq popóna ‘pull up, uproot’. *po’na vs. Aztecan and ST *-pu’na, but often *u-a > o-a, so PUA *u. [iddddua] [SUA: Tep, TrC, CrC, Azt]

1514 Hebrew ’rg ‘to weave’; as the definition in Hopi, ‘pull taut’ is the primary activity of weaving:
UACV-1731 ***(wi)laŋa** ‘pull, drag’: Dakin 1982-310: CN wilaana ‘drag’; Hp laŋa-k ‘be pulled taut, stretch out in a line, vi’; Xal wilaa-na; Mec wilaa-n-ti-á ‘ir jalando’. [*-’r- > l] [1’,2r,3k] [NUA: Hp; SUA: Azt]

1515 Syriac ʕrq ‘flee, escape, shun, avoid’:
UACV-1020 ***wayaq** ‘go out (fast)’: Sr wayaq|q ‘go/come out, exit fast’; Sr wiq-kin ‘take out, cause to exit fast (sg obj)’; Sr wayaq-kin ‘take out, cause to exit fast (pl obj)’; Sr wiq-q ‘go out, come out, exit fast (sg sbj)’; Sr wayaq-q ‘go out, come out, exit fast (pl sbj)’; Hp waaya ‘move, run, fly away, escape’. Might Hp be a loan from Takic? Otherwise, we would expect ʕ > Hp l. Perhaps Tb waai’it ‘fast, quickly’. [1’2,2r,3q]

1516 **Hebrew ’rk** ‘be, become long, last a long time’, hiqtiil: hi’riik ‘make long (rope, one’s days/life)’, impfv -’rak; Aramaic(S) **’rk** ‘be long, lengthen’, Aramaic(S) ’arrek ‘lengthen, extend in time’; Akkadian araaku ‘be long’; Arabic ’araka ‘hesitate’; Syriac ’rk ‘be long, lengthen, **stretch out**’; The Semitic ‘stretch out’ and ‘make long (rope, Isaiah 54:2)’ > UA ‘stretch, make string/length of s.th. for carrying, pull along (by rope)’ is quite plausible; UA best fits a qittel form UA *wiyyek > *wiik:
UACV-399 ***wika / *wiki** ‘take by hand, lead out’: Ca wík- 'carry with the hand'; Hp wiiki ‘take along, lead, escort, kidnap, steal (anim obj)’; Hp wikiki-ta ‘hold s.th. suspended from the hand by a handle’; Hp wiki

'strand, items on a string for hand carrying'; Hp wikikiti-ma 'go along carrying s.th. in the hand'; Yq wiike 'estirar [stretch s.th. out], jalar [pull/drag], sacar [take out]'; Tr wi-mea 'coger y llevarse, arrebatar, robar'; Nv gika 'llevar algo colgado de la mano'; what of Mn wïï-(kï) 'get, have, catch'? [NUA: Hp, Tak, Tb; SUA: TrC, Tep]
UACV-1843 (some of UACV-1843 is at 657 *wit 'string, rope, fiber plant' and if overlap, needs sorting; ***wika** 'rope': Eu wiká / viká 'estirar [stretch out]'; AYq wikia 'string, rope, cord'; Yq wíkia 'mecate, piola'; My wíkyam 'cordones, correas'; Tr wíia 'rope' (having lost -k-). NP wiha 'string, fishing line' (NP often has -h- < *-k-) ***wiki** 'string or fasten with rope for transporting or leading, v': Yq wike 'haul, drag'; Yq wiki/wikri 'estirado [taut]' (as in 'keep pulling cord tight'); Hp wiki 'string up for hand carrying by string'; Tr wíi- 'lazar, atar'; NP wihi kaazi 'train' (kaazi 'car(s)'), i.e., a string/line of cars being pulled along; Eu vikat / béwika- 'estirar [stretch out]'. These may explain the wik- morpheme in Hp wik-paŋwa 'rope, line' and -wi of SP paġaŋ'wi 'bow string'.

1517 Hebrew mašii^{a}ħ 'Messiah' > Hopi Màasaw '1 spirit being, Lord of the Fourth World, god of life and death'; 2 'corpse, dead person'; 3 'spirit of one who has died'. The Hopi dictionary lists final -w(ï) as a noun suffix, and though w < ħ is usual, even masa- is a decent match. As for vowels a-i > a-a, note similarity of Hp yàasaŋw 'year' < *yasii^{a}ħ.

1518 Hebrew qpz / qpṣ 'leap, jump', **wa-yyi-qpoz** 'he jumped'; Arb qfz (i); Aramaic qpṣ / qpṭ:
UACV-1250 **wïppuki** 'jump': Mn wïbïki 'jump, vi'; Ch wïpúki (< *wïppúki) 'jump'. [*u > ï] [NUA: Num]
Though another possibility exists in Egyptian ħpg 'jump, leap'; Egyptian ħpgt 'a leaping dance', the doubled *-pp- (< -qp-) and *wï- of Hebrew waw-consecutive (also in 938 and 1215 repeated below), make more likely *wa-yyi-qpoz > wïppuki, if -ki is an extra syllable as in SP in 1215. Perhaps noteworthy is that all three instances of the waw-consecutive are only in Numic. [*u > ï] [e1h2,e2p,e3g] [NUA: Num]
At (938) Hebrew wayyigammel > UA wïkam'mi and at (1215) Hebrew wayyišroq 'he whistled, hissed' (< šrq 'to whistle, hiss') > UA *wisuko 'whistle': Mn wisïqohi 'whistle, vi'; SP uššuC-qqi 'whistle'

1519 Hebrew ʕayn 'eye'; Arabic ʕayn 'eye'; Syriac ʕayyen 'to eye, perceive, point out, show':
Ktn 'ayn 'show s.o. s.th.'; perhaps SP ončoxi 'be one-eyed'. [1'2,2y,3n]

1520 Hebrew **pwṣ** 'to spread, disperse, overflow'; Arabic fyḍ / faaḍa 'overflow, flow, stream, pour forth':
Wr poci 'to be full'; Wr taipoci 'to sweat'; Tb puuiy|ut 'be full, get full'. Miller (M88-pu9 'full'; M67-193 *pu 'full') combines the *puy and *pun(i) stems, but different 2nd C and meanings say separate; *puni is at 754.
UACV-983a ***puca** > NUA puya 'full': KH.NUA: Tb puuyut~'uubuui 'be full'; Cp púyi-š 'full after eating, also of moon'; Ca puy 'become full with food'; Ls púya 'full from eating'; Gb púy llenarse'. We ought also to include Eu bóde 'full'; Eu bodávi 'full': Eu bod and Tak puy agree fairly well and point to *puy, since *poy should show high front vowels in Tak, and Eu d < *y, though Eu changed *u > o. On the other hand, KH/M06-pu9 includes Tr(H) bučíami 'lleno' and Tr(H) bučíwa 'llenar, vt' which fit a NUA -y- and SUA -c- pattern. [1p,2w,3s4] [NUA: Tak, Tb; SUA: TrC]

1521 Hebrew gly, qittel impfv: -galley 'uncover (woman's nakedness), sleep with (woman)':
Sr ŋalyaaŋalya'n 'be loose'; Sr ŋalyaaŋalyahkin 'loosen, make loose'; Sr ŋalyaaŋalyahq 'become loose'.

1522 Late Hebrew madwe 'menstrual flow of blood'; Aramaic madwe 'flux' [blood of menstrual flow]; such a Semitic form with *haC- 'the', often hi- in UA, may underlie these: *hammadwe > UA *hiNtwa, and *tw > kw (AMR 1991, 1993a) to yield Hp ïŋwa, Tb ïkwa-l, etc.
UACV-**258c *ï(N)twa > *ï(N)kwa** 'blood': CL.Azt205; M88-ï4: KH/M06-ï4 *ïtwV (AMR): Hp ïŋw; Tb 'ïkwa-l, 'ïkwa-n (poss'ed). If these tie to the Takic forms below, the Tak lack the velar and nasal dimensions, while Hp and Tb's labiovelars agree with each other, though Hp includes a nasal not apparent in Tb. In other sets, Uto-Aztecanists have not tied lexemes together so phonologically diverse as these, so their association of all the below is puzzling, but may be more for contemplation in hopes that explanations may surface:

BLOOD; SANGRE

Mn	páápi; paaqa 'bleed'	Hp	ïŋwa	Eu	erát; vavíka 'bleed'
NP	bïïpi	Tb	ïkwa-l	Tbr	ará-t; avá
TSh	paoC; paoppi	Sr	ïcc; ïcava' 'bleed'	Yq	ohbo
Sh	pïïC-pin	Ca	'éw-ily	My	ohbo
Cm	pïïhpi	Cp	éw	Wr	elá
Kw	pïï-pï	Ls	'ów-la	Tr	e*rá; lasí
Ch	páï-pi	TO	ïh'ïd	Cr	suúre'e
SP	païC	Nv	ï'ïrha	Wc	šuuríya
CU	páa-pï	PYp	e'er		šuure 'red, blood-colored'
WM	páá-pï	NT	ïïrai	CN	es-tli; tlapalloo (tlapal-li 'dye')
		ST	'ï'ïïr	CN	espipika 'blood flow out'

UA terms for blood are among the most difficult for sorting and reconstructing definitively. Approximations are TrC / Tep *ïra, Azt *ïs-/*əs, CrC *sor/*sot, Tak *'əwi, Hp ïŋwa, and Num *paC. Miller puts them all together in M88-ï4, perhaps for consideration rather than by conclusion that they are all cognate, for no one has explained how such a diverse group could be reconciled from a single proto-form. Manaster Ramer (1991, 1993a) comes closest with a plausible explanation for the TrC, Azt, Tak, and Hp forms—*ïtwa—and a medial cluster is likely. Whether Yq and My ohbo 'blood' (*kwV > Cah bwV > bo)?

1523 Hebrew *ʕiddaa / ʕiddiim 'menstrual period'; Samaritan ʕiddaan 'time, menstruation'; or perhaps Hebrew niddaa 'bleeding, menstruation' with haC- prefix and reduced to hVCta:

UACV-258a ***ïta/ïra** 'blood': Sapir; B.Tep *'ï'ïrai; M67-47a *'et; CL.Azt16 PAzt *əs, 205 PUA **ï-; L.Son13 *'ïra; M88-ï4: KH/M06-ï4 *ïtwV: Eu erát; Wr elá; Tr lá/lé-/lasí; Tbr ará-t, avá; Tbr avá-ma-li-r 'corazón'; TO ïï'ïd; PYp e'er; Nv ï'ïrha (probably ï'ïra); NT ïïrai; ST ïï'ïr; Sr 'ïţ|ţ 'blood' and Sr ïçava' 'to bleed'; Ken Hill adds Ktn 'ïč. [liquids] [kw-1'2,2d] [NUA: Tak; SUA: Tep, TrC]

UACV-**258b** Azt ***ïs-/*əs** 'blood': CL.Azt16 PAzt *əs, 205 PUA **ï- 'blood': CN es-tli; Pi es-ti, etc. [SUA: Azt] [Not Eg snf?]

UACV-258d ***ïwi** 'blood': BH.Cup; M67-47b *'ew; KH.NUA; Munro.Cup17 *'əəwi-la 'blood'; M88-ï4: Ls 'ów-la; Cp 'əwə-l; Ca 'éwi-ly. Manaster Ramer (in 1993a "Blood, Tears, and Murder" and 1991e "UA *tw") suggests *ïtwa 'blood' and that a cluster of *-tw- underlies the complexities, stating that the only known source of kw in Tb is *tw: e.g., Tb tuugukwï-t 'mountain lion' < *tuugut-wït-ta 'big-wildcat' (cf. Ls tuk-wu-t 'mountain lion' and Ls tuuku-t 'wildcat'). He cites other evidence to suggest that at least some Hp -ŋw- may derive from *-tw-. (See also crow and bighorn sheep.) If so, then we might consider *ïtwa > Tep/TrC *ïta/*ïla, Hp ïŋwa, Tb ïkwa, Tak *ïwV, and Azt ïs-. [NUA: Tak, Tb, Hp; SUA: TrC]

1524 Aramaic ql' / qly 'roast' > Ls qali- 'boil (food)'; different ways of cooking, but the phonology is identical.

More Egyptian

A few more Egyptian forms found later and put here at the end to avoid renumbering the whole book:

1525 Egyptian **isnwi** 'testicles'; the initial vowel and s in a cluster appear lost, leaving nwi:

UACV-804 ***noyo** 'egg, testicle': B.Tep172 *nonoha 'egg'; M67-154 *no 'egg'; I.Num115 *no(yo) 'egg, house, dwelling'; M88-no3 'egg'; AMR1993a *nok 'egg'; KH/M06-no3 *nok 'egg': Mn nóyo; NP noho; TSh noyo-pin; Sh noyo-; WSh noyo 'egg, testicle'; Hp nöhï; TO nonha 'egg'; NT -nóno; ST na'no. Initial i's are weak, s in a cluster with n would be gone, and after that the UA forms show the *nwi portion quite well. Note also WSh no'i-pïh 'womb'; WSh noi-ci'i 'ejaculate'. [NUA: Num, Hp; SUA: Tep]

XXX Egyptian(F) **ḫr** 'face'; Coptic ho/hra-: UA ***holya** 'cheek': Cp hilya 'cheek' (Cp i < *i or *o); and perhaps Ls wííwilma-š 'cheek' if from a voweling of *ḫira (> *huira > *wila). [e1h2,e2r] [Tak]

1526 Egyptian im 'Rippe [rib] (no longer used in the Middle Kingdom)':

UACV-1808 ***amattaN** 'rib': I.Num4 *ama(h)(taN) 'ribs'; M88-'a20 'rib'; KH/M06-'a20: Mn awatápï (<*awattappï); NP amïtaba (< *amïttapa); Sh ama 'waist, rib cage'; Sh amattam-ppï 'ribs'; Kw 'awatï-bï (<*awattï-(m)bï); SP aŋwattaN, aŋwattam-pï 'rib'; CU 'awáta-pï; Wr oma-tére 'axila / arm pit'. Ken Hill adds Sr -a^{r}mö^{r}; Ktn amu-c; and Cp amsisva-l (Cp -ámi 'waist, poss'd). [*-CC-; w/m/ŋw] [NUA: Num, Tak; SUA: TrC]

1527 Egyptian(H) ṯnw 'zählen [to count]'; but the glyph options are both ṯnw and ṯn 'count', the latter matching Tr: Tr tará- 'contar [to count]' (and often NUA n > SUA l/r).

1528 Egyptian(H) t'-tmw 'alle menschen [all men], menschheit [mankind, lit: earth-all, i.e., all mankind]'; Egyptian(H) tmw / **tmmw** 'die menschheit [mankind]'; a precedent for a semantic shift from 'man' > 'we' is in Numic (see below):

UACV-2662 ***(i)tammu** 'we': B.Tep 297 *'aatï'i; BH.Cup *c…m; I.Num 205 *ta(h)-mV; M88-pr5; KH/M06-pr5: Mn taq^{w}a; NP tammi; Cm tamï; TSh tammï; Kw tami; CU tami; Hp itam (acc -ïy); Sr ačam/ičam; Ktn icam; Ca čémem; Cp čəmə; Ls čáá'um, čáá's, čá'a, čám; Gb eyómoma; TO aačim; NT aatï-; ST aat^{y}i'; Eu tamíde; Tb ité; Tr tamu(he); Wr remé; My ítapo; Yq itepo, te, ítom; Wc tááme; CN te'waan; Pl tehemet. The Numic languages suggest a geminated m. The final vowel was likely *-u, in light of Numic ï (< *u often), Tr tamu, Yq ítom (< *itomo < *itammu), and Ls čáá'um (both showing assimilation to a now lost final *-u). This involves a semantic change from 'man(kind), people' to 'we'. For a people isolated enough that nature and animals are 'they', then 'humans' are 'we', or the 'tribal members' are 'we'. The change 'people' to 'we' has precedent in Numic, where 'person/Indian' became 'we'. In Numic, the UA branch that developed inclusive vs. exclusive 1st pl pronouns, *nïmi 'we, exclusive, I and they, but not you' lets *tammu 'we, inclusive, you and we' mean all us people. Even Numic *nïmi 'we, exclusive' itself is from UA nïmi 'Indian, one who lives traditionally, wandering hunting and gathering' from UA nïmi 'to walk around, live traditionally'. John S. Robertson (p.c.) also informs me that a French pronoun came from 'man': French homme 'man' > Old French (h)om > on 'one, someone' is used like impersonal 'one/you/they' in English: On me l'a donné '[someone] gave it to me' (also in "French personal pronouns," Wikipedia, August 2014). [NUA: Num, Tak, Tb, Hp; SUA: Tep, TrC, CrC, Azt]

6 Seven Uto-Aztecan Puzzles Explained by Egyptian and Semitic

6.1 One, Tarahumara's initial ŕ (< Semitic/Egyptian r) vs. t < t, d, t̲, ḏ

From the traditional UA perspective, initial PUA *t remained t in all UA languages except in Tarahumara (Tr) where it appeared to have changed to ŕ; that is, Tr ŕ corresponds to t of the other UA langauges. The problem is that Tr also has many words with initial t besides initial ŕ, that is, many Tr words begin with t besides those that begin with ŕ. So if the traditional view is correct, then where did Tr initial t come from? Said differently, why do some UA cognate sets of initial PUA *t yield Tr ŕ and others yield Tr t?

This is explained by Egyptian t, t̲, d or Hebrew initial t, d, ṯ > t in Tr, but initial r of both Semitic initial r and Egyptian initial r, remain ŕ in Tr, though initial r- > t- in the other UA languages. This distinction is clear in Tr. A few Tr words have alternate forms, one with initial t and one with initial ŕ. Some forms are not identifiable to the Near Eastern tie, but of those identifiable to the tie, 37 of 40, or 93% match this distinction: that Tr initial ŕ corresponds to Egyptian or Semitic r, while Tr t corresponds to Egyptian t, t̲, d or Hebrew initial t, d, ṯ. The other 7% may well be items that developed variants, then lost the original of the pair and kept the variant. Nonetheless, in Brambila's Tr dictionary of initial t, those identifiable to the Near Eastern tie relate to Egyptian or Hebrew forms which start with sounds (t, t̲, d, ṯ) that correspond to UA t.

Tarahumara	Semitic / Egyptian
tábiri 'thing'	< dabar 'thing' (610 Hebrew)
ta- / taní 'to ask for'	< natan / -ttan 'to give' (1036 Hebrew)
takú 'type of palm tree'	< daqal 'date palm tree' (961 Hebrew, Arabic)
tará- 'to count'	< t̲nw 'to count' (1527 Egyptian)
téburi 'louse nit'	< ḏabboot 'flies' (620 Hebrew, Semitic)
(semantics: fly > flea > louse / nit)	
tégu- / téku- 'to be drunk'	< txw 'drunkard' (170 Egyptian)
tesó < UA *tïkso	< tks (124 Egyptian)
ti 'me'	< 'ootii 'me' (1497 Hebrew)
teté'na- / ŕe'na- 'yawn, open mouth'	< ḏqn (Arabic), dqn (617 Aramaic), zqn (Hebrew)
tewé-re- / ŕewé-re- 'be named'	< dʕy / daʕaa 'to call, name' (1059 Arabic)
tibú- 'watch, take care of'	< tbʕ 'follow, trail, observe' (1327 Arabic)
tami / timi 'like, look like'	< dmy / damaa 'be like, resemble' (751 Hebrew)
toa / to- 'take along, carry'	< t̲'w 'take up, seize, steal, bearer' (159 Egyptian)
toba- 'atollarse, sink in the mud, atascarse'	< ṯbʕ / ṯbl (1159 Semitic)
tókowa 'to crow (of bird)'	< tqʕ 'to blow (a horn)' (1471 Semitic)
tori 'cock, hen'	< toor 'turtle-dove' (725 Hebrew)
towí 'boy'	< t̲'y 'male, man' (206 Egyptian)
tosá- / ŕosá- 'white'	< t'-ḫd̲t 'the-white' (494 Egyptian)
tumu-(hé) 'you, pl'	< 'antum / -tum 'you, pl' (106 Arabic/Aramaic), attem (Hebrew)
tu'na- 'be thick'	< dšn 'be fat' (Hebrew)
tutuguri / ŕutuburi 'a ritual dance'	< twt 'stand, perfect' (420, 421 Egyptian)
tagáči- 'give fruit from a vine'	< dqr 'fruit' (269 Egyptian)
tékoa / tékowa 'master, lord'	< tqʕ 'pierce(d)' (1472 Hebrew)
tarí 'seed for sowing'	< dry / dara^{y} 'to sow (seed)' (1499 Semitic)
tá / tamu / tami 'we'	< tmmw 'man' (1527 Egyptian)

While Semitic and Egyptian initial r- became t- in the rest of UA, Tarahumara retained intial ŕ, so Tr shows Semitic and Egyptian t > t, and also Semitic r > Tr ŕ and Egyptian r > Tr ŕ:

(169) Egyptian rmt̲ 'man': Tr **ŕemarí** 'boy'; Eu temáci 'young man'; Wr te'marí 'boy, young man'; Wr re'marí 'friend'; Wr remarí 'man' (perhaps a loan from Tr).
(508) Egyptian rmn 'row of rowers' > UA *taman 'tooth/teeth': Tr ŕame (as Wr's in 'row of teeth'; see 508)
(168) Egyptian rm 'fish' (Coptic rame); Egyptian rm is often found in the pl rmw: Tr **ŕamú** 'small fish'.

(164) Egyptian rn ‘young one, of animals’ > UA *tana ‘offspring’: Wr taná 'child, little one';
Wr tana-ní/tani-má 'give birth'; **Tr ŕaná**(ra) ‘offspring, son’; Tr ŕana-mea ‘give birth’;
(337) Egyptian r’-ib ‘stomach’ > UA *to’i / *to’(pa)/*toCpa 'belly, stomach': Wr tohpá; **Tr ŕopá**;
My toppa; My tópa’ara; Ca tí’i-ly (< *to’o); Ls téé’-la 'belly'; Sr tö’č; Eu toa.
(422) Egyptian r̲di > rdi (in middle Egyptian) ‘give, put, grant, give (the price, i.e. buy), sell’ >
UA *tari 'sell': Wr tariké ‘sell s.th. to s.o.’; Wr tala-ní ‘buy, vt’; **Tr ŕari**-mea ‘buy’; Tr ŕarinéa-ma ‘sell’
(600) Hebrew r’y / ra’aa ‘see, v’ > UA *tïwa ‘find, see’: Hp tïwa ‘find, perceive’; Tb tïwat~’ïïtïw ‘look
for, find, guess’; Cp tewa ‘see, vt’; Ca téew ‘find, discover’; PYp teega ‘find, see, vt’;
PYp teegida ‘show, vt’; NT tïïgai; Eu téwa; Wr tewa; **Tr ŕewa**/tewa; My téwwa ‘hallar’; Yq tea;
(603) Aramaic rymh (= riimaa) ‘large stone’; Aramaic *rima-taa ‘large stone-the, n.f.’; Syriac ryaam-taa
> Sr tïmï-t; Ktn tïmï-t; NP tïb-bi; Sh tïm-pin; Tb tïn-t; Yq téta; My tetta-(m); Wr tehté; **Tr ŕeté**; ŕeepó.
The final –ta / -te of the SUA languages is fossilized absolutive suffix *-ta.
(1240) Arabic raǧul ‘man’ > UA *tihoyi ‘man’: Wr tihoé/rihoé; Wr(MM) rihoé / tehoyé ‘man’; **Tr ŕehói**;
Wr also has loans from Tr it appears.
(1242) Hebrew rbṣ ‘lie down (animals)’; Hebrew rebɛṣ ‘resting place’; ribṣ-o ‘resting place-his’:
UACV-1518a *tosa ‘nest’: Eu hitósa; Yq tóósa; My toosa; Tbr tuesá-r.
UACV-1518b *ta’so ‘nest’: Wr ta’só; **Tr ŕasó**.
(1341) Hebrew rʕm ‘to rage, roar, thunder’ > SP tom’mu ‘make a big noise, thunder’;
Wr te’ó-na ‘buzz, roar, thunder’; **Tr ŕe’o**-ma ‘thunder’.
(403) Egyptian rd ‘foot’: Eu tarát ‘pie’; Wr talá ‘planta del pie’; Tr rará ‘planta del pie, pie, pata, huella’.

Three forms to the contrary are below, though they could be due to other language influences or could be the survivor of a pair of variants that had both forms, but lost the other:

(602) Hebrew régaʕ ‘a moment, in a moment, a short while, abruptly’
> Tr teko ‘soon, in a short time, quickly’ may be a loan from Wr or an invalid tie.
(743) Aramaic tuumr-aa ‘palm-the / date-palm-the’
> UA *tuʼya ‘type of palm tree’: Wr tu’ya ‘palmilla’; Tr ŕu’ya ‘kind of palm tree’.
(866) Semitic ṭamar ‘hide, bury, cook underground’ > Tr ŕemé-ma ‘make tortillas’ though the
pharyngeal / retroflexive nature of Semitic ṭ may have better aligned with ŕ than t.

An item not yet identified but worth listing for future reference: Tr tabá- ‘opening, narrow gap, crotch’

Among the Wr dialects and Tr dialects, all in the general vicinity of each other for convenient borrowing, doublets or word variants that have both an initial t- form and an initial r- form are not surprising, as a Wr t- form would join the Tr r- form, but only two such items are in this list. No less than 24 items with initial t- in Tarahumara are from initial t- forms in Semitic or Egyptian, and twelve items of Tarahumara initial ŕ are aligned with Semitic intial r- or Egyptian initial r-. Two items show both, for example, Tr ŕewa/tewa vs. Wr tewa and UA *tïwa in a dozen other UA languages. Only one shows r > t with no alternate r- form, which lone form may be a loan from Wr or elsewhere, and two forms (ŕu’ya, ŕemé) go the other way. So 36 of 39 or 38 of 41 if counting the two with both forms, amount to all but three forms to the contrary. Those noteworthy numbers yield a rather impressive 93% agreement.

6.2 Two, Tara-Cahitan Initial b (< Semitic/Egyptian b) vs. initial p (< p)

An interesting distinction exists in the Tara-Cahitan (TrC) branch of UA. Proto-Uto-Aztecan *p is simply p in most UA branches. However, six languages/dialects in the TrC branch—Tarahumara (Tr), Western Tarahumara (WTr), Eudeve (Eu), Mayo (My), Yaqui (Yq), Arizona Yaqui (AYq)—show both initial b and p for PUA *p. This dichotomy has been without explanation the last century since Sapir established UA as a language family, yet Semitic explains the distinction the great majority of the time: items with initial b in these UA languages align with Semitic b or Egyptian b, and items with initial p in these UA languages align with Egyptian or Semitic p. We shall only deal with the initial bilabials, because non-initial (later in a word) bilabials are easily voiced intervocalically or otherwise altared due to word-internal environments. To state the matter another way, for items contributed by Sem-p, Semitic p > UA *p and Semitic b > *p, such that Semitic b and p merged in UA to UA *p. However, in the six languages mentioned,

they did not merge, but are distinguished. For most, Semitic b > TrC b and Semitic p > TrC p; AYq shows v < b and p < p; and Eu shows both b/v < b vs. p < p. Wr never shows the distinction, but is closely related, and is often listed to show the difference. Abbreviations of the relevant sets follow:

Semitic b

(527) Semitic baraq > UA *pïrok / perok ‘lightning’: My berok-; Yq be’ok-; AYq ve’okte; Tbr virikí-t;
Sr vönäq-q ‘flash (lightning)’.
(528) Hebrew **bayit / beet** ‘house’; Arabic **byt / biit** ‘pass/spend the night’: Hebrew byt ‘to spend the night’ > Tr bete-ba-ma ‘spend the night’; Tr bete-či / biti-či ‘home-at’; Tr bete-ra ‘house’; Tr beté-re- ‘live, inhabit, dwell’; Tr peréame ‘inhabitants, residents’; Tr bití ‘estar [various objects being in horizontal positions], vi pl’; WTr behte ‘live, v’ (Burgess 1984, 19); WTr bete-ba-ma ‘spend the night’; WTr bete-ra ‘house, n’; WTr bití ‘be lying down, pl’; WTr bite ‘dwell’;
(529) Hebrew béged / baaged ‘garment, covering, clothing’; Arabic biğaad ‘striped garment’:
Eu vakaci ‘clothing’; Eu vakace ‘get dressed, vi’.
(530) Hebrew béged / baaged ‘garment, covering, clothing’ denominalized to be a verb ‘put on, enter’
> UA *pakiC ‘enter’: Eu vaké/baké; Wr pahki; Tr baki-mea; My kibake; AYq kivake.
(531) Hebrew **bw’** ‘come, v, way, n’ > UA *pow/*po’ ‘road, path, way’: Eu bowé-t; Yq bóo’o; My boo’o; AYq voo’o; Tr bowé/boyé.
(532) Arb **baaṣir**at ‘eye’ (= Hebrew booṣer) > **UA *pusi** ‘eye’; Eu vusít/busít; Tr busí; while Eu and Tr show b, Yq and My show p: Yq púusi; My puúsi.
(533) of the same root, Arabic **baṣṣara ‘open** one’s own **eyes**’; unattested Hebrew *buṣṣar > Eu busá ‘awaken, vt’; Eu busú ‘wake up, vi’; Tr busá-ma ‘wake another, vt’; Tr busi-mea ‘wake up, vi’;
Tr busire ‘be aware, conscious, awake’; My bussa; Yq busa; AYq vusa; AYq vusa’a ‘awake, adj’.
(535) Hebrew **baaqaar** ‘cattle, livestock’; Aramaic **bqwrh** (bVquuraa) ‘herd of cattle’ > UA *puku ‘domesticated animal, s.th. possessed’: Tr bukú 'animal poseído’; Tr bukurú ‘take ownership of’;
Eu bukút ‘slave’; My bukke ‘raise (children or animals)]’; Yq búke ‘have animals’; Yq buki ‘slave’;
Eu vuk ‘possession’: no vuk ‘mio’, amo vuk ‘tuyo’.
(538) Arabic badda ‘separate’; Arabic budd ‘part of a thing’; Hebrew bad ‘part, portion’ > Tr biré and Wr piré.
Wr never shows the b vs. p distinction.
(540) Hebrew bṭḫ ‘trust, v’; Hebrew biṭḫa(t) ‘trusting’ > UA *pitiwa > *piciwa ‘believe’: Eu vícwaci ‘believe’;
Eu vicwaterá 'believe’; Tr biči ‘believe, have faith’.
(545) Arabic bd’ ‘begin, start’, bad’a(t) ‘beginning, n’ > UA ***pïwa(t)** 'first, begin': Eu viwát ‘first time’
(similar and possible is Arabic **bdʕ** ‘start, do for the first time’ (badʕ); Arb bidʕat ‘innovation’).
(548) Syriac bd’ ‘to invent, make up’; OSArabic bd’an ‘loose talk’; Hebrew bada’ ‘to invent, devise’ > AYq veewa ‘non-sense, gibberish’; AYq veewa-tia hia ‘brag, boast, complain, whine’. Both meanings, ‘new, begin’ and ‘bad-talk’, show the pattern *pïwa / *bïwa < bad’a. Also interesting is that AYq v corresponds to Hebrew b instead of p.
(549) Arabic blg / balaga ‘to shine’; Arabic blg / baliga ‘be happy, glad’; Hebrew hi-bliig ‘cause to flash, become cheerful, brighten up’ > Yq bále ‘enjoy, rejoice’; Yq balí-ria ‘joy, gladness’;
Yq(EF) belohko ‘bright, shining’; AYq vélohko ‘bright, shining’; AYq valepo ‘desire, will’.
(550) Aramaic **bəśár** ‘flesh’, biśr-aa ‘flesh-the’; Hebrew bááśaar ‘flesh, penis’ > UA ***pisa** ‘penis’: Wr pisá; Tr bisa.
(552) Arabic baṭuna (u) ‘be paunchy, pregnant’; Arabic baṭn ‘belly, womb’; Hebrew baṭṭen ‘pregnancy’; Syriac bəṭin ‘to conceive, be with child’; Hebrew bɛṭɛn ‘belly (of man, of pregnant woman)’
> UA ***poc(c)a / *putta** ‘pregnant’: Tr bocá ‘be pregnant’; Eu púcika ‘rebosar de lleno’. Tr aligns, while Eu is an exception to the alignment, perhaps a loan from a non-distinguishing language.
(553) Hebrew bṣq ‘to swell’; Hebrew baaṣeq ‘flour-dough’ [what swells/rises]; Arabic basqat ‘raised spot’ > UA ***posa** ‘swell’: Hp pös-ti ‘become swollen’; Wr posa- ‘estar lleno, satisfecho'; Tr posá/bosá, bosawí (irreg pres) 'full from eating’; Eu vosve ‘get full of food’; Eu vosáhtude- ‘fill another with food’. Hp and Wr are included as examples of languages that do not show the distinction, while Tr and Eu do, though Tr has alternate forms, one likely borrowed from nearby Wr which does not distinguish b vs. p.
(554) Aramaic(S) bəzar ‘seed’; Aramaic(S) biizr-aa / bazr-aa ‘seed-the’; Arabic baḏara ‘sow’;
Arabic baḏr- ‘seed, seeds’; Arabic baḏra(t) ‘a seed, pit’ > ***paCci / *pa’ci** ‘seed’: My báči-a; Yq bací-a; AYq vačia ‘seed, pit, stone’; Wr pahcí; Tr bací-ra ‘semilla de calabaza’ (Tr bací- ‘calabaza’); Tr pačí ‘elote, siembra’; Eu suváci (acc: subáta) ‘seed’ (su- another morpheme); Tr has both b and p, while all the rest align with b like Semitic b.
(556) Hebrew **bayṣa(t) / beeṣa(t)** ‘egg’; Arabic **byḍ / baaḍa** ‘lay eggs, be white’:
Arabic **bayḍat-** ‘egg, testicle’: plural would be Hebrew **beeṣoot** > UA ***pïyso** ‘testicle’:
Yq bíčo 'testicle'; Tr bičó/wičí 'testicle'; Eu vicó-puva- ‘castrate’.
(562) Hebrew -**bbiiṭ** > UA ***pica/i** ‘look, see’: Eu vica/bica; My biča; Yq biča; AYq viča; Tr beči/peči.
(1390) Semitic bə-tVxVt > My bétuku 'debajo'; Yq bétuku(ni) ‘below, down’; AYq vétuku ‘under’.

(1394) Ugaritic bʕd ‘behind’; OSArb baʕdu ‘after, behind’; Arabic bʕd ‘be distant’; Hebrew báʕad ‘behind, through, round about, for’ > Tr bo’ó / ko’ó ‘del/al otro lado de [from/at/on the other side of]’.
(1238) Hebrew **bayt-aa** ‘inside-to’> UA *paca: B.Tep254 *vaasa ‘to put into’: Tr bač-á ‘put in’;
Wr pahcá; My kibáca ‘meter’. Wr and Tep never show the distinction, only Tr and My ever show it.
(823) **Hebrew ba-yyameey** ‘in the year of, lit: days of’ > ***payami** > UA ***pami** 'year': Tr bamí; bamíbari ‘year’; Wr pamíbari ‘year’; Wr pamíbame ‘years’. Wr is included for contrast, as it does not who b > b.
(811) Hebrew **-biin** / he-**biin** / yV-biin / tV-biin ‘understand’: Tr biní-mea ‘learn, study’; Tr bene- ‘know, acquire habit or custom’; Wr peni ‘learn’; Wr pené ‘know how to do’; Eu viné ‘know/like (a place)’. Note Tr b and Eu v, but Wr p which never shows the distinction.
(1277) Aramaic(J) rbʕ ‘lie down’; Syriac -rbaʕ ‘lie down’ > Eu voó ‘lie down’; Eu voí ‘lying down’; Wr po’í; Tr bo’í; My bó’o-ka ‘acostado’; My boo’-te ‘acostarse’; AYq vo’o-te ‘lie down’; AYq vo’o-ka ‘be lying down’.
(1050) Hebrew ben ‘son’, pl: **bənee(y)** ‘sons’ > UA *poni ‘younger brother’: Eu bonwa/vónwa; Tr boní ‘younger brother’. The following AYq term demonstrates how a term for ‘son’ can come to mean ‘younger brother’ as in AYq pale ‘hijo [son], hermano menor [younger brother]’.
(1496) Hebrew **brd** ‘to hail’; Hebrew baaraad ‘hail’; Syr bard-aa ‘hail-the’; Arb brd ‘be cold’; Arb barad ‘hail’: Tr bara- ‘ser el tiempo de lluvias [be the time of rains]’; My baali / baayi ‘cool’; AYq bali ‘cool’.
(1397) Hebrew bayin / been ‘between, among’; Syr bainai >Eu vené ‘to’; Eu vené-ri ‘together with, near’.
(1398) Hebrew bə-panee ‘on the surface of’: Eu vepán ‘encima, sobre’; AYq vepa ‘on top of’. The two languages that show v < Semitic b, vs. p < Semitic p, show their consistent v.
(722) Syriac **bl’** ‘grow old, wear out’ > Eu virúe- ‘get tired’; Eu virúhmukú ‘die of exhaustion’.
(1450) Arabic **ṣbb** ‘pour, gush, flow’; Arb ṣabiib ‘poured out, blood’; CN espipika ‘blood flow out’; Eu vávika 'bleed’
(590) Hebrew **’**aboot ‘fathers, ancestors’ > Eu voc-wa ‘grandfather’; not count, because intervocalic.
(1399) Semitic **bxr** ‘test, choose, be/make choice’: Syriac bḫr (< *bxr) ‘try, prove (as silver by fire)’; Hebrew bḫr (< *bxr) ‘choose’; Hebrew ni-bḫar ‘be tested (refined in fire, as metal), be preferable’; Hebrew baḫiir ‘choice’; Hebrew baḫuur ‘young man (i.e., choice, in prime of life)’; Amorite bexeru ‘elite soldier’: My behre ‘be costly’; My behri ‘opponent, enemy’; Yq behé’e ‘expensive’; AYq behe’e ‘1 betray, deceive, 2 cost, be expensive’.
(1400) Syriac **baatar** ‘after, following’ < bə-’atar, cognate to Hebrew b-’ašer); Hebrew ba’ašer ‘because’; Arabic ’aθar ‘track’; Arabic ’iθra ‘immediately after’; these 3 language forms are cognate in Semitic, and the UA form is phonologically like Hebr, but semantically like the more original meaning in Arabic and Syriac, i.e., ‘in the track of’ or ‘after, behind’ > AYq veasi ‘behind, beside, on the other side of’.
(1401) Hebrew brḫ ‘flee, slip away, pass through, glide past’ > My bóroh-te ‘tiene diarrea’
(1165) Arabic baḫr- ‘sea, large river’, that is, water vs. land; Arabic baḫra(t) ‘pond, pool’ > *paa ‘water’ in nearly all UA languages, yet in Cahitan(My,Yq) *ba’we ‘sea’: My báa’a; My báawe ‘see’; Tr ba’wí ‘agua, jugo, caldo, líquido’; Wr pa’wí; Wr pa’wé ‘sea’.
(1067) Hebrew bʕy / baʕaa[1] ‘enquire, search’; Ugaritic bġy ‘wish’; Arabic bġy ‘seek, desire, wish for’ > UA ***paya** ‘call’ (loss of ġ in cluster): TO waiđ; Wr paé-; Wr(MM) pa’é / paé ‘call’; Tr bayé/páe.
(1351) Hebrew bqʕ ‘split, cleave’; biqʕaa ‘valley’ > Tr bakowá ‘ravine where water runs’.
(1259) My beyúk ‘stoop’ < brk ‘bow’

Counter examples, if valid, may be (1260) Semitic brk ‘praise, bow’ > Yq(EF) po’ok-te ‘stoop over’; Yq(EF) po’ola ‘head bowed forward’ and perhaps (537) if valid.

In the six languages that show Semitic b > b, no less than 75 words align with the b > b, and 4 do not, for a 95% agreement. As for sets as a whole, 36 sets align and 2 may not, again a 94% agreement.

Egyptian b

(138) Egyptian **bši** ‘to spit, vomit, v’; Egyptian **bšw** ‘spittle, vomit, n’ > UA ***piso-(ta)**: My bísata;
My bísači ‘vomit, n’; AYq visata; Yq bísata; Tr o’pésu ‘vomit, vi’; Tr ku’péso ‘vomit, vi’. Most are voiced b;
Tr clustered with a voiceless stop (’) to cause devoicing b > p. 2 of the 2 languages have b > initial b
(139) Egyptian **bnty** ‘breasts’: Eu viít / biít; Yq pípim; My píppim. 1 of 3 have b > b
(141) Egyptian **bit** ‘bee, feminine noun’: some t’s survive in UA but many palatalize to c:
Eu pica/pisat 'avispa'; Tr pičé 'avispa grande'; My bíica 'avispa'; AYq viiča ‘wasp’. 2 of 4 have b > b
(143) Egyptian **bk’** ‘pregnant’ > Eu bokát ‘preñez’; Eu boké ‘preñada’; Eu vokíma ‘stomach’. 1 of 1 have b > b
(241) Egyptian **nb** ‘any, every, all’ > Tr nabí ‘always, each, every, all’. Intervocalic b, not countable.
(465) Egyptian **bi’** > UACV-1268 *papayu > *papa / *papo ‘rock, cliff’: TO waw ‘cliff, bedrock, a rock’; NT vávoi; ST vaapai. Add PYp vava ‘hill, mountain, cliff’; PYp vaves ‘rocky terrain’; and Nv baba ‘roca, peña, peñasco’. The Cahitan forms—My baabu ‘barro [clay]’ and AYq vaavu ‘clay’—vary semantically from Tepiman, but the phonological identity with Tepiman and a slight semantic shift to ‘clay’ deposit/place (quarry) from flint/ore/rock deposit/place (quarry) make it probable. 2 of 2

Of Egyptian terms, all 6 of 6 UA sets (100%) show some b, and 8 reflexes of the 12 show b > b, for 75%.

Semitic p

(724) Hebrew parʕoš ‘flea’ (jumper, Hebrew prʕš ‘jump’) > UA ***paro’osi** 'jackrabbit': Op paros; Eu barós; bwaros; paaros; Yq páaros; AYq paaros; My paaros; pl. paró’osim; Wr pa’loísi; Tr ba’loísi. 6 of 8 forms have p
(640) Semitic psx ‘lame’ > Eu piopiioké ‘limping’ 1 of 1 has p
(640) Semitic psx ‘lame’ > ‘bad’ > UA ***pisika** ‘(become) rotten, infected’: Eu viíke ‘pus; Eu viikát ‘sore, pus’; Yq bikáa ‘rotten’; AYq viika ‘rot, spoil, decay, infected’; My biká; Tr biká / bi’ká (Tr(L)) 0 of 5 have p
(812) Aram **pty** ‘be wide’; Arm(J) pətee(y) ‘be wide, open’; Syr pətaa(’) / pətiiy ‘be enlarged, increased, wide, broad, ample’: with forms in all 8 branches, UA has explanatory power for both the y and the ’ alternations in UA, because the same pair of options exists in Aramaic. Eu bete’e-; Tbr --; Yq béte’a ‘pesar’; AYq vette; My bette; Tr be’té-re. 0 of 5
(1392) Syriac p’y ‘be becoming, comely’; Syriac paayuut (< *pa’yuut) ‘beauty, comeliness, elegance’: Tr ba’ó ‘hermosura [beauty]’; Tr ba’ó- / ba’óre- / bayóre- ‘be beautiful’. 0 of 1
(1377) Hebrew *ṣəpardeᵃʕ ‘frog’ > My booro’okim ‘toads’ and/or My báta’ači ‘frog’. Non-initial
(827) Hebrew **daqar panaa-w ‘till its surface’ > UA *tĭkir-panawa** 'work, cut’ CN teki-panoaa ‘work, v’ (as well as CN teki-ti ‘work, pay tribute, v’; CN teki-tl ‘work, tribute, n’); Tbr tekipa-(na)- ‘trabajar’. Note Yq tékil ‘trabajo, n’ and Eu tékirwa ‘trabajo, n’ without *panawa. Though possibly borrowed directly from CN, we ought to note also *tĭki-panawa in Yq tékipanóa ‘trabajar’; My tekipanoa; as for *tĭkipanoa being a compound of *tĭki ‘cut’ plus *panawa, note Eu panava / panawa ‘trabajar’. 5 of 5 have p
(1391) Hebrew pšṭ ‘spread out, take off clothes, stretch oneself, remove (skin)’; Syriac pšṭ / **pəšaṭ** ‘stretch out, extend, spread out’; Syr pəšiiṭ ‘straight, plain, flat’: Tr pe-, pesá (irregular present) ‘stretch, spread, spread a cover onto s.th., spread out a bed’. 1 of 1 has p
(1391) Hebrew pšṭ ‘spread out > UA *(hi-)pïta 'woven mat': M67-277 *peta 'mat, bed': Eu hipét; Wr ihpetá; Tr péra; My hípetam; CN petla-tl 'woven mat'; Pl petat. 4 of 4 have p
(852) Hebrew paneeʸ ‘on face/surface of’ > Tr paní ‘up’ (loan from Azt?). 1 of 1 has p
(851) Hebrew panaa-w ‘face-his’ > Tr bana ‘cheek, face’ 0 of 1
(1453) MHebrew and JArm **pwḫ** ‘blow, breathe’; Arabic fwḫ ‘diffuse an aroma, exude a pleasant scent’; Syriac pwḫ ‘breathe, blow, exhale’; Syriac payyaḫ ‘breathe forth, exhale’; Tr pewa- ‘to smoke’. 1 of 1 has p
(1395) Hebrew paḫ, pl: paḫiim, pl construct paḫee(y) ‘thin plate(s) of metal’ (< Egyptian px’ ‘check’) Tr piwe- / piu- / piwi- ‘remoler bien, pulverizar fino’. 1 of 1 has p
(1396) Arabic kfr (< *kpr) ‘cover, hide’; Syr kpr, impf: **-kpur** ‘wipe clean, scour’; Hebrew kpr ‘smear (i.e., cover) with s.th. (pitch in the extant example in the O.T.) > Tr pora- ‘tapar, cubrir, techar’.
(840) Hebrew pwṣ ‘spread, disperse, overflow’; scatter is what a wind does when it blows; Eu pupúca; Wr pupúce; Tr pučá; AYq puh-ta ‘blow away, spray’; CN piica ‘blow on s.th.’ 4 of 4 have p
(1133) Syriac baʕw-aa ‘(camel) hair/hide-the’ > Tr bo’wá / boa / bo’o / bó ‘hide’; My bowwa ‘hair’; Yq bóa ‘hair, feathers’; AYq voa ‘fur, down, body hair’. 4 of 4 have p
(1132) Hebrew pɛraʕ ‘hair on the head’; Arabic farʕ- < *parʕ- ‘long hair’ or Arb farw-u < *parw-u (nom) / parw-a (acc) ‘fur, skin, pelt’; Syriac perʕ-aa ‘bud, shoot, sucker, blossom-the’ > UA *pï’wa ‘hair, hide, fur, body hair’: My beewa ‘piel’; Yq béa ‘skin (animal)’; AYq beá. Perhaps analogized voicing due to baʕw-aa (1133) above, but 0 of 3

11 of 15 sets (73%) generally show p > p, but 28 of 45 reflexes is 62%, not quite 2/3 show Semitic p > UA p.

Egyptian p

(293) Egyptian **pds** ‘stamp flat, flatten, beat flat’ > Eu pitása ‘aplastar [flatten]’; Yq(EF) pitta ‘aplastar’; AYq pitta ‘press (a surface), crush, smash’. ?but not AYq vetala(i) 'flat, smooth'; Yq bétalai 'level'? 3 of 3 have Egyptian p > UA p
(286) Egyptian **px’** ‘purge, clean’; Egyptian px’ ib ‘clean of heart’; Egyptian px’ ht ‘clean of thought’: UA ***pi’wa** ‘clean’: Tr bi’wá-/ be’wá-/ be’wé- ‘clean, purify, wipe’; WTr bi’wí ‘become clean, vi’; WTr bi’wá ‘clean, vt’; Eu píwa-/pígwa- ‘clean, wipe, v’; Eu píwi-/pígwi- ‘clean’. 1 of 2
(289) Egyptian **phr** ‘turn, turn about, revolve, surround, travel around’ > UA ***pi’ri-na > piyi(na)** 'to spin, twist (thread/rope)': Tr bi’rí ‘be twisted, rolled up’; My biirite 'spin, twist’; AYq vi’ita ‘twist, wind around, coil, vt’; Eu virá- ‘torcer’; Eu vírana- ‘voltear’; Sr viooro-k ‘be rolled up’. This one is reversed: 0 of 4
(491) Egyptian phrw ‘water’ > UA *parawa 'juice, soup, stew’: Hp paala 'juice, soup'; TSh paawa ‘juice’; Eu varáwa 'stew'; Wr pa’wíla; My bá’wa; My bá’awa; AYq va’awa; Yq bá’awa (*r > ’ in Cah); Tr ba’wi-rá ‘make stew’. This set is partially influenced by the term for water and thus reversed, so 0 of 4
(319) Egyptian **psi** ‘cook’ (Coptic pise); Egyptian psw ‘cooking (verbal noun)’: UA ***paso** > **poso**: Wr pasu ‘cook by boiling’; CN posooni ‘boil, be angry’; My poh-te ‘is boiling’; AYq poh-ta ‘boil’; Yq pohte ‘hervir [boil]’. 3 of 3

3 of 5 sets show Egyptian p > UA p, but the two sets reversed yield only 7 of 16 reflexes.

Egyptian f (has few examples and is inconclusive, though Egyptian f > b 2 times, > p one time)
(275) Egyptian f'i 'take from s.o.' > Tr bo'e- 'take from, dispossess'
(279) Egyptian ftt 'jump' > Tr počí- 'jump';
(277) Egyptian fx 'loose(n), release, cast off, depart' (infinitive fxt) > UA *puC-tV 'loose(n), untie(d)': My búttia 'untie'; Yq búta; Wr po'tá; Wr(MM) po'tá 'become loose, untied'; Tr bo'tá; Tr o'ta- 'bec slack, loose

6.3 Three, Proto-Uto-Aztecan *k > Tübatulabal h, versus PUA *k > Tb k

The two reflexes of Proto-Uto-Aztecan *k in Tübatulabal (Tb) have long eluded solution among Uto-Aztecanists. PUA *k often remains Tb k, but at least as often PUA *k > Tb h. Though unexplained previously, the Tb dichotomy is partially explained by the fact that a doubled Semitic *-kk- remains -k- in Tübatulabal (group 5) while a single k, g, ġ, q, or x > h, unless followed by a back round vowel u, o, or ï. The vowel ï may not be back and round, but can be back and in Numic its assimilative influences trigger rounding. So ï being associated with u and o is not surprising. This explanation holds for 38 of the 43 examples below, but group 9 and one in group 3 seem to be exceptions, unless an additional factor is found. In Kenneth Hill's Tübatulabal Dictionary are 5 pages of ko, ku, kï and 2 pages of ka and 2 of ki. Yet among initial h- words are 5 pages of Tb ha, but only 1 ½ pages of ho, but less than a half page of hu and a quarter page of hï, and many of those are not from PUA *k, but *h. So those lopsided ratios support the over generalization that *k > k preceding o, u, ï, but *k > h more often before the other vowels. Thus, Semitic/Egyptian k, g, ġ, q, and x all generally become k in UA, but in Tb, the k vs. h distinction is not determined by consonant as much as it is by doubling vs. not, and by the quality of the following vowel.

Group 1: Egyptian and Semitic **x > Tb h** (Semitic-p contributions), x > h also in Hopi at times:
Tb šaahat 'willow' < Egyptian sxt 'willow' (174)
Tb wahaayu 'after that' < Hebrew 'axar-o 'after it, after that' (570)
Tb nohhot 'to roast in the ground' < Egyptian nwx (172)
Tb hapši-l 'thigh' < Egyptian xpš 'thigh, upper arm' (294)

Group 2: Egyptian and Semitic **q > Tb h** when before the vowel ***-a***, also in Hopi at times:
Tb tïdïha~'ïtïdïha 'be cut up' (Tb *tïha redupl'd) < Semitic dqr 'pierce' (827)
Tb ha'~'aaha' 'hear' (pfv of ha'ït) < Hebrew hi-qšab 'listen' (1069)
Tb haa-l 'willow' < UA *kana 'willow' < Hebrew qaanɛ 'reed, stalk' (1216)
Tb pahaabïl / paha'bïl 'sugar cane plant' < Hebrew qaanɛ 'reed, stalk' (1135)
Tb haawa-l 'wood rats'; Hp qaala 'packrat'; Ls qáw-la 'woodrat' < Egyptian q'r 'bundle, pocket' (328)
Tb haayčan 'to chew' < Semitic *qrḍ > Hebrew qrṣ 'bite' (1448)

Group 3: Semitic **-g- > Tb -h-** (in Semitic-p):
Tb(H) wohhompoo-l / wohhoono-l 'gray pine, bull pine' < Hebrew 'egooz < *'VNgoz (569-p)
Tb yahaawi-t / yahaawi-l 'summit, point of a hill' < Semitic *yagar 'hill, heap of stones' (1279-p)
Tb wiih ~ iiwihï 'to wait for' < Arb 'ğl < *'gl 'to hesitate, wait, linger' (1332-p)
Tb wahaminaš (Takic waŋam) 'down, deep' < Semitic ʕgm (927)
Tb(H) waahay' 'work' < Semitic 'gr 'hire' (1365-p)

Semitic ġ > Tb h:
Tb(H) haa'išš(a) 'no, not'; Tb hayyi / haayi 'no, not any, none' < Arb ġayr 'without, no/not' (690-p)

Group 4: Semitic k > Tb h, before -a (the last three are definitely Sem-p, and so perhaps the first also):
Tb hannii-l 'house' < Semitic *kann 'shelter, house' (890)
Tb(H) hammaššat 'be sad' < Syr kmr / *kamar 'be sad' (1422)
Tb mahat, pfv amha 'give' < Hebrew makar 'sell' (565-p)
Tb(M) pahaa'at/'apahaa' 'cry, howl' (Hp pak- ; Ktn paka') < Hebrew baka^{y} 'cry'; Syr bakaa/baka' (559-p)

When Semitic *-kk- is doubled or clustered *-Ck- (≈ -kk-), it remains -k- in Tb:
Group 5: Semitic -kk- > Tb -k-
Tb(H) mukut 'dead' < Hebrew mukke 'smitten' (52)

Tb(H) hookii ‘deceased grand-relative after death’ < Hebrew hukke ‘was smitten’ (53)
Tb(H) waakaayš-t / Tb waagaaiš-t < Egyptian ʕbxn ‘frog’ due to cluster *-bx- > *-kk- > Tb -k- (298)
Tb pahkaanï~pahkaan ‘to speak’ < Syriac etpakkan ‘be insolent, abuse, gabble’ (1151)
Tb(H) pikiiniššït ‘wear or put on a shirt’ < *piC-kinis (*-Ck- > -kk-), Semitic kns ‘wrap’ (829-p)
Tb(H) maakat ‘know, vt’ < Hebrew makkiir ‘know(er), know(ing), participle’
Tb ekeewan / egeewan ‘big, large’ < Semitic et-kabbar (1015-kw), Tb -’w- < UA *kw < Semitic b with *-kw- < -bb- also suggests *et-kabbar

Tb ku is much more frequent than Tb hu, and Tb hu < PUA *ku is almost nil, which suggests that, all else being equal, the vowel u (and other back round vowels) encourage retention of *ku > ku, not *ku > hu:

Group 6: Semitic q > Tb k when before a back round vowel ***o, u,*** and ***ï***, close to back round:
Tb kulaa- ‘neck, n’ < Syriac qədaal-aa ‘neck, nape of neck’ (1014-p)
Tb kuuŋa-l ‘husband’ < Egyptian qm’ ‘create, beget’ (284)
Tb(H) kooyoo-t ‘turtle’ < Semitic qrʕ (987)
Tb(H) woŋko-l ‘shoe, moccasin, sandal’ < Hebrew ʕaaqeb ‘heel, footprint’
Tb(V) kïï’-, kï’ït~'ïïgï’ ‘bite’; Tb(H) kïï’ït, pfv: ïïkï; Ktn kï’< Semitic *qrḍ > Aramaic qrṣ (1447)
Tb(H) waakït ‘be dry’, Tb waakinat ‘dry, vt’ < Semitic ʕqr ‘uproot’ (1380)
Tb(H) waaki’ït ‘be thin, be poor’ < Semitic ʕqr (1380)

For Egyptian/Semitic x, as for q, the back round vowel ***u*** encourages retention of UA *ku > ku:
Group 7: Egyptian/Semitic x > Tb k
Tb kutt ‘fire’ < Egyptian xt (452)
Tb kutči / kuudzin ‘older sister’ < ’axoot ‘sister’ (594)
Tb kuyuu-l ‘fish’ < *kicu < Egyptian xddw ‘fish’ (365)
Tb kuu-l ‘yellow flower’ < Egyptian **x’w** ‘flowers’ (326)

For Semitic k also, the same following vowels ***u, o,*** and ***ï*** encourage retention of UA *ku > ku:

Group 8: Semitic k > Tb k (perhaps mostly Sem-kw)
Tb kuyuu- ‘lower leg’ < Hebrew **kəraaʕ** ‘lower leg’ (997)
Tb kïyii-l ‘arrowhead’ < Hebrew kly (1314)
Tb aakït, pfv: a’aak ‘open mouth, bite’ < Hebrew ’kl ‘eat’ (798)
Tb kuuhupi-l 'elderberry’ < Egyptian **k’w** ‘sycamore figs’ (1049)

Group 9: One instance of Semitic g- > Tb k- and one of q- > Tb k- are enigmatic:
Tb(H) kam’mut, pfv aŋkam’ ‘to fit, be proper’ (l > ’ in cluster) < Semitic gml ‘beautiful, proper, fit’ (571)
Tb(H) kamiič|ït, pfv: akkamiič ‘to catch’ < Syriac qmṭ ‘lay fast hold of, take’, participle qaamiṭ (1508)

6.4 Four, Takic Absolutive Suffixes and Luiseño -la

A few noun suffixes (called absolutives in UA) are suffixed to a noun in citation form, but many things cause that suffix to drop, possession being the most frequent. The most common absolutive suffix is PUA *-ta, from the Aramaic definite suffix *-taa ‘-the’. The final vowel often drops to leave final -l or -t in Tb and in the Takic branch. Similarly, in the Aztecan branch it is usually -tl, which is from PUA *-ta (Whorf 1937), which lateralized as -tla before losing the final vowel: *V-tla > V-tl. But if the stem ends in a consonant, then a final vowel on the suffix remains (VC-tli) to avoid a final consonant cluster (C-tl does not occur). However, when a Nahuatl noun ends with -l-, then the final -t (or -tli) assimilates to -l (or -l-li), and the suffix’s final vowel -li is also kept to avoid ending with a doubled -l-l, as in tamal-li and chil-li. Similarly, in Luiseño the usual Ls absolutive suffixes are -l and -t: -l when the stem ends with a vowel, such that intervocalic -t- > -l-, as in *V-ta > V-la > V-l; and Luiseño -t when the stem ends with an underlying consonant no longer obvious, such that the cluster VC-ta causes t to remain t: *-Cta > -ta > -t. However, slightly less frequent than those two, but frequent enough is the Luiseño suffix -la. Uto-Aztecanists can see that, synchronically, a final nasal encourages the retention of the vowel on the absolutive suffix (…N-la), as the Ls phonology does not end a word with a two-consonant cluster. For example, the first group of 8 Ls

terms end in a nasal consonant (n or ŋ), thus the -la form of the absolutive suffix: N-la rather than N-l. The 4 items in group 2 take the -la suffix also, as they also end with consonants, even if weak consonants. The 3 words in group 3 end with glides (y or w), yet glides are quite vowel-like (y ≈ i, and w ≈ u/o), so in synchronic terms the need for -la is somewhat opaque, though intense glides are indeed consonants. So the first 3 groups are synchronically understandable, resulting from mechanisms to avoid word-final consonant clusters. However, group 4 stems end with long vowels, with no apparent final consonants whatever, yet strangely add -la. Yet the underlying Semitic and Egyptian consonants of gutturals and liquids create a nearly 3-consonant cluster with -la, the liquid encourages the absolutive liquid, as in Nahuatl, and the formidable 2 or 3-consonant clusters clarify the need for the final vowel: *-hr-, -lʕ-, -ħr-, -l-, -'r-ta > VV-la. Such gutturals become -l- in Hopi also. In these Ls apparent vowel-final stems, the need for -la is baffling. However, the Semitic and Egyptian sources of these words clarify VV-la. In other words, when an underlying cluster guttural + liquid would develop, then -la appears, though the cluster is not synchronically (presently) apparent at all. Group 5 has other clusters that may not include a liquid on the stem, but which also reduce a 2- or 3-consonant cluster to one light C: …CC-la > -la. Stress patterns may also be helpful for preserving the vowel of -la in that when the 1st syllable is stressed, the 2nd unstressed syllable tends to collapse, which encourages the 3rd syllable to be stressed, which may be the suffixed -la, lending it some stress, and thus preserve the final vowel of -la, normally lost in other forms. The 1st and 3rd stress would help 2nd vowel to disappear and the 2nd and perhaps 3rd consonants to cluster, creating a 2- or 3-consonant cluster with -la. Most interesting and consistent with the preceding phenomena is Ls tóó-ta 'stone, rock', explained at the end.

Luiseño -la suffix

Group 1 (…N-la, nasal consonant before -la):
Ls ṣún-la 'heart, sad, suffer' < Egyptian swn 'suffer' (218)
Ls 'éŋ-la 'salt' < Egyptian ħm't 'salt' (280)
Ls kún-la 'sack' < Egyptian gwn 'sack' (330)
Ls qiqeŋ-la 'ring snake' < Egyptian qrħt 'snake' (332)
Ls tón-la < *tïmïna 'antelope' < Aramaic rə'emaan-aa / reemaan-aa 'antelope' (604)
Ls huŋ-la 'the wind' < Semitic ħwg 'atmosphere' (912)
Ls ṣááṣaŋ-la 'yellowjacket' < Hebrew ṣirʕa(t) 'hornets' (737)
Ls túŋ-la < *tï(N)wa 'name' < Arabic dʕw / dʕy / daʕaa 'to call, name' (1059)

Group 2 (…š/'-la, another consonant before -la)
Ls púš-la 'eye' < Semitic *booṣer 'eye' (532)
Ls lá'-la 'goose'; Ca la'la' 'goose' < Arabic laqlaq 'stork, n' (704)
Ls ṣú'-la 'star' < Egyptian sb' 'star' (154)
Ls qéš-la 'seashell' < Semitic qeṣṭ-aa 'measure, coin, jewel, ancient money' (1248)

Group 3 (…y/w-la, a glide/approximant before -la)
Ls súy-la 'scorpion' < Egyptian d'rt 'scorpion' (479)
Ls yúy-la 'spruce tree' < Hebrew yáʕar 'wood, forest, thicket, wooded heights with trees to be felled' (92)
Ls qáw-la 'woodrat' < Egyptian q'r 'pocket, bundle' (Hp qaala; Tb haawa-l) (328)

Group 4 (…VV-la, only vowels are apparent before -la, but clusters of liquids and gutturals underlie)
Ls púú-la 'shaman' < Egyptian phr-ta, Egyptian phr 'stir, make medicine' (3 C: …hr-ta > -la) (290)
Ls túú-la 'charcoal' < Hebrew tooleʕaa (3 C: …lʕ-ta > -la) (710)
Ls páá-la 'water' < baħr 'water' (3 C: …ħr-ta > -la) (1165)
Ls 'iyáá-la 'poison oak' < Hebrew 'ayil 'tree, oak' (…l-la > -la) (599)
Ls wááwa-la 'mud wasp'; Cp wá'walim 'yellowjacket' < Aramaic ʕrʕyt' / ʕurʕyt' 'wasp' (1044)
Ls yúú-la, -yu' (poss'd) 'head, hair' < Egyptian i'rt 'hair (of hide)' (…'r-ta > -la) (389)
Ls méé-la 'head of cattail rush' < UA *mo'o 'head' < Arabic/Semitic muxx- 'brain' (…xx-la) (1078)
Ls húú-la 'arrow' < Hebrew ħeṣ / ħeṣi 'arrow'; Arabic ħaẓwat / ħuẓwat 'arrow' (…ṣ-la) (78)
Ls kúúkunta-la 'bumblebee' vs. Cp kutáŋva-l 'bumblebee' show a velar nasal in Cp, with the nasal anticipated in Ls, but Cp's 3rd and 4th consonants (-ŋv- now clustered) are where the Ls word ends and shows -la, probably also explaining -la (vs. -l) as well, though no Near Eastern parallel is noticed for this item.

Another cause of Ls -la is when multiple consonants were reduced and are not visible at the end of the stem, but underlyingly exist(ed) such that their effect still underlies the stem's end just before -la:

Group 5 (…CC-la, underlying consonant clusters before -la more complex than the single consonant seen)
Ls náq-la 'ear' < Semitic na-qšab 'what perks up to listen' (3 C: …qšb-ta > q-la) (1070)
Ls móy-la 'moon' < Semitic manzal 'star, heavenly body' (4 C: … nzl-la > y-la) (1077)
Ls téé'-la 'belly' < Egyptian r'-ib 'stomach' (3 C: … V'b-ta > V'-la) (337)
Ls 'éx-la 'earth, land, dirt' < Syriac ħaql-aa 'field-the, open country-the' (…ql-la) (1275)
Ls 'áy-la 'abalone' / Ls páá'i-la 'turtle' < Arabic qarʕ- 'gourd'; Syriac qara'- 'gourd' (…rʕ-la) (988, 989)
(vs. Ls páá'aya-t 'turtleshell rattle' < qrʕ 'gourd, rattle')

Most interesting of all is Ls tóó-ta 'stone, rock' with possessed form Ls -tó'. Rare is the absolutive suffix -ta, and at 603 we see that this is the Ls reflex of UA *tïmï 'rock' from Syriac ryam-ta / Aramaic riimaa / riimat 'large stone'. Yet consistent with a near final nasal and a final multi-consonant cluster (*-mt-t-), both encouraging the retention of the vowel -a, we also see -t- in -ta (vs. -la), which is significant since the Aramaic form is riimat. Adding the UA suffix -ta would yield *rim^{a}t-ta > *tïmt-ta > *tïï-ta (and Ls o < UA *ï), thus Ls tóó-ta. (…mt-ta) (603)

Ls tóó-ta 'stone, rock' < Aramaic ryam / rim(a)-taa plus perhaps another synchronic -ta (603)

6.5 Five, Hopi w vs. l/_a, e, ö

Uto-Aztecanists have long known that most Proto-Uto-Aztecan *w change to Hopi *l* before the low vowels *a, e, ö* (group 3), but that PUA *w remains Hopi *w* before high vowels *i, ï, o* (group 6). Remember the Semitic pharyngeal ʕ and glottal stop ' are two sources of UA w, and some Arabic speakers pronounce ʕ as w at times and as r (the other liquid) in certain environments. I heard a native speaker of Syrian Arabic say sabriina (< Arabic sabʕiina 'seventy'). Many UA sets substantiate Hopi *l* corresponding to UA *w in the rest of UA. However, Uto-Aztecanists have also known that a number of exceptions yield Hopi words with syllables like *wa* and *we*, which do show Hopi *w* before low vowels (groups 4, 5, 7). Though aware of this subset of exceptions, an explanation for the exceptions has not been found—until now. The UA tie to Near-East languages explains the exceptions, as follows:

First of all, Hopi *l* sometimes does come from Semitic *l*. Group one shows five examples of Semitic *l* > Hopi *l*. Next, the fact that the Semitic-p laryngeals (', ʕ) correspond to PUA *w underlies the solution. Those PUA *w and the would-be Hopi *w* from the Egyptian or Semitic laryngeals (', ʕ) do change to *l* in Hopi (groups 2 and 3) when before a low vowel, but when before a high vowel, PUA *w > w in Hopi (group 6) consistent with what Uto-Aztecanists have long known. However, when Hopi *w* comes from an actual *w*, whether from Egyptian *w* (group 4) or from Semitic *w* (group 5), then *w remains *w*, even before low vowels (groups 4 and 5). In addition, doubled laryngeals remain *w*; that is, *-''- > *-ww- > -w-. Or in the case of consonant clusters in which one consonant is a laryngeal, which in effect doubles the rounding effect similar to *-ww-, then those clusters or doubled *-ww- in effect also remain -w- (group 7). That is, Hopi taawa 'sun' < *tawwa < Egyptian raʕwa 'sun' and Hopi siwa < Semitic šipħaa, wherein p is absorbed to double the -w- effect of the pharyngeal: *-pħ- > *-ww- > Hp -w-. Such phenomena explain the exceptions.

Group 1: Hebrew l > Hopi l
Hp loma 'good, etc' < Hebrew lummad 'trained' (see at 700)
Hp lööqö(k-) 'wedding' < Hebrew lqħ / laaqaħ 'take (to wife)' (695)
Hp kwelo 'sample by tasting' < Hebrew blʕ / balaʕ 'swallow' (6)
Hp pööŋala 'thick (in size)' < Arabic pgl 'be thick' (1387)
Hp salày-ti 'pleased, joyed, gratified' < Arabic slw / sly / salaa V tasalla 'to delight, take pleasure in' (1501)

Group 2: Hebrew/Egyptian ʕ > Hopi l
Hp kwala 'come to a boil, get angry' < Hebrew II bʕy / baʕaa 'bring to a boil' (37)
Hp löwa 'vagina, vulva' < Hebrew ʕɛrwaa 'nakedness, genital area' (686)
Hp -laqvï in Hp kïk-laqvï 'tracks all over' < Hebrew ʕaaqeb 'heel, footprint' (685)
Hp ma-laci 'finger' < *ma-watti < ma- 'hand' + Egyptian **ʕnt** 'nail, claw' (262)

Hp lèesi- ‘horizontal’; Hopi lèe-ta ‘lay across’ < Arabic ʕarḍiy ‘cross- (in compounds), horizontal’ (687)
Hp qölö ‘hole, a lot of’ < Hebrew tqʕ (1473)
Hp nàala(-k-) ‘change places/residence, move’ / UA *nawa / *nawi < Egyptian **nʕi** ‘travel, traverse’ (239)
Hp laaki ‘become dry, thin, v’ < Semitic ʕqr ‘uproot, barren’ (dried up); Arabic ʕaaqir ‘barren, sterile’ (1380)

Group 3: Hebrew/Egyptian ’ (> UA *w) > Hopi l
Hp löqö ‘pine’ < Hebrew ’egoz ‘nut’ (569)
Hp löö(y) ‘two’ < Hebrew ’axar ‘follow/after’ (570 of Sem-p) (vs. Hp ’ahoy < ’aħar of Sem-kw 643)
Hp laq-ta ‘sweep snow clear’; UA *wak ‘sweep’ < Egyptian **’xi** ‘sweep together’ (515)
Hp waala ‘gap, pass, saddle in ridge’ < Egyptian w’t ‘way, path, street’ (514) note w > w, but -’- (> -w-) > -l-
Hp qaala ‘packrat’; Tb haawa-l ‘wood rats’; Ls qáw-la ‘woodrat’ < Egyptian q’r ‘bundle, pocket’ (328)
Hp laŋa ‘be pulled taut’ < Hebrew ’rg ‘weave’; Hebrew ’ereg ‘loom’ (1514)
Hp -pela in Hp tùupela ‘cliff wall’ < Egyptian bi’ ‘quarry’ (see explanation at 465, UACV-1268c)

Group 4: Egyptian w > Hopi w
Hp mowa ‘moist, wet’ < Egyptian mw ‘water’ (229)
Hp waala ‘gap, pass, saddle in ridge’ < Egyptian w’t ‘way, path, street’ (514)
Hp wehe ‘for liquid to spill out’ < Egyptian whi ‘go out, slip out, run/trickle out, pour out’ (469)
Hp wahi- ‘throw out pl objs’ < Egyptian whi ‘go out, slip out, run/trickle out, pour out’ (469)
Hp warani ‘s.th. reserved, saved for future use’ < Egyptian wdn ‘load, offer, bring, consecrate’ (516)
Hp wáŋway ‘summon, call’ < Egyptian wx’ ‘seek, want’ (288)
Hp wayoŋ- ‘protection, windbreak’ < Egyptian wi’ ‘ward off, protect, turn away’ (517)
Hp naawa ‘groan, moan’ (example given is old person groaning in death) < Egyptian nw ‘be weak (due to age)’ (518)
Hpi waho(-k-) ‘for particulate matter to spill’ < Egyptian wħ’ ‘hew (stone), break (stone)’ (186)

Group 5: Semitic w > Hopi w
Hp soniwa ‘beautiful, bright’ < Arabic snw ‘gleam, shine’; Ethiopic snw ‘be beautiful’ (13)
Hp löwa ‘vagina, vulva’ < Hebrew ʕɛrwaa ‘nakedness, genital area’ (686)
Hp tïŋwa ‘name’ < Arabic dʕw / daʕaa ‘to call, name’ (1059)
Hp wïŋwa ‘grow up’ < Arabic ʕlw / Hebrew ʕly / ʕalaa ‘ascend, go up, grow’ (681)
The last two are unique in having underlying Semitic -w as 3rd C and both show -ʕw- > -ŋw-

Group 6: Hebrew ʕ, ’, ħ > Hopi w before high vowels i, o, ï or if doubled (next group, group 7)
Hp wïŋwa ‘grow up’ < Semitic ʕlw / ʕalaa ‘ascend, go up, grow’ (681)
Hp wiiki ‘take along, lead, escort’ < Semitic ’rk ‘long, make long (rope), stretch’ (see details at 1516)
Hp wiimi ‘religious rite, habit’ < Semitic ħrm ‘dedicate’ (660)
Hp wi-hï ‘fat, oil, lard’ < Semitic ħilb ‘milk’ (652)

Group 7: When clustered or doubled -ww- > Hopi -w-/_a/e, whereas single -’- > -l-, not > -w-
Hp meewan- ‘forbid, warn’ < Hebrew m’n ‘refuse’ (< *mi’’an) from geminated -ww- < *-’’- (1333)
Hp taawa ‘sun’ < *tawwa < Egyptian *raʕwa ‘sun’ (163)
Hp siwa ‘younger sister’ < Semitic šipħaa ‘maiden’ (757)
Hp löwa ‘vagina, vulva’ < Hebrew ʕɛrwaa ‘nakedness, genital area’ (686)
Hp tïŋwa ‘name’ < Arabic dʕw / daʕaa ‘to call, name’ (1059)

Matters to contemplate are Semitic-kw final -b > Hopi -ŋw and some (near) final -’ > -ŋw
Hp ïnaŋwa ‘heart’ < Hebrew hal-lebb ‘heart’ (1312); Hp hayiŋw- ‘draw near’ < Semitic qariib ‘near’ (1008)
Hp lölöqaŋw ‘bullsnake, gopher snake’ < Hebrew ʕooqeb ‘deceiver’ (1198)
Hp koyoŋo ‘turkey’ < Semitic qr’ ‘cry, call’ (1357); Hp paŋwï ‘bighorn sheep’ < Egyptian b’ ‘ram’ (406);
Hp wayoŋ- ‘protection, windbreak’ < Egyptian wi’ ‘ward off, protect, turn away’ (517)
Hp kookyaŋw ‘spider’ < Aramaic kuuky-aa’ ‘spider-the’ (1409)

6.6 Six, Takic distinguishes Semitic-p velars (k, g > k) and uvulars (q, x, ġ > q)

Proto-Uto-Aztecan *k is generally k throughout UA, though Hopi and many Numic languages have a rule that lowers PUA *k > q before low vowels. However, in the Takic branch, we see in Ca, Cp, Ls, and Sr, both initial ka and qa. The k- vs q- distinction adjacent to other vowels or intervocalic -k/q- between two vowels might be explained by environmental factors, but to find both initial ka and qa, both before _a, in those four Takic languages is a distinction not found elsewhere in UA, yet no satisfactory explanation to date explains that phenomenon in Takic. However, Semitic-p and Egyptian offer an explanation consistent with 40 of the 41 examples. Semitic has velar k and uvular q: e.g., Arabic kalb 'dog' and qalb 'heart', often pronounced [kælb] and [qɔlb], k and q affecting their respective adjacent vowels. Besides q, some Semiticists are beginning to see an uvular (rather than velar) nature to Semitic *x and *ġ (Rubin 2010, 24; Goldenberg 2013, 67) or an uvular-like glottalic/ejective original in *x' that eventually merged with *x in East Semitic and with pharyngeal ḫ in West Semitic (Rubin 2010, 24).

Interestingly, the Takic languages suggest the same: that Semitic *x and *ġ were uvular-like for speakers of the Semitic-p / Egyptian contribution into UA. First, are presented items from Semitic initial velars *ga… and *ka… > Takic ka…; and also medial -k- > -x-. Then are presented items showing Semitic initial uvulars *qa, *xa, and *ġa > Takic qa… Also keep in mind that in the four languages that show the split, q is the more marked option, and the preferable reconstruction, as k is the usual UA result: *q > k.

In fact, even though other branches of UA do not show a q vs. k distinction, other branches do show evidence of previous/underlying uvular q causing adjacent vowels to round, which velar k does not do.
(961) Hebrew dɛqɛl 'date-tree, palm'; Arabic daqal 'kind of palm tree'; Semitic *daqal > UA *taku 'palm tree': Eu takú-t; Wr tahkú; Tr ŕakú; My takko; Tbr takó-t; Wc taakïï; Cr takï; Yq táko.
(738) Hebrew qayiṣ/qeyṣ 'summer' > UA *kuwïs 'summer' also shows the strong rounding influence of q.
(527) Semitic baraq 'lightning' > UA *pïrok / Cah beroq 'lightning'; note -a- > -o- anticipating -q.
(1402) Egyptian mx' 'make fast, tie, bind, fetter, v' > UA *maĝo'i- 'bag, bind, wrap, blanket', we see Sr q and also a deep uvular in CU, even a pharyngeal tap in WMU: TO mako 'connect, couple, hitch together, shackle'; Sr möö̧q-kin 'fold, wrap, vt'; NP mago'o 'bag'; Kw mogwi'i 'tanned hide'; WMU maĝwáy' / moĝwé' 'blanket'; CU moĝóy'a 'blanket'; Sh mokoccih 'sack, bag'.

Another matter relating to rounding adjacent to q are several items showing Takic *qo…, in which other Uto-Aztecanists have presumed that UA *ko > Tak qo, and then *qo > Ca/Cp qi, Ls qe, Sr qö. That makes sense and may be so; but also possible is that *qo is original and would not necessarily have to be from *ko. The fact that we also have both Takic qa and ka in those four languages suggests that uvular *q was a proto-phoneme in Takic as well as *k, or a proto-phoneme in UA, that merged with *k in other branches, and that unstressed initial *qV > *qo happened due to the uvular affecting the otherwise rather non-descript unstressed vowel, a schwa-like vowel in an uvular environment that defaults to *qo.

In the data below, we first see 6 sets exemplifying velars remaining velars: g, k > k. Then 15 other sets show Semitic uvulars qa, *xa, *ġa aligning with Takic *qa, instead of ka. Then 9 sets show unstressed or less certain vowels of Semitic qV > Takic *qo. Then 6 other sets show that adjacent to high vowels, *q > k even in Takic; that is, Semitic qi / qu / qə / iq > Tak ki / ku / kï / ïk. Then 5 -q- > -x- are noted, mostly involving medial -x-, which may be the only fricative option in the UA phonology for an original uvular. Intervocalic / medial -q- exists in some highlighted Takic forms, but if fricativized, there is not an uvular fricative alternate to velar -x- in UA. So it appears that fricativization either eliminated the uvular dimension or minimized the difference enough to make it difficult to discern. In fact, Sr -q- aligning with Ca, Cp, Ls -x- in 298 below is evidence of exactly that. Given that, only one Ls form remains an exception (248). Thus, the statistical support for this explanation for the q vs. k distinction in Takic—40 of 41—is 97.5%.

Semitic velars ga / ka > UA velar *ka
(608) gdʕ / gadaʕ 'cut down, cut off' > Sr katu' 'cut up, cut (into several pieces), vt'
(636) Syriac kp' 'bend, bow, incline, curve, lean over'; kappep 'bend, vt'; Syriac kapiipuu-ta 'crookedness'; Syriac kapaap-taa 'anything hollow or curved, coffer'; Assyrian kappu / Hebrew kap 'hollow or flat of hand, palm, sole, pan'; and 'pan, cup of hand, or hollow' is like an olla, cup, a hole/hollow: Cp kavá'mal 'pot'; Ca káva'mal 'olla, water jar, cup, pot'; Ls kaváá'a-l 'clay pot'; Ls kapa-kpa-ma-l 'short, low'.

UA *kapV / kappV '(make/be) a hole, open, yawn': Ca kavi ‘have a hole, be open (window, etc)’; Ca kávi-ve 'hole'; Cp kápe ‘yawn’; Cp kápele ‘to open’; Cp kápal 'make hole'; Sr kïvïhka’ ‘hole’; Sr kïvïhï’q ‘be a hole’. Also of kp’ / kappV’, note Syriac kapiipuu-ta ‘crookedness’ and Ca kapu-kapu ‘be crooked (back, tree, etc); and Syriac kp’/kpy ‘bend, bow, incline, curve, lean over’; Aramaic kpy/kp’ ‘bend over, turn upside down’ > Ca kavay ‘go round, turn around, to curve (road). And all of these Tak terms show initial ka…

Semitic medial velars *-g-/-kk-/-k- > Takic -k-/-x-:
(926) Hebrew/Aramaic ’agap ‘wing, pinion feather, arm, shoulder’ >
UA *wakapu > *wakaC > *waki / *wiki ‘wing, feather’: Ca wáka-t ‘wing’, Ca wiki-ly ‘feather’; Ls kawí-t ‘wing’ (< *waki); Ls no-wki ‘my wing’; Cp wíki-ly / wáki-ly ‘feather’; SP wiġivï-vi ‘eagle tail-feather’ and Hp -wïki ‘feather’ in Hp kwaa-wïki ‘primary wing feather of the eagle’ (kwaa ‘eagle’). Metathesis in Ls (*waki > kawi); and SP shows the 3rd consonant *-p-. In 1103 below is Semitic medial *-kk- > Takic -k-:
(1103) Semitic dakka ‘make flat, smooth’ > Ls táka/i ‘be straight’; Ls tááki-š ‘stone for smoothing pottery’; among other UA *takka ‘flat, smooth’ reflexes.
(616) Aramaic dakar ‘male, man’ > UA *taka ‘man’; Tak *tax ‘person’: Cp ’atáx’a; Ca táxlis-wet; Ls ’a-táax ‘person, self’.
(565) Semitic makar ‘sell’ > UA *maka ‘give, sell’: Sr naamq ‘distribute, give out, give to several people’; Cp né-mexe 'sell, give as gift'; Ls námxa 'give to several people, distribute’; Ca máx ‘give (money, clothes), sell’. Three of the four Tak languages show -x-, but Sr does have unexpected q.

Semitic uvulars *qa-, *xa-, or *ġa- > Takic uvular qa-
(690) Arabic ġayr- ‘other than, different from, no, not, non-, un-’ > Tak *qay ‘no’, not kay:
Sr qai; Ls qáy; Cp qáy; Ca kílye ‘not’ / kí’i ‘no’.
(294) Egyptian xpš ‘thigh’ > UA *kapsi (> *kasi) ‘thigh’: Tb hapši-l 'thigh'; Ls qaasi-l; Hp qàasi / qahsi ‘thigh, hind quarter’; but *kasi throughout the rest of SUA. Tb shows -p- and Hp suggests a cluster, but notice Ls q instead of k, as only Takic has the q vs. k distinction, and Ls is the only Tak language with a reflex in this cognate set.
(322) Egyptian q’yt ‘high-lying land, hill’ from Egyptian q’i ‘be high’ > UA *qawi ‘mountain, rock’:
BH.Cup *qawíca’ ‘rock’; HH.Cup *qawíiča ‘rock’: Cp kawí-š ‘rock’; Ca qáwi-š ‘rock’; Ls qawíí-ča ‘mountain, hill’; Gb xay ‘sierra’; Sr qaiič; Ktn kay-c; Sr qaqaiič ‘mountains all over the place’ and *kawi in many SUA languages. Loss of bilabial in Gb again; cf. believe (567). Notice that both BH.Cup and HH.Cup reconstruct Takic *q, not *k. Ktn has no q, only k, and the four languages that have both available show q.
(960) Arabic qarqara ‘rumble, gargle, coo (of pigeon)’ (and qahqaha is similar) > UA *ka(k)kara ‘quail’:
SP qaqqaraC ‘quail’; Cp qaxá-l ‘valley quail’; Ca qáxa-l ‘quail’; Ls qaxáá-l ‘valley quail’; Gb kakár ‘quail’; Sr kakaata’ ‘quail’; Mn qahï ‘grouse’; Sh kahan ‘grouse’; TO kakaiču ‘quail’ (< *kakkatu). Why this from qarqara, differs from squirrel (957) is a good question, though the qahqaha synonym may be involved.
(329) Egyptian qd ‘go round’; Egyptian qdi ‘walk about’; Egyptian qd / qdd ‘sleep’; Egyptian qdqd ‘wander, stroll’; semantically, Egyptian ‘to dwell/live/be at a place/area, walk around there, return regularly, sleep there’ etc, is summed up by the UA meaning of ‘dwell, live, be’:
UA *katï / *kattï ‘sit, be/live (at a place)’: Mn qatï; NP katï; TSh katï; Ch karï; Kw karï; SP qarï; CU karí; Tb halït~’aahal; TO kaač; Op katte; Eu kací; Wr kahtí; My káttek; Yq káatek; Tbr katé.
But Takic all show q, not k: Cp qa’; Ca qál; Ls qál ‘live, be’; Sr qaṭ/qaṭï.
(994) Hebrew ʕqr ‘uproot, weed’; MHebrew neʕeqar (< *na-ʕqar) ‘be uprooted’; Syriac ʕqr / ʕəqar ‘uproot, be barren, heal’, impfv: -ʕquur; Hebrew ʕaaqaar ‘infertile’; Samaritan Aramaic ʕaquur ‘death, barrenness’; loss of initial ʕ (perhaps in a cluster) while 2nd C q is retained in the UA forms from impfv -ʕqar, with -a- instead of -u- (such dialect variations happen), or stressed 2nd syllable of a pfv ʕᵊqar > qay: Takic *qaya/i ‘uproot, weed, clean, wash’: which Bright and Hill also reconstruct as *qáyi 'wash': Ls qáya/i- ‘fall, as a tree, vi’, blow down (a tree), vt’; Ls qáya/i- ‘heal (sore), get well, vi, heal a sore, wash one’s hands, vt’; Ca qáyi ‘get clean, clear (ground, body, etc)’; Ca qáyi-n ‘to clean, get rid of, wash, clear’; Cp qéye ‘pull out, vt’; Ca qúyen ‘to pull out (tree)’. Ls káyi ‘to uproot’ has k instead of q.
(631) Aramaic ħamar (< *xamar) ‘wine’; Hebrew ħɛmɛr ‘wine’; Arabic xmr ‘to ferment’; Arabic xamr ‘wine’; Arabic ximiir ‘drunkard’; Arabic xamrat ‘wine’; Ugaritic xmr ‘wine’:
UA *kamaC 'drunk': Sr qäm|(ä)’q ‘get, be drunk, crazy’. Ken Hill shows this Sr term to have pharyngealized vowels (ä) instead of (a), that is, with some rounding, as well as q instead of k.

(1525) Aramaic ql' / qly 'roast' > Ls qali- 'boil (food)'; not identical, but both are ways of cooking food, and the phonology is identical.
(486) Egyptian xfty(w) 'enemy(ies), opponent(s)' > UA *kaytu 'enemy, opponent': keep in mind the bilabial as first element in a cluster -ft- is not expected to remain, and intervocalic -t- > -l- in Takic, so the fact that it remains -t- does suggest the cluster, and -y- may anticipate the i after t; and the Egyptian plural suffix -w may be apparent in Takic: Cp -qáytu; Ca káytu 'rival, competitor, enemy'; Ls káytu-š; Sr -qaiš.
(328) Egyptian q'r 'bundle, pocket' > UA *kawaC 'pocket, bag' and UA *kawaC 'packrat'; the 1st has identical semantics, the 2nd only possible, but what makes me think that *kawaC 'packrat' below is from the same Egyptian root is Ls qáw-la 'woodrat' whose -la suffix is infrequent and happens when the stem ends with a liquid with laryngeal cluster or nasal. Again BH and Munro both reconstruct *q, not k:
UA *kawaC 'rat, packrat': BH.Cup *qawala' 'rat'; Munro.Cup107 *qaawa-la 'rat': Mn qawa; NP kawa 'packrat'; TSh kawan; Sh kaan; Kw kaa-ci 'woodrat'; SP kaa-ci; CU kaac'a-ci 'packrat, gopher'; Hp qaala 'packrat'; Tb haawa-l 'wood rats'; Sr qää-ţ; Gb xar; Ktn ka-č; Ls qáw-la 'woodrat'; Ca qáwa-l; Cp qáwe-l; Ch kaaci 'rat'. Note Sr ää, and SNum lost -w-. This is in all branches of NUA, but not in SUA.

Semitic medial uvulars -q-, -x-, -ġ- > Takic uvular -q-:
(1070) *na-qšab 'what is perked up, i.e., the ear' > Sr qävaač 'ear, leaf'; Ca náq-al; Cp náq'a; Ls náq-la; and forms resembling *naka or *nakapa in every other UA language also. Note again Sr -ä-.
(1340) Arabic pqḫ / paqaḫa 'to open the eyes, to blossom'; Syriac pqḫ 'to bloom'; Hebrew pqḫ / paqaḫa 'to open the eyes': Ls páqa- 'to sprout through the ground, of plants, v.i.'; Ca púqi 'bloom'
(298) Egyptian ʕbxn 'frog' > *wapkan > UA *wakaN/C(-ta) > *wakatta 'frog': BH.Cup *waxa 'frog'; HH.Cup *waxaa 'frog': Sr waqät 'frog'; Cp wáxači-ly 'frog'; Ca wáxačily 'frog'; Ls waxáw'ki-la 'type of frog'; Ktn wakata-t; Kw wagata/wogata; TSh wakatta 'toad'; Ch wagáta-ci 'frog'; Tb waagaaiš-t 'little frog'.
(1402) Egyptian mx' 'make fast, tie, bind, fetter, v' > UA *maĝo'i- 'bag, bind, wrap, blanket':
TO mako 'connect, couple, hitch together, shackle'; Sr möoq-kin 'fold, wrap, vt'; NP mago'o 'bag';
Kw mogwi'i 'tanned hide'; WMU maĝwáy' / moĝwé' 'blanket'; CU moĝóy'a 'blanket'; Sh mokoccih 'sack, bag'. In fact, WMU has a very deep pharyngeal tap, and Sr -q- agrees.
(515) Egyptian 'xi / i'xi 'sweep together' > UA *wak / *waq 'sweep, comb': BH.Cup *wáq- ? 'sweep':
Ls wáqi 'sweep, brush, comb'; Cp wák 'comb, sweep'; Ca wáka'an 'sweep, clean, comb, rake'; Hp laq-ta 'sweep snow clear'; Sr wööq 'sweep, brush, comb'; Ktn wok- 'brush, sweep, v'. In Takic, 2 q and 2 k, and the original following -i may have triggered the two -k-.

Semitic qV… > Takic *qo… > qi (Ca/Cp), qe (Ls), qö (Sr)
(630) Hebrew *xole 'be sick, hurting' > UA *koli 'be sick, hurt, vi' in many SUA languages; Takic *qolV > Cp qil^{y}íqa-t 'hot, spicy, strong'; Cp qil^{y}íqtu'ni 'hurt, sting, vt'; Ca qél^{y}a 'feel sore, v'; Ca qél^{y}ak 'peppery, pungent, creating a burning sensation'.
(957) Arabic qarqaḍaan 'squirrel' > UA *koŋi 'squirrel': BH *qéŋic 'squirrel'; Munro.Cup122 *qééŋi-š 'ground squirrel': Cp qíŋi-š; Ca qíŋiš; Ls qééŋi-š; Gb xoŋít; Sr qöönt; Ktn koŋit.
(864) Arabic quppat 'large basket'; Aramaic quupp-aa 'basket, large vessel' and quupt-aa; Later Hebrew quuppaa 'basket, tub, ball'. The Hebrew plural would be *quuppoot > UA *koppot 'basket': Ls qéépiš 'baby basket'; Sr qöpöt 'round kind of basket'.
(332) *-rḫ- > UA *-Nw- > -ŋ- in Takic, -ŋw- in one Nahuatl dialect, but -w- in most of UA:
Egyptian qrḫt 'serpent'; Egyptian qrḫ 'friend, partner'; *qVrḫat > UA *koNwa 'snake, twin': Cp qeqiŋi-ly 'king snake' and Ls qiqeŋ-la 'ring snake' < Tak *koŋo all reveal Tak -ŋ- from the -rḫ- cluster (a liquid-pharyngeal cluster), very natural; and while *kowa has been a common reconstruction, Kaufman (1981) *konwa and Joe Campell (1976) *koŋwa, predate me in constructing a nasal *koNwa.
(1014) Syriac qədaal-aa' 'neck, nape of neck'; Arabic qaḍaal 'occiput'; Aramaic qədaal-aa 'neck' may yield an alternate form qudl-aa; with the rounding power of q- it's a possible development whether original or not:
UA *kutaC / *kura 'neck': Mn kúta; Np gguta; TSh kutan; Sh kuta; Kw kura-vi; Ch kura; SP qura-vi; WMU qurá; CU kurá-vi; Tb kulaa-; but Cp qil^{y}'a 'nape of the neck'; Ls qelá-t / qilá-t.
(1248) Arabic qasaṭa 'divide, measure'; Hebrew qəśiiṭaa 'ancient weight, used as money, n.f.';
MHebrew qəśiiṭaa 'a coin, a weight, lamb'; MHebrew qəśiiṭaa 'a standard value, jewel, lamb';

Syriac **qesṭ-aa** ‘measure, n.m’ > UA *koCta ‘bark, shell, money’: Munro.Cup118 *qééči-la ‘shell’: Ls qéš-la ‘seashell’; Ls qéš-la ka-š ‘skull’; Cp qíči-ly 'money, silver'; Ca qíč-ily 'money' (pl: qišlyam); Sr -qöč 'hide, bark'; Sr qöčaaviam 'money'.
(594) Hebrew ’aɦoot (< *’axoot) ‘sister’ (Syriac ɦaat-aa ‘sister’ eliminates the first syllable also) > UA *ko(’)ti / *ko’ci ‘older sister’ > Tak *qoci: Cp qísma; Ca qis-ka; Ls qee’is; Gb óxo’; Sr -qöör; Eu kócwa; Wr ko’cí; Tr go’čí; etc.
(449) Egyptian qq / q’q’ ‘eat’ > UA *koki 'graze, v’: Cp qíxin 'graze, pull out (hair)'; Ls qéexi 'graze’.
(1163) Syriac qəpa’ ‘collect, gather in heaps, congeal, swim on the surface’; western variant is qap (qpp); Mandaic Aramaic qəpa ‘swim, float on the surface, assemble in a bunch’; Aramaic(CAL) qpy ‘to coagulate, to float’; Aramaic(CAL) qpy’ / qpee / qipy-aa ‘floating stuff, n.m.’:
UA *qoppV ‘mark/stripe, float’: Ca qípi / qíipi ‘be marked (of line), float (as fish, bird)’; Cp qípe ‘be striped’.

However, adjacent to high vowels, Semitic qi / qu / qə / iq > Tak ki / ku / kï / ïk
(1166) Hebrew qɛdɛm / qedɛm ‘in front, east’; Hebrew qidmaa ‘(toward) east of’ > UA *kitam 'south, east': Ktn kítamik ‘toward the east’; Ca kíčam-ka 'southward'; Cp kičám; Ls kíča-mi-k, kíča-nuk 'southward'.
(986) Semitic qiir ‘wall, town’ > Tak *kiC ‘house’.
(295) Egyptian xpd ‘buttock(s)’ > UA *kupta ‘buttocks’: Ls kupča-t ‘buttocks’; Cr kïcá ‘buttocks’; Wc kïcá ‘buttocks’; Cp xútaxwi ‘back’ whose -t- suggests a cluster -Ct-, as intervocalic *-t- > -l- in Cupan. The first three (Ls, Cr, Wc) agree in *kupta, because PUA *u > Cr/Wc ï, PUA *p > ø in CrC.
(861) Hebrew qšy / qaašay ‘be heavy, hard, difficult’; Aramaic qəša’ ‘be hard, difficult, severe, harmful’; Syriac qš’ / qšy / qəša’ / qəšaa ‘difficult, severe, strong (of smell), harsh (of taste)’ > UA *kïsa 'sour':
Ls kóṣa/i 'be sweet or salty'; Ls kuṣ-úla 'be sour' (listed with koṣa/i); Cp kešelvekéšelva'a-š 'too sour’.
UA *kïsa 'harm(ed), bad': Cp kéše/ kəṣ- 'to injure, hurt'; Sr kïṣaa’ 'bad'; Ktn kïša’ ‘no good, bad’.
(525) Egyptian isq ‘linger, wait for, vi; hinder, vt’ (s is lost as 1st segment in a cluster: *isqV > *ïska > * ïka) > UA *ïka / *ïkï ‘remain, be in a place, let lie’: Sr ’ïkï|i ‘be in a place, lie’; Ls ’óka/i 'leave, let remain, vt; be left, vi'; Gb ’okó 'lie down'; Cp ékeme 'give'; Ca ’ékamax 'give s.o. (food/drink)’; Ktn ’ïk ‘lie’.
(247) Egyptian xr ‘to fall down/out’ > UA *kuri ‘fall’: Sr kur-q ‘fall, pl’; Ca kúli ‘fall (in a hole), stick (in), rush in’. The vowel u aligns with qu > ku (see below). Another set has two Ls forms, one of which has q, the other k: UA *kara ‘fall’: Ls kára ‘fall (of leaves)’; Ktn karara’y ‘fall, vi’; but also Ls qára ‘spill out, fall (as leaves, fruit, hair from the head), slide off’.

Most of these, that might be thought exceptions, show the medial uvular becoming -x-, which may be the only fricative option in the UA phonological repertoire for an original uvular. Intervocalic / medial -q- exists in the sets above, but with fricativization, there is not an uvular fricative alternate to velar -x- in UA. So the fricativization either eliminated the uvular dimension or minimized the difference enough to make it difficult to discern. In fact, the first set below (298), repeated from medial -q- above, shows exactly that: Sr shows the -q- as we would expect from an uvular -x- clustered, but Ca, Cp, and Ls fricativized that uvular to -x- as the only fricative option for -q-. Beyond those medial -q- > -x-, only one Ls form (248) remains an exception, and regarding apparent exceptions, we see doublets or alternate forms in nearly every UA language—alternate forms with b and p in Tr, Yq, My, etc, and Ca káwiya / qáwiya ‘hire, employ’, often due to contact with another language not having two options, like Ktn k, but no q.

(298) Egyptian ʕbxn ‘frog’ > *wapkan > UA *wakaN/C(-ta) > *wakatta ‘frog’: BH.Cup *waxa ‘frog’; HH.Cup *waxaa ‘frog’: Kw wagata/wogata ‘frog’; TSh wakatta ‘toad’; Ch wagáta-ci ‘frog’; NP wakatta ‘toad’; Tb waagaaiš-t ‘little frog’; Cp wáxači-ly ‘frog’; Ca wáxačily ‘frog’; Ls waxáw’ki-la ‘type of frog’; Sr waqät; Ktn wakata-t. Note Sr -q- corresponding to -x- of the other Takic languges.
(595) Aramaic ’axaat-aa ‘sister-the’ > Ca -wáxal^{y} ‘younger sister’ and Cp -wáxal^{y}i ‘younger sister’.
(632) Semitic xnq ‘put/wear around the neck’ > Tak *qonxa ‘necklace, s.th. around the neck’. In this, the initial x- does the expected q-, and the later medial -q- > -x-.
(654) Hebrew ɦrr / ɦarar ‘be hoarse’; Arabic xarxara ‘snore’; Arabic xrr / xarra ‘snore’ > Ls xaráá-ya ‘snore’. This Ls form from Semitic-p *x > x may have lost prefixed morphemes to show -x- instead of q- or k-.

(244) Egyptian nxx ‘be old, vi; old age, n’; Egyptian nxx ‘youth, boy’; Egyptian nxn ‘young’; Egyptian nxnw ‘child’; Egyptian nxnw ‘youth (abstract)’; for Egyptian nxx to mean both ‘age’ and ‘youth’, the common sememe is ‘grow’—grow up / grow old—and UA *nakan has the same range—grow up / grow old; the stems nxx and nxn underlie a similar pair of alternate forms in Egyptian nxx.t / nxn.w ‘kind of bread’: UA *nakana ‘grow’: BH.Cup *naxá ‘old man’; HH.Cup *naxáa ‘old man’: Sh nahnaC ‘grow up’; Kw nahna; Cp naxánču’ve-l ‘old man’; Ca náxaluvel ‘old man’; Ls naxááču ‘become an old man’.
(248) Egyptian xr ‘speak to, so say, vi’; Egyptian xrw ‘voice’ > Ls kára/i ‘belch, croak, ring’.

6.7 Seven, Uto-Aztecan *-w- > Luiseño -ŋ- vs. Uto-Aztecan *-w- > Luiseño -w-

Sapir (1915) noticed one instance of UA *-w- > Ls -ŋ-, that is, UA *siwa ‘woman, girl’ > Ls ṣuŋáá-l. Munro (1973) listed a few more in a 1973 IJAL article, such as Ls túŋ-la ‘name’ (< UA *tïwa ‘name’), qiqéŋ-la ‘ring snake’ (< UA *koNwa ‘snake’), and Ls hiŋéé-ma-l ‘boy’. Munro also notes that this only occurs medially, not initially. She also knows that even medially, most UA medial *-w- remain Ls -w- (148, 150, 159, 165, 229, 251, 332, 328, 488, 570, 600, 835, 1031, 1044, 1163, 1523). Even in cases of Ls -ŋ- (757, 1059, 332, 1237, 411, 412, 413, 270), Ls is sometimes not alone in having *-ŋ-, as some sets (757, 1059, 332) show other NUA languages sharing -ŋ- with Ls. In 1059, Hopi -ŋw- and Tb -ŋw- have some nasalization like Ls túŋ-la, while the other Takic languages and the rest of UA all have -w- in *tïwa ‘name’. So what underlies the differences? As stated several times previously, any one of four Semitic phonemes—w, ʕ, ħ, or ’—can yield UA *w when initial or intervocalic. However, when one of those is the 2nd consonant in a consonant cluster, the result is usually -ŋ- in Ls, and depending on the components of the cluster, sometimes -ŋ- in other NUA languages as well.

One of those four rounding phonemes as 2nd segment of a cluster yields -ŋ-: *-CW- > -ŋ- (W = w, ʕ, ħ, or ’)
(757) Hebrew šipħaa ‘maid, maid-servant’ > Tak *suŋa 'man's daughter, wife': Cp ṣuŋáma ‘man's daughter’; Ca súŋama 'man's daughter’; Ls ṣuŋáá-l ‘woman, wife’; Gb ásoŋ 'wife'; Sr ṣuuŋ 'man's dau’; Ktn huŋ ‘descendant’ and Ktn nïmihuŋ ‘wife’. All Takic languages do as Ls in their reflexes .
(1059) Arabic dʕw / daʕaa ‘to call, name’ > UA *tï(N)wa / *tïnwa (AMR) ‘name’: Hp tïŋwa ‘name, refer to, vt’; Tb ’ïndïŋwa-l ‘name’; Cp téw’a ‘name (n. poss’d)’; Ca téwa-l; Ls túŋ-la; Sr tïwan(č) ‘name, n’; Ktn tïw; TO cïïck ‘name, vt’; TO čïïg ‘(1) find, (2) call by name’; Eu tewát; Tbr temwa-ra; Yq tea; My tééwam; and *tïwa in most other SUA languages. Semitic has an underlying *-ʕw-, convenient for Hp -ŋw-, Tb -ŋw-, and Ls -ŋ-. Even though the perfective daʕaa and other forms seldom reflect the underlying -w- or -y- of such verbs, UA exhibits those underlying consonants (daʕwa) more often than most Semitic languages do.
(681) As in dʕw / daʕ(w)a above, ʕlw does the same in Hp as l > N often in NUA, and the pharyngeal helps *-lw- > -ŋw-: Semitic *ʕalaa / *ʕal(w)a ‘ascend, go up, grow’ > UA *wïla ‘grow’, but Hp wïŋwa ‘grow up’.
(332) *-rħ- > UA *-Nw- > -ŋ- in Takic, -ŋw- in one Azt dialect, -w- in the 20 other UA languages: Egyptian qrħt ‘serpent’; Egyptian qrħ ‘friend, partner’ > Aztecan *koŋwa ‘snake, twin’ or UA *koNwa ‘snake’ reflects a -rħ- cluster (< *qVrħat), as well as the feminine ending -at > -a. Cp qeqiŋi-ly ‘king snake’ and Ls qiqeŋ-la 'ring snake' < Tak *koŋo have Tak -ŋ- from the -rħ- cluster (liquid-pharyngeal cluster), very natural. UA *kowa is often reconstructed, yet Kaufman (1981) *konwa and Joe Campell (1976) *koŋwa, predate me in constructing a nasal *koNwa. CN kooaa-tl ‘snake, twin’ has an odd pair of meanings, yet their Egyptian source-form also has both ‘snake’ and ‘partner’:
(1237) *-p’- > -ŋ- in Tak (Cp, Ca, Ls), > -w- in Tb: Semitic *roop’-aa ‘healer’ > UA *toŋa ‘cure, administer to’: Cp tíŋele; Ca tíŋ’ay ‘cure, doctor s.o.’; Ls téŋal ‘to cure, doctor with herbs’; Ls téŋala-š ‘medicine’; Ls téŋalka-t ‘herb doctor’. Note Tb dzowaa-l ‘shaman’. Ca -ŋ’- may suggest a cluster.

In the next three, the two successive pharyngeals (ħ and ʕ) seem to strengthen the 2nd enough to become -ŋ-:
(412) Egyptian ħʕi ‘be glad, happy, rejoice’; Egyptian ħʕwt ‘joy, rejoicing’; Egyptian ħʕʕw ‘be happy’ > Ls heŋča-wu-t ‘cheerful, contented’. Ls e < UA *o, so UA *howV reflects the two pharyngeals well.
(413) Egyptian ħʕ’ ‘child, boy’ > Ls hiŋé’-ma-l / hiŋéé-ma-l ‘boy’. UA *howo’ / hoŋo’ > Ls heŋé’-, then unstressed Ls e > i, and Ls even shows the 3rd consonant glottal stop in the one variant, besides the first two consonants matching in these three sets (411-413): Egyptian ħʕ > UA *how > Ls heŋ.
(411) *-ʕw- > UA *-ŋ- > NUA -ŋ-, SUA -n-: Egyptian ħʕ / ħʕw ‘body’ > UA *hoŋa 'body’; Tepiman n corresponds to NUA ŋ, so UA *hoŋa 'body’ > TO hon ‘body’; Nv hona ‘body’; PYp hona ‘body’. Regardless

whatever else may occur in these three (411-413), considering that ħʕ would correspond to UA *how and that to Ls heŋ-, and that the three meanings associated with Egyptian are ‘happy’ and ‘boy’ and ‘body’, all quite different, and that the expected reflexes in UA/Ls have the same three meanings in UA is striking.

A cluster of a nasal plus pharyngeal/laryngeal in either order strongly tends toward -ŋ- in NUA, as we also see in the four instances of the cluster *-m’- > NUA -ŋ- > SUA -n- (salt, lung, husband, left) and in which some Numic languages actually show -m- also, while Ls, with the rest of Tak and Hp and Tb have -ŋ-.
(1246) *-m’- > -ŋ-: Old Canaanite hassim’al ‘the-left’ > Tb aašiŋan ‘left side’
(280) *-m’- > -ŋ-: Eg ħm’ / ħm’t ‘salt’ > UA *omwa > *oŋa ‘salt’
(281) *-m’- > -ŋ-: Eg sm’ ‘lung’ > UA *somwo > *soŋo ‘lung’
(284) *-m’- > -ŋ-: Eg qm’ ‘create, beget’ > UA *kumwa > *kuŋa ‘husband’
(940) *-mʕ- > -ŋ-: -mʕak ‘squeeze, crush, rub’ > UA *ŋaka/i ‘grind, scrape, rub against’
(941) *-nʕ- > -ŋ-: -nʕar ‘shake, grunt, roar’ > UA *ŋïy ‘shake, be dizzy’

Thus, the pharyngeal-plus-nasal cluster (*-ħn-) in 462 behaves similarly:
(462) Egyptian tḫn ‘shine, gleam, sparkle’ > UA *toŋo / *toŋa ‘shine (of sun), be hot, heat (of) sun/day’: Sr töönava’ ‘(in the) summer’; Cp tíŋe ‘be hot’ (Cp i < UA *o); Ca tíŋma ‘warm’; Hp töönï ‘heat, hot weather, heat of the day’; Ls iténvu ‘hot spring’; Ktn toŋava’ ‘August, summer’; TO toni ‘be hot’; TO tonod ‘shine, twinkle’; TO tonoliđ ‘shine onto, give light to’; NT tonóli ‘sunshine; ST tanoolyiop ‘in the sun’; Wr tono/toni ‘boil’; Eu tonó ‘be hot, boil’; CN toonal-li ‘warmth of the sun, summertime, day’; etc.
(270) Egyptian dbḫ ‘ask for, beg’ > Mn tïpiwï / tïbiyu; NP tïbiŋa; TSh tipiŋa; Sh tïtïpiah; Sh tïbiŋa ‘ask for’; Kw tïvina; Ch tïviŋi; SP tïvi / tïvi-ŋu ‘to ask’; CU tïvïyuy; Hp tïïviŋ-ta 'ask (for), inquire of’; Ls tuvyuŋi 'ask a question'; Cp túvyuŋ 'ask'. This set is a bit puzzling in that a non-clustered *-ħ- > -ŋ-; it may have an additional morpheme, as shown in SP, but all the other languages have a nasal without showing such a morpheme break. Note the alignment of SNum or CU tïvïyu-y and Tak tuvyuŋi.

Instances of UA *-w- remaining Ls -w- apparent in this tie are mostly from Egyptian or Semitic solitary or intervocalic -w- or -’-, and not from clusters with laryngeals as are the sources of Ls -ŋ-:
(165) Egyptian rwi ‘dance, v’ > UA *tawiya / *tuwiya > *tuya ‘dance’; redupl *tu(w/v)tui: AYq tatawiilo ‘turn around, vi’; Sr tuhtu’ 'dance, vi'; Ktn tuhtu’ ‘dance, vi’; Ktn tuhtuic ‘dance, n’; Ktn tuhtuhyït ‘dancer, n’; Ls tóótuwi-š ‘guardian spirit, person who performs a certain dance, the tatahuila’.
(229) Egyptian mw ‘water’; Egyptian mwy ‘watery’ (Coptic mu) > UA *muwa/i ‘wet’: Hp mowa-ti ‘be wet, moist’; Ls páá-muwi-š ‘wet’.
(322) Egyptian q’yt ‘high-lying land, hill’ from Egyptian q’i ‘be high’ > UA *qawi ‘mountain, rock’: Cp kawí-š ‘rock’; Ca qáwi-š ‘rock’; Ls qawíí-ča ‘mountain, hill’; Gb xay ‘sierra’; Sr qaiič; Ktn kay-c; and *kawi in many SUA languages.
(600) Hebrew ro’e ‘seer’; Hebrew r’y / raa’aa ‘see, v’ > UA *tïwa ‘find, see’: Hp tïwa ‘find, perceive’; Tb tïwat~’ïïtïw; Cp tewa ‘see’; Ca téew ‘find, discover’; Ls tów ‘see, look at’; Ls tóówi ‘see by second sight, be clairvoyant’; TO cïïg(iđ); PYp teega ‘find, see’; Eu téwa; Wr tewa; Tr ŕewa / tewa; My téwwa; Yq tea.
(148) Egyptian t’yt ‘shroud’ > Ls tawaayi-š ‘cape-like garment of twisted strips of rabbitskin formerly, but now any kind of cape’ (Elliott); UA *tawayi, redupl UA *tatawayi > *talawayi ‘wrap around’: Eu hitárave / hitárawe ‘put on, get dressed’; Tb talaawïš(-ït)~'atalaauš 'go around'; Tb talaaw~’atalaauš ‘he encircles it’.
(150) Egyptian t’ ‘earth, land, ground, country’ (Coptic to) > UA *tïwa ‘sand, dust’: Hp tïïwa 'sand'; Hp compounds suggest an originally larger semantic range to include ‘dust, earth’: Hp tïïwa-qal- ‘(at) the edge of the land, seashore, horizon’ (qal ‘edge’); Hp tïïwa-nasave ‘the center of the earth’; Hp tïïwaŋw-ti ‘decompose, turn to dust, become part of the earth’; Tb tïïwï-t 'dust'; Cp tïw- ‘dust’; Cp tewvaŋa ‘where dust was’; Ls toowu-t ‘dust in the air’ (Ls o < *ï); Sr tiüva-ţ ‘earth, ground, land, world, country, floor, dirt, dust’.
(1031) Semitic-p qn’ ‘be jealous’, impfv: -qna’ > UA *nawa ‘jealous’: Cp náwe 'be jealous of, vt’; Ca nawaan 'be jealous, vi’; Ls nááwin 'be jealous'.
(328) Egyptian q’r ‘bundle, pocket’; the similarity of UA *kawaC ‘pocket, bag’ and UA *kawaC ‘packrat’, and both semantically derivable from q’r ‘pocket, bag’ may point to q’r > *kawaC ‘packrat’ also: UA *kawaC ‘rat, packrat’: Tb haawa-l ‘wood rats’; Sr qää-ţ; Gb xar; Ktn ka-č; Ls qáw-la ‘woodrat’; Ca qáwa-l; Cp qáwe-l; Hp qaala ‘packrat’; NP kawa ‘packrat’; Mn qawa; TSh kawan; Sh kaan; Sr and SNum lost intervocalic -w-: Kw kaa-ci ‘woodrat’; SP kaa-ci; CU kaac’a-ci ‘packrat, gopher’.

A lone intervocalic pharyngeal -ʕ- usually remains its expected and usual -w-:
(488) Egyptian šʕt ‘kind of bread/cake’; Egyptian šʕyt ‘Schot biscuits or baked goods’ > UA *sawa ‘make tortillas or bread’ and *sawiC-ta ‘bread’: Ca sáw 'make tortillas'; Ca sáwi-š 'tortilla'; Cp ṣáwi-š 'bread, acorn bread'; Sr ṣaawt 'bread, acorn bread'; Ls ṣáwa/i 'singe, get singed'; Ls ṣááwa-kaa 'cook tortillas’.
(1044) Aramaic ʕrʕyt’ / ʕurʕyt’ ‘wasp’; Aramaic **ʕaaraaʕii**-taa ‘wasp-the, n.f.’ > UA *wa’wa 'wasp': Ls wááwa-la 'mud wasp'; Cp wá’walim 'yellowjacket'; Tb weweehyuu-l 'yellowjacket’. In this instance, we see from Aramaic ʕaaraaʕii-taa that UA *wa’wa results from a later cluster after the 2nd vowel syncopated, not from an original cluster (as in 332 above): ʕaaraaʕii- > warawV > warwa > wa’wa. Note Tb -y- (< *-y-).
(251) Egyptian sʕ’y ‘tremble, v’ > UA *sawi(ya) ‘fear, v’: CN iisawiaa ‘be overawed, vrefl, frighten, outrage s.o., vt’; Eu sevíce ‘be afraid’ (*w > v); Ls ṣuwó’ ‘be afraid of’ (if *sawi > suwï > Ls suwo’). The difference between 251 and 413 is the double pharyngealization in 413 (see above) vs. a single pharyngeal in 251.

1522 does not have a pharyngeal or laryngeal, and may not even tie to Hp and Tb, thus -w- in all of Takic.
(1522) ham-madwe ‘the-menstrual blood’ > *hiNtwa > *ï(N)kwa > Hp ïŋwa ‘blood’; Tb ïkwa-l (*tw > kw, AMR 1991, 1993a); loss of -k- in Tak *ïwi: Munro.Cup17 *'əəwi-la 'blood': Ls 'ów-la; Cp 'əwə-l; Ca 'éwi-ly.

The one instance of glottal stop-plus-w remained as such (*-’w- > -’w-):
(159) Egyptian t̲’w / t̲’y ‘take up, seize, steal, collect, gather/bring together’ (> Coptic jiwe) > UA *tï’wi / *tu’wi ‘gather seeds, harvest’: Ls tó’wi ‘gather (as seeds), harvest’; Numic tu’u ‘take (pl obj’s).
(835) Sem-p *ya’xez / *ya’ħez ‘grasp, take’ > SP yaŋwi ‘carry’; CU yáa’way ‘carry, take by hand’; Cp yáwe ‘bring, carry’; Ca yáw ‘to catch, touch, have, hold, take care of’; Ls yááw ‘have, hold, take’; Sr yaa’ ‘take, carry’; Sr yaa(i) 'take, seize, catch'. Given UA -ŋw- / -’w- / -w-, this does belong, but merits thought.
835 (-’x-) and 159 (-’w-) contain clusters in which I would not have been surprised to see Ls -ŋ-, but what they have in common is glottal stop as 1st consonant, and neither 1st or 2nd is a pharyngeal, though the glottal+uvular cluster in 835 *-’x- comes close, and we do see -ŋw- in SP and -’w- in CU.

7 Other Comparative Matters, Consistencies, and Patterns

7.1 Vowel Correspondences

Proto-Semitic and Egyptian vowels were originally only three *a, *i, *u. Arabic still has only those three, but from those three, Hebrew developed seven or more, and most Aramaic dialects have something between three and seven. The Proto-Uto-Aztecan vowels and their reflexes in the various UA languages are presented on page 46 and are discussed on pages 58-64. While there are periodic inconsistencies within the UA vowel correspondences among themselves, the correspondences of the Semitic vowels to PUA vowels enjoy a comparable consistency; most abide by consistent patterns but include instances of not yet explained variance. I say "not yet explained" because as linguists know, sometimes subsets of exceptions are later explained by a newly discovered principle or environmental cause. Untangling the history or prehistory of stress patterns and changing stress patterns from the two Semitic infusions to the contemporary UA languages may be the most significant contribution toward clarifying UA vowels, though it may also be the most difficult, and perhaps not entirely possible. Nevertheless, the PUA vowels (*a, *e/ï, *i, *o, *u) often align with the same Hebrew vowels (*a, *e, *i, *o, *u) and most of the groups of exceptions are consistent or explainable patterns. In essence, the following patterns are apparent:

Semitic mid-vowels (e, ə, o) often rise to UA high vowels i, ï, u, as in Hebrew prtcpl oo-e > UA u-i:
(754) Hebrew poone 'turn, look' > UA *puni 'look, turn'
(532) Arabic baaṣir 'eye'; unattested Hebrew/Phoenician cognate *booṣer 'eye' > UA *pusi 'eye'
(1318) Hebrew ygr / yaagor- 'be afraid', unattested participle *yooger > Ca yuki 'get scared, be afraid'
Other forms similarly show raised vowels:
(564) Hebrew śapoot 'lips', sᵊpootee^{y} 'lips of' > UA *puti 'lip'
(52) Hebrew mukke 'smitten' > UA mukki 'die, sick, smitten'
(607) Hebrew dobɛr 'pasture, vegetation' > UA *tupi 'grass, vegetation'
(1384) Aramaic -be 'with it, in it, by means of it' > Hp -pi 'instrumental' and other UA languages
(796) Hebrew to'kal > *tukkaC > tïkkaC 'eat';
(832) Semitic sarṭoon 'scratcher, crab' > UA *saCtun 'claw, crab'
(57) Arabic singaab = expected Hebrew *siggoob 'squirrel' > UA *sikkuC 'squirrel'
(583) Hebrew ʼepod 'ephod, shoulder cape or mantle' > UA *wipura 'belt'
(755) Hebrew kutónet 'shirt-like tunic' > UA *kutuni 'shirt'
(710) toolaaʕ 'worm, scarlet stuff' > UA *tulo 'embers, coals, dark, black' (2nd V rounded by pharyngeal)
(30) Hebrew ṣippoor 'bird, small bird' > UA *cipuri 'bird'

Likewise, impfv stems Hebrew -CCoC / Arabic -CCuCu > UA -CuC with loss of 1st C of the cluster.
(718) Hebrew npl, impfv stem -ppol (< *-npul) 'fall, be born' > UA *puli 'to fall, give birth'
(1094) Hebrew ktš, impfv -ktoš (< *ktusu) 'pound, grind' > UA *tusu 'grind' with loss of 1st C in a cluster
(1064) Semitic lxš, impfv *-lxoš (< *-lxusu) 'whisper, mutter' > UA *kusu 'make its sound (of animal)

Semitic low-central vowel A usually remains (*a*) in stressed syllables:
(571-p) Semitic ya'ya'/yaa'ayaa' 'beautiful' > Ls yawáywa, Sr yï'aayï'a'n 'beautiful'
(616-p) Aramaic dakar > UA *taka 'man'
(559-p) Aramaic bakaa / baka' 'cry' > UA *paka' 'cry, v'
(892-p) Semitic ṣanawbar 'type of pine tree' > Sh sanawap-pin 'pine tree'
(534-p) Hebrew batt 'daughter' > UA *pattï 'daughter'
(567-p) Hebrew ya'amiin-o 'he believes him/it' > UA *yawamin-(o) 'believe (him/it)'
(1055) Syriac ʼaamaqqət-aa 'lizard-the, n.f.' > UA *makkaCta(Nka)-ci 'horned toad'
(1079) Aramaic naanaa 'mother' > UA *nana 'mother'
(1190) Aramaic 'aykaa 'where' > UA *haka / *hakka 'where?
(639-p) Semitic *-psax 'be lame, limp' > CU sakï- 'limp'; WMU süġű-y 'limp, be lame' (assimilated)
(991-kw) Hebrew ni-qraʼ 'he/it is called/named' > *nihya 'call, name' (Numic)
(954-kw) Semitic/Arabic baqiya 'stay, be left behind' > Hp kwayŋya- 'behind'

Final low vowel -*aa* of the suffixed article of Aramaic nouns usually remains (*a*), appearing to have preserved the stress that it has in some Aramaic dialects:
(1276) Aramaic talg-aa ‘snow-the’ > UA/CNum *takka ‘snow’
(617) Aramaic diqn-aa ‘beard / chin-the’ > UA *tï’na ‘mouth’
(618) Aramaic di’b-aa ‘wolf-the’ > UA *tï’pa ‘wolf’
(1130) Aramaic pagr-aa ‘carcass-the’ > UA pïïkya ‘hide, fur, carcass’
(1403) Syriac šigr-aa ‘drain, ditch, gutter-the’ > Hp sikya ‘small valley, ravine, canyon with sloped sides’
(604) Aramaic rəʼemaan-aa ‘antelope-the’ > UA *tïmïna 'antelope’
(967) Aramaic qušṭ-aa ‘bow-the’ > UA *kuCta-pi ‘bow’
(1042) Semitic marʼ(aa) ‘prince, princess’ > Ktn/Sr mayha; Hp maana ‘daughter’, SUA *mara ‘child’
(1409) Aramaic kuuky-aa ‘spider-the’ > UA *kuukya ‘spider’
Also at 2, 3, 4, 5, 16, 49, 50, and throughout, are many more *a* < **a*.

However, sometimes Semitic *a* rises to UA *ï*:
(581) Hebrew ’arṣ-aa ‘earth-ward, down’ > UA *wïcï ‘fall’
(99) Hebrew rakb-uu ‘they mounted, climbed’ > UA *tï’pu ‘climb up’
(1459) Hebrew yhb, haabaa > haavaa ‘come on, let’s, go to (cohortative) > SP ïvï ‘go ahead! (hortatory adv)’
(1007) Semitic *xdl (> Hebrew ẖaadal) ‘cease, cease doing’; OSArabic xdl; Akkadian xadaalu ‘cease’
Arabic xadila ‘stiffen, become rigid’ > Hp hïrïï-ti ‘come to a stop, harden’; Hp hïïrïla ‘be hesitating, pausing, stopping’. Note Hopi’s two very different meanings (stop, harden) both in Semitic (cease, stiffen/rigid).
See also 7, 24, etc.
Semitic **a* > UA *ï* especially in a less stressed first syllable when the second vowel is stressed.
(1130) Aramaic pagr-aa ‘body/carcass-the’ > UA *pïkya ‘animal hide, carcass’
(1077) Semitic *manzaal > UA *mïcaC ‘moon’:
(1284) Aramaic dəwaay-aa ‘grief-the’ > UA *tïwoya ‘sick(ness)’
UA *a > ï when assimilating toward final -i (11, 54, Sr in 571, etc.)
Many UA verbs *CïCaC suggest Aramaic pfv CəCáC 2nd syllable stress (vs Hebrew/Phoenician CaaCaC):
(681) Semitic ʕlw / ʕly / ʕalaa ‘ascend, go up, grow’ > UA *wïla/i ‘grow’
(861-p) Hebrew qaaša^{y}; Aramaic qəša’ ‘be hard, severe, harsh (of taste)’ > UA *kïsa 'sour, harm(ed), bad'
(683-p) Syriac ʕmṭ ‘become dark, cloud over, be obscure, concealed’ > UA *(w)umaC / *(w)ïmaC ‘rain’
(782-p) Arabic ṭẖy / ṭaẖaa ‘to hurl, shoot’ > Wr cewa ‘to throw or hit with a missile’
(600-p) r’y / raa’aa ‘see’ > UA *tïwa ‘find, see’
In contrast to Aramaic-like Sem-p, **Hebrew/Phoenician Sem-kw CaaCaC preserves 1st vowel as -a-**:
(935-kw) Hebrew glm / gaalam ‘wrap up, fold’ > UA *ŋálam ‘tie, entangle(d)’
(946-kw) Hebrew qlʕ / *qalaʕ ‘to sling, throw out (people from land)’ > UA *ŋalaw ‘throw out’

Semitic high front vowel I usually remains i, unless assimilated to other nearby segments:
(757) Hebrew šipẖaa ‘maid, maid-servant’ > UA *siwa 'female, sister, daughter'
(769) Semitic taqipa, pl: taqipuu ‘to overpower, be strong’ > UA *takipa / *takipu ‘push’
(810) Hebrew hikkiir ‘recognize, know, know how to’ > Tr iki- ‘know, be aware of’
(853) Aramaic ẖippušit-aa ‘beetle-the, n.f.’ > UA *wippusi ‘stink beetle’
(1088) Aramaic ẖild-aa (< *xild-aaʼ) ‘mole, burrower’ > UA *kita ‘groundhog’: Mn kidá’; NP kidï
(1246) NWSemitic *has-simʼal ‘the left’ > UA aašiŋan ‘left’
(1293) Hebrew hiśkiil, hiśkal- ‘to understand, make wise’ > CN iskalia ‘be discreet, prudent’
(1403) Syriac šigr-aa ‘drain, ditch, gutter-the’ > Hp sikya ‘small valley, ravine, canyon with sloped sides’.

Many i > ï when assimilating toward a following -a or other non-high V: *i-a > ï-a
(889-p) Aramaic rikb-aa ‘upper millstone-the’ > UA *tïppa ‘mortar (and/or) pestle’
(617-p) Aramaic diqn-aa ‘beard / chin-the’ > UA *tï’na ‘mouth’;
(618-p) Aramaic di’b-aa ‘wolf-the’ > UA *tï’pa ‘wolf’;
(1003) Semitic kirš / kariš ‘stomach, paunch, belly’ > UA *kïca ‘belly, waist’
(944-kw) Hebrew tiqqen ‘to make straight, straighten s.th.’ > Ktn tïŋen ‘to straighten arrows’

Hebrew mid back round vowel O often remains o (but sometimes rises to u, see 7.1):
(531-p) Hebrew bw' 'come', infinitive boo' 'coming, way' > UA *poo' 'road, way'
(569-p) Semitic 'e(N)gooz 'nut tree' > UA *wo(N)koC 'pine'
(724) Semitic parʕoš 'flea (jumper)' from prʕš 'jump' > UA *par'osi / *paro'osi 'jackrabbit'
(630-p) Hebrew *xole 'be sick, hurting' > UA koli, Tak *qoli 'be sick, hurt, vi'
(705) Semitic l'y / la'aa^{y}, Hebrew prtcpl: loo'e^{y} 'grow weary / tired' > UA *lo'i / *loCi 'tired'

Many o are assimilations or lowerings of *u-a > o-a
(868) Aramaic ṭwr- / ṭuur-aa 'rock, hill, mountain-the' > UA *toya 'mountain'
(931-kw) Hebrew gulla(t) 'basin, bowl'; Arabic ğulla(t) 'ball, bowl' > UA *ŋola 'hoop, ring, wheel'

Semitic high back round vowel U often remains u:
(853) Aramaic ħippušit-aa 'beetle-the, n.f.' > UA *wippusi 'stink beetle'
(52) Hebrew mukke > UA mukki 'die, sick, smitten'
(871) Hebrew *tu'pal 'become dark' > UA *cuppa 'fire go out, become dark'
(872) Hebrew *yu'pal 'become dark, be gone down (sun)' > UA *yuppa 'fire go out, (get) dark, black'
(967) Aramaic qušṭ-aa 'bow-the' > UA *kuCta-pi 'bow'
(1283) Aramaic ruumš-aa' 'evening-the' > Sr rumaaruma'n 'be dark'; Sr ruma'-cï'q 'be very dark'
(1138) Hebrew šor (< *šurr) 'navel, navel cord'; Arabic surr 'navel cord' > Sr ṣuur 'navel'
(606) Arabic dubr/dubur 'back(side), buttocks' > UA *tupur 'hip, buttocks'
(1409) Aramaic kuuky-aa 'spider-the' > UA *kuukya 'spider'

Uto-Aztecan initial *hu is often from pharyngeal ħ introduced in 78-85, and other examples such as:
(672) Arabic ħabaqa 'pass air, break wind' > Hopi hovaqtï 'smell bad, stink' (Hopi o < UA *u)
(675) Semitic ħnp 'have turned in feet, be pigeon-toed' (used in lizard/turtle words) > UA *hunap- 'badger'

Also final or medial ħ > o/u, becoming round vowels when adjacent to pharyngeals, are numerous:
(1408) Syriac dinħ-aa 'sunrise, light, ascendant or predominant star' > UA *-cinuN- in *ta(C)tinuN-pi 'star'
(773) Semitic ṭħn 'grind, pound' > UA *to'na(C) 'hit, pierce, stab', UA *co'na / *co'ni 'pound, hit'
(84) Hebrew impfv: yi-ṣmaħ 'sprout' > UA *icmo 'sprout': CN icmo-liini 'sprout, grow'.
(1308) Semitic nħl, -nħal 'have/ take possession', naħ^{a}lat 'property' > nol- of TO nolawt 'buy'
(188) Egyptian nħbt 'neck, back of neck' > UA *nohopi / *nopi 'hand, arm'
(1421) Arabic saħr- / suħr-, masaaħir 'lungs' > SP soo-vi 'lungs'; Tb mosooha-t 'lungs'

UA ï/e does not exist in Proto-Semitic or Arabic; Hebrew e is of various sources: *-ay- or *i (> e).
(943-kw) Syriac qanqen (< *qanqin) 'to chant, sing' > UA *ŋaŋi 'to cry'
(528-p) Semitic bayit / bayt / beet 'house' > Tr bete 'house'
(1316) Hebrew yayin / yayn / yeen 'wine' > Wr yena 'strong (of liquor)'
(1292) Hebrew śyb 'be grey-headed, old'; Arabic šyb 'become old, white-haired'; Hebrew śeebaa 'grey hair, advanced age' > Wr ahseba 'reach or be so many years old'; SP siu- 'light grey'
(1324) Hebrew henaa 'hither, toward here' > Wr ena 'come'; Tr enai / ena 'here'
(1325) Hebrew hinné 'behold!'; Arabic 'inna 'particle of emphasis' > UA *ne 'look! adverb of emphasis'
Likewise, the masculine plural construct -eey is originally from -iiy, and UA shows -i also:
(823-p) Hebrew ba-yyamee^{y} (< *ba-yyamii) 'in the year of' > *payami > UA *pami 'year':
(852) Hebrew pl: *paniim, pl construct panee^{y}- 'face, surface of' > CN pani 'on top, on surface'

An unstressed 1st vowel often assimilates to a longer or stressed 2nd vowel:
(569-p) Semitic 'e(N)gooz 'nut tree' > UA *wo(N)koC 'pine'
(535-p) Aramaic bəquuraa / bəquurə-t-aa) 'livestock' > UA *pukku(C) 'domestic animal'
(864-p) Arabic/Hebrew quuppa(t) 'basket'; Hebrew pl *quuppoot > UA *koppot 'basket'
(934) Hebrew glm 'wrap up, fold together', verbal noun: gəloom 'wrapping, garment' > UA *koloom 'cover'
For other examples, see also 966, 1041, 1415.

Vowels often assimilate toward or anticipate the point of articulation of the following consonant:
(527-p) Semitic baraq ‘lightning’ > UA *pïrok / My berok- ‘lightning’; the 1st a > ï/e, raised and fronted toward alveolar -r-; the 2nd a > o, anticipating back uvular -q
(726) Hebrew paraq ‘drag away, tear away’ > Numic *piyok ‘pull, drag’
(19, 20-kw) Semitic brr / barr(a) ‘land, choose’ > UA *kwiya ‘earth, choose/take’;
(64-kw) Semitic krr ‘circle, dance’ > UA *kiya ‘have a round dance’;
(65-kw) Semitic mrr ‘go’ > UA *miya ‘go’;
(5-kw) Hebrew báášaar ‘flesh, penis’ > UA *kwasi ‘tail, penis, flesh’.
Or assimilate to either adjacent consonant:
(1284) dwy ‘be sick, miserable’; Aramaic dəwaay-aa ‘grief-the’ > UA *tïwoya ‘sick(ness)’

As in 527 and 726 above, Semitic-p uvular q seems to have a strong rounding influence causing V > u:
(738-p) Hebrew qayiṣ / qeyṣ ‘summer’ > UA *kuwïs 'summer'
(961-p) Hebrew dɛqɛl ‘date-tree, palm’; Arabic daqal ‘kind of palm tree’ > UA *taku ‘palm tree’
(963-p) Hebrew qaaṣiir ‘branch(es)’ > UA *kusi ‘wood’

In Masoretic Hebrew phonology, “guttural” consonants (ʕ, ḫ, ’, r) share behaviors unique to themselves—cannot be doubled/geminated, must take helping vowels in original clusters—and often lower adjacent vowels in certain environments. In Hopi, two of those original “guttural” consonants being in the same word seem to trigger Hopi ö, originally Hopi’s lowest round vowel, corresponding to PUA *o:
(695) Hebrew lqḫ / laaqaḫ ‘take, grasp, take as wife’ > Hopi lööqö(-k-) ‘(for bride) to marry’ (q and ḫ)
(663) Hebrew ḫɛrpaa ‘shame, mutilation, reproach, deficiency’ > Hp ööpï ‘sickly one, invalid, one with disabling sickness’ (ḫ and r) (Also note Hopi -p- < *-Cp-, i.e., from a cluster, or *-rp- here.)
(686) Hebrew ʕɛrwaa ‘nakedness, genital area’ > Hp löwa ‘vulva, vagina’ (ʕ and r)
(280) Egyptian ḫVm’at ‘salt’ > PUA *homwa ‘salt’ > Hopi öŋa ‘salt’ (ḫ and ’)

Anticipating Semitic-kw -l (but not Semitic-p -l) causes a vowel to rise and maybe front: V > i or ï
(797-kw) Hebrew ’kl , imfv: yo’kal ‘eat, enjoy love’ > UA *yï’ïki / *yïkï ‘swallow, taste, finish’
(798-kw) Hebrew ’aakal ‘(he) ate (pfv) > UA *’aki ‘open mouth, eat’
(1321-kw) Hebrew ḫargol ‘locust’; Arabic *ḫargal / *ḫurgul ‘locust’ > Tr urugi-pari ‘grasshopper’

The rather universal **centralization of vowels** or schwa-like behavior in unaccented syllables that occurs in many languages worldwide happens in UA too, though both *ï* and *i* serve that purpose in UA.
(550-p) Biblical Aramaic bəśár ‘flesh’ > UA *pisa ‘penis’
See other examples in the 4th and 5th groups under 7.2

Short initial unstressed vowels often disappear:
(1416) Arabic iđaa / iđan ‘then, therefore, if, when, whenever’ > Tb tan / tanni ‘if’.
(591) Hebrew ’adaamaa / ’ᵃdaamaa ‘earth’ > UA *tïma ‘earth’
(592) Hebrew ’abneṭ, pl: ’abneṭ-iim ‘sash, girdle’ > UA *natti ‘belt’
(1055) Syriac ’aamaqqət-aa ‘lizard-the, n.f.’ > UA *makkaCta(Nka)-ci ‘horned toad’
(729) Aramaic ’eebaar-aa / ’eebr-aa ‘limb, arm, wing’ > UA *pïra ‘arm, right arm’

Or the whole first syllable may be lost when unstressed:
(593) Akkadian qardammu ‘enemy, opponent’ > UA *tïmmu ‘opponent’
(564) Hebrew saapaa(t) ‘lip’, pl: sapoot ‘lips’, sᵊpooteeʸ ‘lips of’ > UA *puti ‘lip’
(948-kw) Hebrew ʕiqqaar ‘root’; Syriac ʕeqaar ‘root, remedy’ > UA *ŋa- in UA *ŋa-kaw ‘root’
(1054) Aramaic raqbubit-aa ‘decayed-matter, moth-eaten, moth-the’ > UA *(V)kupïpika 'butterfly'
(597-kw) Arabic ’arnab ‘hare, rabbit’, Hebrew f. pl: *’ᵃrnaboot > UA *taput ‘cottontail rabbit’
(1325) Hebrew hinné ‘behold!’; Arabic ’inna ‘particle of emphasis’ > UA *ne ‘look! adverb of emphasis’

7.2 Medial Consonant Cluster Results in Uto-Aztecan

Medial consonant clusters in UA have been obscure enough that UA specialists have scarcely dealt with them until relatively recently. Alexis Manaster Ramer (1993b, 1997, etc) broke new ground in discovering a few clusters that underlay what were formerly thought single medial consonants. The fact that the medial consonant correspondences were not nearly as consistent as the initial correspondences was a strong hint that more former clusters probably did underlie that medial variety than previously suspected (addressed p. 47); nevertheless, other than Manaster-Ramer's pioneering start, little has been accomplished in clarifying unobvious clusters, perhaps because most could hardly be extracted from the UA data alone. All that were apparent were so many arrays of inconsistent combinations of medial reflections among so many cognate sets. This Near-East consideration for a portion of UA's origins, if valid, seems to shed light on many previously puzzling aspects of UA—consonant clusters being one such area where such a key should clarify much. Yet further analyses are also needed to answer some unanswered questions.

Some clusters remain basically as are:
*-ky- > -ky-: kuuky-aa 'spider-the' > UA *kuukya / *kukkaC 'spider' (1409-p)
*-'y- > -'y-: Eg x'yt 'slaughter, carnage' > UA *ko'ya 'fight, kill pl objects' (178-9)
*-'w- > *-'w-: Eg t̲'w 'take up, collect, bring together' (Coptic jiwe) > UA *tï'wi / *tu'wi 'gather seeds, harvest' (159)
*-'w- > *-w-: Eg t'w 'man, male' > UA *tawa / *tawi 'man, male' (205)
*-yl- > -yly-: gyl 'do circles, dance, rejoice' > Cp ŋáylʸa 'spin, twirl' (929-kw)
*-ly- > -ly-: gly / -galley 'uncover (nakedness), sleep with (woman)' > Sr ŋalyaaŋalyah-kin 'make loose' (1521-kw)
*-'b- > *-'p-: n'bl / nebel 'skin-bottle (of wine)' > no'pal- 'prickly pear cactus fruit' (fermented to alcohol) (720-p)
*-'p- > *-'p-: naap-aa, written na'p-aa 'louse egg-the' > UA *no'pa / noppa 'egg' (1076-p)

Geminated consonant clusters often remain geminated or doubled in some UA languages, but lenition of *-CC- > -C- happens often in this tie as well as among some UA reflexes themselves:
mukkɛ 'smitten' (*mu-nkay > mukkɛ) > UA *mukki 'die, be sick' (52)
'aamaqqət-aa 'lizard-the' > UA *makkaCta(Nka)-ci 'horned toad' (1055)
dkk / dakka 'make flat, level, smooth, stamp, crush' > UA *takka 'flat' (1103)
zgg / zagga, impfv *-zuggu 'throw, squeeze, force, cram' > UA *cukka/i 'crowded, mixed' (622)
šakka 'pierce, prick, stab'; Arabic šikkat 'weapons'; Hebrew sek 'thorn' > UA *sikki 'spear, pierce, stick' (1291)
Eg ngg 'goose' > UA *nakï 'goose' (395)
Eg t'-ggt 'the-kidney' > UA *takkiC 'kidney' (357)
Eg qbb 'cool, calm, quiet' > UA *koppa 'quiet, calm' (134)

Bilabial stops b and p: in etyma from Semitic-kw, any cluster with -b- becomes -kw-:
*-bb- > -kw-: ṣbb / ṣabba (< *ḍabba) 'take hold, keep under lock' > UA *cakwa / *cakwi 'catch, grasp, lock' (8-kw)
*-bb- > -kw-: ṣbb / ṣabb (< *ḍabb) 'lizard (< take hold)' > UA *cakwa 'lizard' (9-kw)
*-bb- > -kw-: šabber 'break, break in pieces' > UA *sakway 'break, ruin' (10-kw)
*-bb- > -kw-: dabber (< *-dabbir) 'speak' > UA *tïkwi 'say' (11-kw)
*-bb- > -kw-: zbb 'be in a frenzy, an ecstatic' > UA *sakwo / sikwo 'witch, bewitch' (18-kw)
*-bb- > -kw-: rbb / *rabba 'shoot (an arrow)' > UA *tïkwa 'hit by striking or throwing, shoot (arrow)' (95-kw)
*-br- > -kw-: br' / -bra'- 'eat' > UA *kwa'a 'swallow, eat' (46-kw)
*-br- > -kw-: brii('/y) 'provide food, feed' > UA *kwi 'food, feed, give food' (47-kw)
*-qb- > -kw-: (ya)-qbiḍ(V) 'take, grab' > UA **kwïsa/i 'take, carry' (44-kw)
*-qb- > -kw-: qbl 'be/face front, go foreward', -qbiil 'confront' > Hopi *kwila 'take a step, step forward' (45-kw)
*-qb- > -kw-: qbr 'bury', impfv: *-qbor > UA *kuy / kuC 'bury' (1017-kw)
*-gb- > -kw-: gbr / -gbar 'be strong,prevail' > UA *kwaC- 'win' (49-kw)
*-nb- > -kw-: gnb / ganba 'side, beside, near' > UA ŋakwa 'side, by, near' (21-kw)
*-bb- > -kw-: ṭibbuur 'navel' > UA *siku 'navel' (777-kw)
*-lb- > -kw-: lbš / -lbaš-uu 'put on (garment), clothe (oneself)' (-lb- > -bb- > -kw-) > UA *kwasu 'dress, shirt' (50-kw)
*-sb- > -kw-: sbl 'carry'; sabbaal 'burden carriers'; *hisbiil > Hp iikwil-ta 'put on the back to carry' (40-kw)
*-šb- > -kw-: yšb / yoošbim 'sit, pl' > UA *yukkwi 'sit, pl' (1158-kw)
*-šb- > -kw-: ʕušb- 'grass, herbage, plants, pasture' > *(h)ukwi 'grass' (918-kw)
*-ṣb- > -kw-: ṣˀpardeaʕ 'frog' > UA *kwa'ro 'frog'; *haC- 'the-' made cluster *ha-ṣṣpardVʕ > kwa'ro 'frog' (1378-kw)
*-bb- / -nb- > -ŋw-: šibbólet 'ear of grain'; Arabic sunbul 'ear, spike (of grain) > *suŋu 'corn' (828-kw)

Also *-pp- > -kw-
*-np- > -kw-: npš ‘to breathe’; *hippiiš ‘breathe’ > UA *hikwis ‘breathe, spirit, heart’ (839-kw)
?*-pp- > -kw-: ṭpl ‘to smear or plaster over’ > Hopi cakwani ‘plaster’; Hopi cakwan-ta ‘plastering, smearing on’ (783)

Semitic-kw more often retains the 1st consonants of other clusters, besides -bC- > -kw-:
*-mr- > -mi-/-my-: ṣɛmɛr ‘wool’ > UA *comi / *comya ‘hair’ (742-kw) (vs. Sem-p tumraa > tu’ya ‘palm tree’)
*-ṣm- > -cm- : ṣmḥ / yi-ṣmaḥ ‘sprout’ > UA *icmo ‘sprout, grow’ (84-kw) (vs. Sem-p *ya-ṣmax > UA *yama)
*-nd- > -n-: buundəq-aa ‘ball, globule, sphere-the’ > UA *kwinu ‘round, spherical’ (1375-kw) (vs. Sem-p *potto)
*-śk- > -sk-: hiśkiil, hiśkal- ‘understand, make wise, insightful’ > CN iskalia ‘be discreet, prudent’ (1293)
*-ml- > -m’- > -’m-: śimlaa / śimla-t ‘wrapper, mantle, cloak’ > *sam’aC ‘to spread, v, a cover, rug, blanket, n’ (764)
*-xr- > -ḫr- > -w-: Hebrew ḫrd, impfv: tɛ-ḫ(ɛ)rad ‘tremble, worry’ > UA *tiwa ‘shy, embarrassed’ (1512-kw)
*-gd- > -ŋ-: gadiir ‘walled place’, *ya-gdiir ‘cause wall to go up’ > UA *yaŋi ‘fence, enclosure, roofless walls’ (916-kw)

In etyma from Semitic-p, we see *-bb- / -pp- / -Cb- / -Cp- > UA -pp- / -(’)p-:
*-bb- > -pp-: ṭabbuur / ṭibbuur ‘navel’ > Tb šappušt ‘belly’; NP sibudu ‘navel’; Cr sipu; Hp sivon- (778-p)
*-kb- > -pp-: kaukb-aa(’) ‘star-the’ > UA *kuppaa’: Sr kupaa’ ‘to shine (as of the stars)’ (1274-p)
*-pp- > -pp-: tpr / tapper < *tappir ‘sew together’ > UA *tappiCta ‘tie’ (1264-p)
*-pp- > -pp-: tpr / tuppar ‘sown’ > tuppa ‘tie(d)’ (1265-p)
*-tp- > -pp-: pakken / etpakkan ‘speak much, chatter, gossip’ > NUA/Num *appaka / *aNpaka- ‘talk’ (1151-p)
*-tp- > -pp-: Eg ḫtp hotpe ‘be gracious, peaceable, set (sun)’ > NUA *huppi ‘peaceable, behave, sink, go down’ (182-4)
*-tp- > -’p-: Eg stpt ‘choice things of food’ > SUA sa’pa ‘meat’; *sa’pï ‘fat’ (256)
*-’b- > -p-: di’b-aa ‘wolf-the’ > UA *tïpa / *to’apa 'wolf’ (618-p)

In etyma from Semitic-p and Egyptian, bilabials b, p, f are usually lost when 1st consonant in a cluster:
*-bʕ- > -w-: ṣibʕ- ‘finger’ > UA *sïwa /WMU *sipwa /Tep*capiwa ‘finger’ (747-p)
*-pʕ- > -w-: Eg ḥpʕ ‘chew’ > UA *hiwa ‘taste’ (299)
*-p’- > -w-: Eg sp’ ‘centipede’ > UA *ma-siwa ‘centipede’ (*sipwa > siwa, bilabial > ø as 1st C in cluster) (297)
*-b’- > -w-: Eg ib’ ‘dance, run’ > *yab’a/i > UA *yawa / *yawi ‘dance’ (296) (bilabial > ø as 1st C in cluster)
*-b’- > -w-: Eg ḏb’ ‘leaf’, pl: ḏb’-w ‘leaves’ > UA *sawa ‘leaf’ (467) (bilabial > ø as 1st C in cluster)
*-bx- > -k-: Eg ʕbxn ‘frog’ (> *wapkan) > UA *wakaN-ta > *waqatta ‘frog’ (bilabial > ø as 1st C in cluster) (298)
*-px- > -x-: npḫ ‘blow, breathe’; *napxat ‘puff, breath, gust’ (*napxa > nïka) > UA *nïka ‘be windy, blow’ (1218-p)
*-pš- > -s-, in one language -ps-: Eg xpš ‘foreleg, thigh’ (Coptic šopš) > UA *qapsi ‘thigh’; others kasi (294)
*-pd- > -t-, in one language -pt-: Eg xpd ‘buttock’ > UA *kupta ‘buttocks’; others kuta (295)
*-ft- > -t-: Eg xfty(w) ‘enemies’ > UA *qaytu ‘enemy, opponent’ (486)
*-bṭ- > -c-: *-bṭaḫ > -cawa (542-p)
*-br- > -r-: gabr-aa, pl: gabr-iim/iin ‘great man’ > UA *kïri ‘man, old man, elder’ (1180)
*-bṣ- > -s-: rbṣ ‘lie down (often of animals)’; rebɛṣ / rabaṣ ‘resting place’ > UA *tosa / *ta’so / *tapa’sol ‘nest’ (1242-p)
*-pḫ- > -w-/Tak -ŋ-: šipḫaa ‘maid’ > *siwa 'female, girl, sister, daughter' (757)
*-p’- > -w-/Tak -ŋ-: rp’ / raapaa’ ‘to heal’; *roop’-aa ‘healer-the’ > UA/Tak/Tb *toŋa ‘cure, to doctor s.o.’ (1237)
Apparent exceptions, but not really:
*-bt- > -pt-: Eg sbty; Coptic sobt ‘wall, fence’ > Yq sápti ‘fence of branches’ likely a later cluster < *sapati (133)
*-pḫ- > -pu-: Eg tpḫt ‘cavern, hole (of snake)’ > UA *tapu 'hole' probably had consonants separated *tapuḫ… (207)

Sibilants (though usually > s initially and intervocalically) **as 1st consonant in a cluster**, were absorbed to disappear or show some residual evidence of a former 1st consonant, occasionally doubling the 2nd consonant:
*-šk- > -hk-: moškat ‘bracelet, fetter, belt > Tb mohkat ‘belt’ (1045)
*-št- > -Ct-: ’išaa / ’išt- ‘woman, wife of’ > Hp wïïti / wïhti ‘woman, wife’ (574-p)
*-št- > -Ct-: qušṭ-aa ‘bow-the’ > UA *kuCta-pi ‘bow’ (967-p)
*-śṭ- > -Ct-: qśṭ ‘measure’; qəśiiṭaa ‘weight, money’; qesṭ-aa ‘measure-the’ > UA *koCta/i ‘bark, shell, money’ (1248)
*-śṭ- > -Ct- > -Cc-: qśṭ ‘measure’; qəśiiṭaa ‘weight, money’; Aramaic qesṭ-aa > UA *pa-koCci ‘shrimp’ (1249)
*-śṭ- > -Ct-: zwsṭ- ‘belt’ > UA *ṣutka ‘belt’ (if -ka another morpheme) (1048)
*-sk- > -kk-: psḫ / *pissex, pl: pisx-iim ‘limping’ > UA *pisika / *pikka ‘bad, rotten, infected, limping’ (640-p)
*-sq- > -k-: Eg isq ‘linger, wait for’, s lost in cluster, *isqV > * ïka > UA *ïka / *ïkï ‘remain, be in a place, let lie’ (525)
*-ṣm- > -m-: ʕɛṣɛm ‘bone’, pl ʕəṣaam-iim ‘bones’ (< *ʕaṣm); Arabic ʕaẓm- ‘bone’ > Azt *omi / *ohomï ‘bone’ (1477)
*-ṣh- > -ṣḫ- > -hu-: yiṣhar ‘oil’ > UA *yuhu ‘grease’ (1120)
*-šk- > h-: -škab ‘lie down’ > UA *hapi ‘lie down’ (983)
*-šk- > k-: šakuur ‘drunk’ or šikkoor ‘drunk’ > UA *kuru ‘mescal, agave’ (59)
*-sb- > -kw-: sbl ‘carry’; sabbaal ‘burden carriers’; *hisbiil > Hp iikwil-ta ‘put on the back to carry’ (40-kw)
*-šb- > -kw-: yšb / yoošbim ‘sit, pl’ > UA *yukkwi ‘sit, pl’ (1158-kw)

*-ṣl- > -l-: ṣlʕ / impfv: -ṣlVʕ ‘limp, be lame’ > UA *lo’i ‘lame, limp’ (1108)
*-ṣm- > -m-: ṣmẖ / yi-ṣmaẖ (< *ya-ḍmax) ‘sprout, grow’ > UA *yama ‘sprout, grow, up’ (813-p)
*-sšt- > -t-: Eg psšt ‘mat (made of the psš plant)’ > UA *ha-pït 'blanket' (402)
*-sn- > -n-: Eg msnẖ ‘rotate, turn backwards,turn, turn away’ (*masnVẖ) > UA *manu 'turn, change' (524)

Sometimes sibilants are lost even as 2nd consonants in the cluster

*-uẖši- > -uhi-: bwẖšyn(’) ‘green herbs’ > UA *puhiC ‘green’ (870-p)
*-mš- > -m-: ruumš-aa’ ‘evening-the’ > Sr *ruma’- ‘become dark’ (1283-p)
*-qš- > -k-: qšb / -qšeebuu ‘perk up (ears), listen, pl’ > UA *kïpu ‘hear’ (1068)
*-qš- > -k-: qšb / -qšeebuu ‘perk up (ears)’, *na-qšab ‘what is perked up’ > UA *naqa / *nakap / *nakas ‘ear’ (1070-71)

Some sibilants are kept, though 1st consonant or from loss of V becoming a later cluster
*-sg- > -sk-: sgy ‘be many, great’; *hosgay ‘be made great’ > Hopi hoskaya ‘large, huge, enormous’ (1414)
*-śk- > -sk-: hiśkiil, hiśkal- ‘understand, make wise, insightful’ > CN iskalia ‘be discreet, prudent’ (1293)
*-šk- > -sk-: muskir ‘alcoholic beverage’; unattested *ma-škar / *mi-škar > CN meškal-li ‘alcoholic drink’ (60)
*-šr- > -s-: šrq ‘to whistle, hiss’; wayyišroq-uu ‘they whistled, hissed’ > UA *wisuko ‘whistle’ (1215)

Sibilants, though usually s initially and intervocalically, often and naturally **become c when 2nd C of a cluster**:
*-dš- > -c-: *xdš ‘scratch’, xadš ‘scratching’; Arabic xadš ‘a scratch, scratch mark’ > UA/Tep *kïca 'scratch' (1490-p)
*-dd- > -c-: Eg xdw / xddw ‘fish(es), coll. pl’ > UA *kïcu ‘fish’ (365-6)
*-nz- > -c-, but Ca/Cp -n-: manzaal ‘star, moon’ > UA *mïcaC / *mïncaC (1077-p)
*-nš- > -c-, but -nc- in 2: Eg wnš / wnšiw ‘jackal’; Coptic: woonš ‘wolf’; wnšt ‘f.’ > Num *wancio / wocia ‘fox’ (129)
*-ns- > -s-/-hs-: Eg kns ‘pubic region’ > Wr kohsí ‘anus, vagina’ (358)
*-rs- > -c-/-nc- in one language: qarsol ‘ankle’ > UA *kwi(n)co ‘ankle’ (858-p)
*-rs- > -c-: qursəl-aa ‘ankle bone-the’; Akkadian kursinnu ‘region of the ankle-bone’ > UA *koci 'ankle(bone)’ (859-p)
*-rṣ- > -c-: ’arṣ-aa ‘earth-ward, to the earth’ > UA *wïcï, NUA *-y-, Num *-’- (581-p)
*-rṣ- > -’c-: qrṣ ‘bite’ > UA *kï’ca 'bite' (1447)
*-rz- > NUA -’-: ’arz-aa’ ‘cedar-the’ > NUA *wa’aC ‘juniper/cedar’, UA *-c- > NUA -’- also at 581 and 532 (582-p)
*-rs- > -s-: gursiptu ‘butterfly’ > UA *asiNpu(tonki) 'butterfly’ (1057).
1057 and 358 above may be exceptions showing *-CS- > -s- instead of *-CS- > -c- (S = sibilant) as usual in the other 9, but keep in mind that c and s discrepancies occur in UA itself, as the two can differ only slightly.

Other 1st consonants of clusters are also lost or are absorbed to double the second consonant

*-kb- > -p-: kbd ‘be heavy, honor, sweep’, hiqtiil: hi-kbad > UA *(hi)paca ‘sweep’ (1354-p)
*-kt- > -t-: ktš / *-ktušu ‘pound, bray’ > tusu ‘grind’ (1094)
*-kb- > -pp-: kaukb-aa(’) ‘star-the’ > UA *kuppaa’: Sr kupaa’ ‘to shine (as of the stars)’ (1274-p)
*-kt- > -Ct-: bkt ‘to weave’ > UA *kwiCta ‘braid, wind around’ (1445-kw)
*-ks- > -s-, Eu -ks-: Eg tks ‘pierce’ > UA/Eu *tïkso ‘pierce, poke’, but Op/Tr tesso (124)
*-nd- > -tt-: buundəq-aa ‘ball, globule, sphere-the’ > SP potto ‘round, spherical’ (1374-p)
*-tq- > -k-: motq-o ‘its/his sweetness’; motq-aa ‘her/its …’ > UA *mumuko/ka ‘bee’ (1231)
*-tq- > -k-/-kk-: ’etqaraš ‘to shade, put in the shade’ > UA *hïkka / *hïkya ‘shade’ (1220)
*-tq- > -k-: tqp, impfv: -tqap ‘prevail, overpower’, təqoop ‘might, strength’ > UA *kopi ‘win/lose in a game’ (1081)
*-ṭm- > -m-: ʕaṭmaa ‘thigh, n.f.’ > UA *uma ‘thigh, upper leg’ (1282-p)
*-df- > -v-: Eg ddft ‘snake, internal bodily worm’ (Coptic jatfe) > Sr sïväṭ-ṭ ‘body louse’ (311)
*-tp- > -pp-: pakken / etpakkan ‘speak much, chatter, gossip’ > UA *aNpaka- / *-appaka ‘talk, speak’ (1151-p)
*-kb- > -kp-: rkb ‘mount, climb up on’ > CN tlakpa-k ‘above, on top’ (887-p)
*-kb- > -pp-: rkb ‘mount, climb up on’ > UA *cippih ‘prairie dog’ (rVkbi > tikpi > tippi > cippi) (888-p)
*-kb- > -pp-: rkb ‘mount, climb up on’, rikb-aa ‘upper millstone-the’ > UA *tïppa ‘mortar (and/or) pestle’ (889-p)

Sometimes the 1st consonant of a cluster reduces to a glottal stop rather than entirely disappearing:

*-mr- > -’y-: Aramaic tuumr-aa ‘palm-the, date-palm-the’ > UA *tu’ya ‘palm tree, sp’ (743-p)
*-qn- > -’n-: diqn-aa ‘beard-the, chin-the’ > UA *tï’na > *tï’ni ‘mouth’ (617-p)
*-qn- > -’n-: zaqn-o ‘chin-his’ > NUA *ca’no ‘chin, jaw’; SUA *ca’lo ‘chin, jaw’ (628-kw)
*-xt- > -’t-: taxt-e ‘under-him/it’ or taxta ‘under’ > Wr te’ré ‘down on the ground’ (1389-p)
*-kt- > -’t-: makteš ‘mortar, grinding stone’ (< ktš ‘grind’) > UA *ma’ta/*maCta /*mattas ‘grinding stone, mortar’ (614)
*-kb- > -’p-/-pp-: rkb / rakb-uu ‘they mounted, climbed’ > UA *tï’pu ‘climb up’ (< rakb-uu) (99-p)
*-kb- > -’p-/-pp-: rkb / rakb-uu-hi ‘they climbed it’ (Syriac) > UA *ciCpuhi 'climb’ (< rakb-uu-hi) (99-p)
*-rd- > -’r-: ṣ̯pardeaʕ ‘frog’ > UA *kwa’ro ‘frog’; *haC ‘the’ clustered *ha-ṣṣpardVʕ > kwa’ro ‘frog’ (1378-kw)

Also -h- > -'- as 1st consonant of a cluster
*-hr- > -'r-: Eg phr 'turn, turn about, revolve,' > UA *pi'ri-na > *piyi(na) 'spin/twist thread, make rope' (289)
*-hp- > -'p-: nhp 'copulate' > UA *na'pa 'join/be together, copulate' (192) see also 506
*-ht- > -'t- > -Ct-: Eg mht 'insect' > UA *matta / *maCti 'tick' (437)
*-hw- > -'w-: tehwe 'you are' > UA te'wa 'you'; yehwa 'he is' > UA ye'wa 'he' (110-p)
Glottal stops themselves are often absorbed to double the 2nd consonant:
*-'k- > -kk-:'aakal, *to'kal 'she/it eats' > UA *tïkkaC 'eat' (796-p)
*-'q- > -kk-: Eg p'q 'thin blade, leaf, sheet (of metal)' > UA pikkaC 'knife' (433)
*-'q- > -kk-: Eg f'k 'be bald, shorn' > UA *piCka / *pikka / *piNka 'smooth, bald' (276)
*-'d- > -tt- / -Cc-: Eg ɧ'dt 'basket' > UA *huCta / *huCca 'basket' (404)
*-ht- > -'t- > -Ct-: Eg mht 'insect' > UA *matta / *maCti 'tick' (437)
*-'p- > -pp-: Eg k'p 'close (eyes), cover, hide self, droop (eyebrows)' > UA *kuppa / *kuCpa 'close (eyes)' (398)
*-'p- > -pp-: Eg g'p 'cut' > UA *kappi 'break, cut' (434)
*-'p- > -pp-: Eg g'p 'cut' > UA *koppi 'break' (435)
*-'b- > *-Cp-: Eg i'bty 'east, left' (Coptic yebt 'east') (*ya'baty? > *yo'boty) > UA *oCpoti 'left' (300)
In the unique cluster of *-C'- > -'w-, the 1st consonant > glottal stop, while the 2nd consonant, a glottal stop > w:
*-x'- > -'w-: Eg wx' 'seek, desire' > UA *wi'wa / *wa'wa 'seek, want' (288)
*-x'- > -'w-: Eg px' 'purge, clean' > UA *pi'wa 'clean' (286)
*-d'- > -w-: in bad'a 'beginning, start' > pïwa 'first, begin' (545-p)

Sometimes the imperfective pronoun prefix is retained with the impfv stem (*ya-qmuṣ 'be stingy' > UA *yamuC 'stingy'); however, at least as often, the impfv stem alone continued into UA without the prefixes. In such cases, the first two consonants of the stem form a cluster (-qm-), but the continuance of the stem without prefix puts that cluster in initial position, which loses its medial behavior tendencies, and naturally almost always loses the 1st consonant and simply begins with the 2nd consonant for Semitic-p items, for which there is no gemination or sign of the 1st consonant.
*-kb- > -p-: kbd 'be heavy, honor, sweep', impfv: -kbod > UA *poci 'sweep' (1353-p)
*-kb- > -p-: kbd 'be heavy, honor, sweep', hiqtiil: hi-kbad > UA *(hi)paca 'sweep' (1354-p)
*-kp- > -p-: kpr, impfv: *-kpor 'cover' > Tr pora 'cover' (1396-p)
*-ṣb- > -p-: ṣbʕ 'to dye'; impfv: *-ṣboʕ; Arabic impfv: ya-ḍbuġu 'to dye' > UA *pu 'dye' (1438-p)
*-ṣl- > -l-: ṣlʕ / impfv: -ṣlVʕ 'limp, be lame' > UA *lo'i 'lame, limp' (1108)
*-lx- > -k-: lxš / *-lxus-uu 'whisper, mutter sounds' > UA *kusu 'make sound (characteristic of species)' (1064-p)
*-kt- > -t-: ktš / *-ktušu 'pound, bray' > tusu 'grind' (1094)
*-qn- > -n-: qn' / impfv -qna' 'be jealous' > UA *nawa 'jealous' (1031-p)
*-lm- > -m-: -lmad 'learn' > UA *mata / mati 'know' (701)
*-rʕ- > *-w-: rʕy /impfv: *ya-rʕay 'to graze, tend (animals)' > Hopi layi 'herd, drive (animals)' (UA*w > Hp l) (1358)
In contrast, Semitic-kw items even in stem-initial clusters often show their 1st consonant prominence in the cluster.
*-mʕ- > -ŋ-: -mʕak 'squeeze, crush, rub' > UA *ŋaka/i 'grind, scrape, rub against' (940-kw)
*-nʕ- > -ŋ-: -nʕar 'shake, grunt, roar' > *ŋïy 'shake, be dizzy' (941-kw)
*-br- > -kw-: br' / -bra'- 'eat' > UA *kwa'a 'swallow, eat' (46-kw)
*-gd- > -ŋ-: gadiir 'walled place', *ya-gdiir 'cause wall to go up' > UA *yaŋi 'fence, enclosure, roofless walls' (916-kw)

-R- as 2nd consonant clustered with -t- or such simply strengthens the -t-
*-zr- > -c-: zrʕ / -zriiʕ 'bear a child' > CN ciiwa 'beget, gender' (624)
*tr- > t-: zˀrooʕ 'arm, forearm, power'; Arabic ðiraaʕ 'arm, forearm' > UA *toC 'with the hand' (1234-p)
*-tr- > -t-: hit-rapp'aa 'have oneself healed' > UA *hitowa 'medicine' (1236-kw)
*-ðr- > -Cc-/-'ci-: Arabic baðara 'sow'; Arabic baðr- 'seed(s)' > *paCci / *pa'ci 'seed' (554-p)

In the next two, the sequence of laryngeal + y + t behaves similarly to each other, adjusting to a CVCV pattern:
*-ɧyt- > -uti: Eg mɧyt 'fish (collective), literally: swimmers' > UA *muti 'fish' (234)
*-'yt- > -uti: Eg m'yt 'sheath, vagina' > UA *muci or *muti 'vagina' (235)

Nasals in clusters with low-back consonants become NUA velar nasal ŋ: *-m'- > -ŋ-, or *-Nʕ- > -ŋ-
*-m'- > -ŋ-: Old Canaanite hassim'al 'the-left' > UA/ Tb 'aašiyan / aašiŋan 'left side' (1246)
*-m'- > -ŋ-: Eg ɧm' / ɧm't 'salt' (Coptic hmu) > UA *omwa > *oŋwa / *oŋa 'salt' (280)
*-m'- > -ŋ-: Eg sm' 'lung' > UA *somwo / *soŋo 'lung' (281)
*-m'- > -ŋ-: Eg qm' 'create, beget' > UA *kumCa / *kumwa / *kuŋa 'husband' (284)
*-mʕ- > -ŋ-: -mʕak 'squeeze, crush, rub' > UA *ŋaka/i 'grind, scrape, rub against' (940-kw)
*-nʕ- > -ŋ-: -nʕar 'shake, grunt, roar' > *ŋïy 'shake, be dizzy' (941-kw)
*-lm- > -'m- > -ŋ-: 'alima 'to experience grief', 'almaanaa 'widow' > UA *o'mana / *oŋana 'sad, suffering' (1144)

Contrast the next two pairs, one from Semitic-p and one from Semitic-kw:
*-mr- > -'y-: Aramaic tuumr-aa 'palm-the, date-palm-the' > UA *tu'ya 'palm tree, sp' (743-p)
*-mr- > -my-/-mi-: ṣɛmɛr 'wool' > UA *comi / *comya 'hair' (742-kw) (vs. Sem-p tumraa > tu'ya 'palm tree')
*-qm- > -m-: qmṣ / impfv: *ya-qmuṣu 'take, be miserly, stingy' > UA *yamuC 'angry, stingy' (1035-p)
*-qm- > -ŋ-: šiqma(t) 'sycamore tree' > UA *sïŋŋa(C) 'cottonwood or aspen' (1012-kw)
In homorganic clusters, the nasals are lost in most languages, but do appear in one or two languages:
*-nz- > *-c-, but Ca/Cp -n-: manzaal 'star, moon' > UA *mïcaC / *mïncaC (1077-p)
*-nš- > *-c-, but -nc- in 2: Eg wnš / wnšiw 'jackal'; Coptic: woonš 'wolf'; wnšt 'f.' > Num *wancio / wocia 'fox' (129)
*-ns- > *-s-/-hs-: Eg kns 'pubic region' > Wr kohsí 'anus, vagina' (358)
*-tn- > -c-: maatn-aim 'loins, dual'; Arabic matnat-aani 'loins, dual' > Ls mááča-t 'back' (1356)

In four instances of the cluster *-qn- below, three of the four (617, 628, 1031) approximate the expected *-'n-; and in the fourth, Semitic-kw *-qn- > -ŋ- (1032) is also expected. The 1032 Semitic-kw *-qn- > -ŋ- and the 628 Semitic-kw *-qn- > *-'n- may seem contradictory, but the cluster in 1032 of the impfv verb form has been a permanent cluster in Semitic for thousands of years while the cluster from which 628 derives was only occasional, only when possessed: *đaqan 'chin', but đaqn-o 'chin-his'. In other words, the two clusters were likely set centuries apart.
*-qn- > -'n-: diqn-aa 'beard-the, chin-the' > UA *tï'na > *tï'ni 'mouth' (617-p)
*-qn- > -'n-: zaqn-o 'chin-his' > NUA *ca'no 'chin, jaw'; SUA *ca'lo 'chin, jaw' (628-kw)
*-qn- > -n-: qn' / impfv -qna' 'be jealous' > UA *nawa 'jealous' (1031-p)
*-qn- > -ŋ-: qn' / impfv -qna' 'be jealous' > UA *ŋa'i 'get even, be jealous' (1032-kw)

In the below, we see Semitic-kw continuing its 1st consonant dominance of the cluster in 1375 (*-nd- > -n-), but in the Semitic-p and Egyptian contributions, the 1st consonant nasal is absorbed to double the following stop:
*-nd- > -n-: buundəq-aa 'ball, globule, sphere-the' > UA *kwinu 'round, spherical' (1375-kw) (vs. Sem-p *potto)
*-nd- > -tt-: buundəq-aa 'ball, globule, sphere-the' > SP potto 'round, spherical' (1374-p)
*-nt- > -tt-/-nc-: pant-aa' 'upper leather of a shoe, instep of the foot-the' > UA *paNca / *patta > *pacca 'shoe' (1281-p)
*-nt- > -tt-: Eg ʕnt 'nail, claw' (Coptic ine) > UA *watti 'claw, fingernail' (262)
*-nt- > -tt-: Eg bnty 'breasts' > UA *piCti / *pitti 'breast' (139)
*-nt- > -tt-: Eg mnt 'thigh'; mnty 'thighs, dual' > UA *macci / *maCti 'thigh, upper leg' (301)
*-nt- > -tt-: Eg ɧnt'sw 'lizard' (Coptic anθus) > UA *-hoto- 'lizard' (185)
*-nq- > -kk-: Eg inqt 'net' > UA *ikkaC / *iCkaC 'carrying net' (384)
*-nx- > -ŋ-: Eg ʕnx 'to live, v, (living) person, n' > Num *onka / *oŋa 'baby' (427)
*-nx- > -'ŋ- or SUA -'n-: Eg ʕnxt 'grain' > Tr/Wr *(w)o'na 'corn cob, olote' (443)
*-nx- > -'k- or -Ck-: Eg wnxyt 'clothing' > UA *waCkay(la) 'clothing, shirt' (223)
*-nẖ- > -ŋ-: Eg gnẖt 'a star' > Num/SP kaŋa 'morning star' (156)
*-nɧ- > -'-/-n-: dnɧ 'rise, shine (sun, moon, star)'; dinɧ-aa 'sunrise, star' > Num tinuN/ti'uN in *ta-tinuN- 'star' (1408)
*-gn- > -ŋ-: šagni 'remove from its place, transform, change clothing' > Hopi siiŋi 'peel, shed skin (of a snake)' (1419)
*-mm- > -'m-: tmm / tumma 'be finished, come to an end' > UA *tuma / *tu'ma 'finish' (820)

In the four items below, the languages show -mm-, but Kaufman reconstructs *-nm-, which exactly matches Egyptian, though I do not know how he figured out *-nm- for them:
*-nm- > -mm-/-nm-: Eg xnm 'inhale, smell, enjoy, eat (food)' > UA *kuCma/i / *kunmi (Kaufman) 'chew, nibble' (302)
*-nm- > -mm-/-nm-: Eg xnm 'inhale, smell, enjoy, eat (food)' > UA *kaNmu / *kanmï (Kaufman) 'jackrabbit' (463)
*-nm- > -mm-/-nm-: Eg xnm 'inhale, smell, enjoy, eat (food)' > UA *kamma / *kanma 'taste, have a taste like' (303)
*-nm- > -mm-/-nm-: Eg xnm 'inhale, smell, enjoy, eat (food)' > UA *kaCma 'cheeks, mouth' (304)

Nasals had often already assimilated in the ancient languages: Proto-Semitic *-nC- > Hebrew -CC-
ngʕ / *ti-ngaʕ 'she/it touches' > Hebrew tiggaʕ > Hp toŋo(k-) 'come into contact with, touch, reach' (*-g- > -ŋ-) (1196)
ngd / *hangiid > Hebrew (y/t/')aggiid 'tell, announce, inform' > TO 'aagid 'tell s.o. s.th.'; Hp ki-ta 'say' (1310-p)
Arabic singaab 'squirrel' corresponds to Hebrew *siggoob 'squirrel' > UA *sikkuC 'squirrel' (57)
mukkɛ 'smitten' (*mu-nkay > Hebrew mukkɛ) > UA *mukki 'die, be sick' (52)
hukkɛ 'was smitten' (< *hu-nkay) > Tb hookii 'deceased grandfather / grandson after death' (53)
hikkiir 'recognize, know' (< *hi-nkiir > Hebrew hikkiir) > Tr iki 'know, be aware of' (810)
npl / *ta-npiil > *teppil: 'cause to fall' > UA *tïppin 'trip, hunt, track' (822)
npš 'to breathe'; nɛpɛš 'breath, life, soul'; unattested: *hippiiš 'breathe' > UA *hikwis 'breathe, spirit, heart' (839-kw)
nṭʕ 'to plant', *yi-nṭaʕ > Hebrew yi-ṭṭaʕ 'he plants' > UA *'ïca 'to plant' (774-kw)

Pharyngeals become a round vowel with glottal stop as 1st consonant in a cluster with a nasal (or other):
*-ħn- > -o'n- or pharyngeal + nasal > u'N / o'N
*-ħn- > -o'n-: bħn, *-baħħen 'observe, examine, pull out organs to examine' > UA *po'na 'pull out, uproot' (1513-p)
*-ħn- > -o'n-: ħny / maħ^{a}ne < *maħne 'camp, people of the camp' > UA *mo'na / *mo'ona 'son-in-law, in-law' (1407)
*-ħn- > -o'n-: ṯħn 'grind, pound, crush, destroy' > UA *to'na(C) 'hit, pierce (773)
*-ħm- > -um-: yħm 'be in heat, be warm' > UA *yuma > *yoma 'copulate' (855)
*-ħm- > -u'm-: yħm 'be in heat, be warm' > UA *yu'mi 'warm' (856)
*-ʕm- > -u'm-: ṭʕm 'taste, eat'; plural participle ṭoʕmiim > UA *cu'mi 'suck, sip (771)
*-ħti- > -u'ci-: Eg swħty / sħty 'fish, sp.' > Wr so'cí 'fish' (456)
*-ʕṭll- > -o'n-: ʕ^{a}ṭallep 'bat'; ha-ʕ^{a}ṭallep 'the-bat'; Aramaic ʕ^{a}ṭallep-aa 'bat-the' > UA *ho'napi 'bat' (784)
*-ħl- > -ol-: nħl 'take/have as possession'; naħ^{a}lat 'inherited property' > TO nolawt 'buy, buy from' (1308)
The Phoenician *ha- and lack of rounding for the pharyngeal both suggest Semitic-kw for the next item:
*-ʕṭ- > -'t-: ʕaṭiišaa 'sneeze, n.f.', ha-ʕṭiišaa 'the-sneeze' > UA *ha'tisa 'sneeze' (1162-kw)
The following two may be due to a three-consonant cluster *-ħNw- > -ŋ-:
*-ħm- > -uŋ-: Eg nħm 'take, carry off' (Coptic nuuhm), if pl nħmw > Tak *nuŋu 'carry'; SUA *nuk 'carry, take' (369)
*-ħn- > -oŋ-: Eg ṯħn(w) 'sparkle, shine, gleam'; ṯħnħn 'be bright' > UA *toŋa 'hot, heat (of) sun/day, shine' (462)

Liquids, usually l, sometimes remain in the cluster:
*-lm- > -lm-: blm 'muzzle, wrap, restrain'; baalm-aa 'halter' > UA *kwalma 'put arm around, carry under arm' (16-kw)
*-lw- > -l- or -w-: śəlaaw / salway; Samaritan šalwi; Hebrew pl: śalwiim 'quail' > UA *solwi / *sowi 'quail' (1082)
Liquids as 1st C in a cluster may double the 2nd C, become glottal stop (-LC- > -CC-/-'C-), or nasalize in NUA
*-lm- > -'m-: 'alima 'to experience grief', 'almaanaa 'widow' > UA *o'mana / *oŋana 'sad, suffering' (1144)
*-lm- > -m-: -lmad 'learn' > UA *mata / mati 'know' (701)
*-rn- > -nn-/-'n-: 'arnébet; Akkadian 'arnabu; Arabic 'arnab 'hare, rabbit' > UA *wa'na/wanna 'rabbit net' (596-p)
*-rp- > -pp-: ħrp / ħɛrpaa 'shame, mutilation, deficiency' > Hp ööpï 'sickly, wounded, invalid, one with disability' (663)
*-rk- > -kk-: bar kəbaan-(aa) 'belt', kbn 'gird' > UA *pakkaC 'belt' (1446-p)
*-rk- > -kk-: karkara / qarqara 'coo (pigeon), grumble, gurgle' > UA *kakkara 'quail' (960)
*-rk- > -k-: birkaa 'blessing, praise' (often sung) > UA *kwika 'sing, song' (35-kw)
*-rg- > -kk-: ħirgaa' 'dust' > UA *huCkuN 'dust' (665)
*-rd- > -tt-: 'ard-aa' 'mushroom-the' > UA/Num *hitto'oC / *witto'oC 'mushroom' (1110-kw?)
*-rd- > -tt-: qarduun-aa 'louse-the, nit-the' > UA *aCtïN > *attïN 'louse' (971-kw)
*-rd- > -'r-: ṣ^{ə}pardeaʕ 'frog' > UA *kwa'ro 'frog'; *haC 'the' clustered *ha-ṣṣpardVʕ > kwa'ro 'frog' (1378-kw)
*-rd- > -r-: ṣ^{ə}pardeaʕ 'frog' > UA *siboro 'tadpole' (1377-p)
*-rṭ- > -Ct-/-tt-: sarṭaan / *sarṭoon 'scratcher, crab' > *saCtun > siCtun / *suCtun 'claw, nail, crab' (832-p)
*-ld- > -t-: *xuld / *xild-aa' 'mole, cave dweller-the' > UA *kita 'groundhog' (1088-p)
*-lṭ- > -tt-i > -c-i: bilṭii 'worm sp' > UA *kwici 'worm' (23-kw)
*-l- > -l-: *ħool 'sand'; Aramaic ħaal-aa; Aramaic pl: haalaat-aa 'sand, sandy area' > UA *(h)ola (Tep) (1141)
*-lt- > -tt-: *ħool-taa > *otta (Num) 'sand' (1141)
*-lt- > -tt-: plṭ 'escape', pl participle: poolṭiim > UA *puCti 'escape' (793)
*-lg- > -k-: Hebrew šɛlɛg 'snow' (< * θalg) > UA *sïk: CN sek-tli 'snow, ice' (760)
*-lg- > -kk-: Aramaic talg-aa 'snow-the' > NUA/Num *takka 'snow' (1276-p)
*-lp- > -pp-: qlp 'to peel, shell, scrape off, strip off'' > Hp hàapo(-k-) 'get loosened, chipped' (1010-kw?)
*-lk- > -(N)k-/-ŋ-: hlk, impfv: sg: yelek / yelku / *yelka 'go' > UA *yïka or *yïŋa / *yïNka 'enter, move, travel' (1085)
*-lk- > -ŋ-: mlk 'to lead in council'; mɛlɛk / malk- / moolek 'king' > Hopi moŋwi 'chief' (1300)
*-rq- > SUA -'k-: prq 'separate from, depart, go away' > UA *pa'ku 'out' (1243-p)
*-rg- > SUA -'k-/-y(k)-: drg 'rise, step, tread' > UA/Tep/Wr *tïy(k) / *tï'kï 'climb, step, make thump noise' (1326-p)
*-rq- > SUA -'k-/-k-: Eg srqt / s'qt 'the-scorpion' > UA/TrC *saka 'scorpion' (363-Eg)
The cluster *-r'- is nicely arrayed as expected in 1042-kw, which see:
*-r'- > Tak -yh-, Hp -n-, SUA -r-: mar'a 'princess' > SUA *mara / Tak *mayha 'daughter' (1042-kw)
*-r'- > Num -'-: *mar'a 'princess' > Num *ma'a 'woman' (1043)
-R- with a pharyngeal or other back consonant often yields -ŋ- in NUA:
*-rʕ- > -ŋ-: ṣirʕaa 'hornets' > UA *saŋa 'yellowjacket, stinging one' (737-p)
*-rʕ- > -ŋ-: ṣrʕ / ḍrʕ 'weak, lean, emaciated', v.n. ḍarʕ, ḍuruuʕ > UA *corowa / *corwa > coŋo 'be hungry' (1066-p)
*-ʕr- > -ŋ-: ʕry / ʕr' / ʕaraa, impfv: ta-ʕra 'to contain, hold' > UA *taŋa 'bag, sack, put in container' (1418-p)
*-rħ- > -w-/-ŋw-: Eg qrħt 'serpent, ally, partner' > UA *koNwa > *kowa; Tak/Azt*koŋwa 'snake, twin' (332)
*-rg- > Num -Nk-/-ŋ-/-kk-:'argaamaan 'red-purple'; Akkadian argamannu 'purple' > UA/Num *aNkaC 'red' (587-kw)
*-rq- > UA/Tak -ŋ-: qarqađaan 'squirrel' > UA *koŋi 'squirrel' (957-p)
*-kl- or *-rk- > -ŋ-: rkl / rakla, impfv: ta-rkulu 'kick' > UA *taŋa 'kick' / *cïŋï 'kick' (vs. 1134 below) (1507)

These may not have been clusters originally, but separated consonants that later clustered:
*-rʕ-/-roʕ- > -’w-: ʕaroʕer / ʕarʕaar ‘juniper tree’ > *wa’wari > waorí / awarí ‘juniper’ (689-kw)
*-rʕ-/-raʕ- > -’w-: pɛraʕ / *parʕ-aa ‘hair’ > UA *pï’wa ‘hair, hide, fur’ (1132-p)
*-rʕ-/-r^{a}ʕ- > *-w-: rʕy /impfv: *ya-r^{a}ʕay ‘to graze, tend(animals)’ > Hopi layi ‘herd, drive(animals)’(UA*w/Hp l) (1358)
*-rʕ- > -r’o-/-ro’o-/-’ro-: prʕš ‘jump’ / parʕoš ‘flea (jumper)’ > *par’osi / *paro’osi ‘jackrabbit’ (724)
*-rw- > -’w-/-’Vw-: Eg wr ‘big, much, many’; wrw ‘the greatest’ > UA *wïrwïru > *wï’wïru > wï’ïwïru ‘big’ (221)

Clusters separated: Cluster separation happened in both Masoretic Hebrew and in UA. In Biblical Hebrew, as voweled by the Masoretes centuries after the consonants were written, the so called guttural consonants (ʕ, ḫ, ’, r) in original Semitic clusters would separate the cluster with a vowel. For example, other Semitic languages show a cluster *-rʕ- in * ʕarʕar ‘juniper tree’ while Masoretic Hebrew has both ʕaroʕer / ʕarʕaar, the first of which separated the cluster between two gutturals: ʕarʕar > ʕaroʕer. Note that a round vowel does this ancient separation of the two gutturals, and the anticipated consonant is a pharyngeal. For Semitic-kw we would expect something like UA *wayowey; and UA *wayori, if -ri is an old noun suffix, fits. Other examples of Masoretic separated clusters include *ya’miin > ya’amiin > UA *yawamin ‘believe’. UA also separates some clusters, though why some separate while others do not, is not always clear. Nevertheless, worth noting is that the UA separated clusters also involve laryngeals or r, as happens in Masoretic phonology also.
*-rʕ- > -’w-: ʕaroʕer / ʕarʕaar ‘juniper tree’ > *wa’wari / *wayori > waorí / awarí ‘juniper’ (689-kw)
*-rʕ- > -r’o-/-ro’o-/-’ro-: prʕš ‘jump’ / parʕoš ‘flea (jumper)’ > UA *par’osi / *paro’osi ‘jackrabbit’ (724)
*-rg- > -rug-: ḫargol ‘type of locust’; Arabic *ḫargal / *ḫurgul ‘locust’ > Tr urugi-pari ‘type of grasshopper’ (1321-kw)
*-’t- > -’ot-: qa’t-aa ‘pelican’ > UA *koto / *ko’ota ‘crane’ (1000-p)
*-’t- > -’at-: raa’taa / raataa ‘lung(s), n.f.’ > Cr ta’atime ‘lungs’ (1428)
*-qb- > -kup-: raqbubit ‘moth’ > UA *(V)kupïpika ‘butterfly’ (1054)
*-tp- > -’p-: Eg stpt ‘choice things of food’ > SUA sa’pa / sa’apa ‘meat’ (256)
*-lb- > -’p-: ḫelɛb ‘fat’ < *ḫilb > UA *wip / *wiCp / *wi’p (>*wi’i) ‘fat’ (652-p)
Liquid > -’- then anticipated (*-CL- > -C’- > -’C-) or anticipation and glottalization may be simultaneous:
*-ml- > (-m’- >) -’m-: śimlaa / śimla-t ‘wrapper, mantle, cloak’ > *sam’aC ‘to spread, v, a cover, rug, blanket, n’ (764)
*-kl- > (-k’- >) -’k-: tiklaa ‘purple-blue, violet’ > UA *tï’kaC ‘red pigment’ (1134)
*-đr- > (-c’- >) -’c-: bađara ‘sow’; bađr- ‘seed(s)’ > *paCci / *pa’ci ‘seed’ (554-p)
*-ḫr- > (-w’- >) -’w-: baḫr- ‘sea, large river, water (vs. land)’ > UA *paC (pharyngeal -C) / *pa’wi 'water' (1165-p)
*-šl- > (-lš- >) -’s- > -’as-: tašleeg ‘it is snowing’ (hiqtil impfv) > UA *ta’asïC 'freeze' (1336)
*-nr- > (-n’- >) -’n-: Eg ʕnr(t) ‘flint’ > UA *wi’naC ‘flint, arrowhead’ (426)
*-mr- > (-m’- >) -’m-: ṭmr ‘bury, cook underground with coals’ > UA *tï’ma ‘baked underground with coals’ (865)
*-ṭr- > (-ṭ’- >) -’t-: pɛṭɛr ‘firstborn’ < *paṭr- > UA *pa’ti / *paCti’i ‘older sibling’ (837)

Other types of 2nd consonants > ’ and then anticipated
*-nq- > -’n-: ynq ‘to suck’, impfv: yiinaq; yaanq-aa ‘nursing child-the’ > UA *yï’na ‘smoke by sucking’ (1160)
*-nx- > -’ŋ- or SUA -’n-: Eg ʕnxt ‘grain’ > Tr/Wr *(w)o’na ‘corn cob, olote’ (443)
Liquid as 2nd consonant is usually lost or lessened to -y- or -’-:
*-ql- > -k-: ḫaql-aa ‘field-the, open country-the’ > UA *oka ‘sand, earth, rock’ (1275)
*-qr- > -k-: qrʕ ‘rip/tear to pieces’, impfv: -qraʕ > UA *kowV ‘to tear’ (965)
*-ql- > -k-: šql take, take (self away), depart’ > UA *saka(la) ‘go, leave’ (1086)??
*-ṣr- > -l’- (Tb): ḫṣr (< *xḍr) ‘be green, verdure, vegetation’ > Tb hul’hulat ‘be green’ (1412-kw)
*-šl- > -l’- > -’as-: tašleeg ‘it is snowing’ (hiqtil impfv) > UA *ta’asïC 'freeze' (1336)
*-ḫr- > -r-: ḫrb ‘lay waste, destroy’; ye-ḫrab ‘massacre’ or *yuḫrab > SP yurava ‘be overcome’ (exception?) (674)
Velar/Uvular + -r- > -ky-:
*-gr- > -ky-: pagr-aa ‘corpse, body’ > UA *pïkyaa ‘skin, animal hide, flesh’ (1130-p)
*-gr- > -ky-: šigr-aa ‘drain, ditch, gutter-the’ > Hp sikya ‘small valley, ravine, canyon with sloped sides’ (1403-p)
*-qr- > -ky-: šqr ‘be fair complexion, blond, blondness, redness, fire color’ > Hopi sikya- ‘yellow’ (1405)
*-hr- > -’r-: Eg phr ‘turn, turn about, revolve,’ > UA *pi’ri-na > *piyi(na) ‘spin/twist thread, make rope’ (289)

Liquid *-ll- > -n- in Numic:
*-ll- > -n’n-: bll moisten, mix’ > UA *kwallV ‘soft(en), stir’, Num -nn-, SP -n’n- (22-kw)
*-nl-/-ll- > -n-: lebb, hal/han-lebb ‘the-heart’ > Hp ïnaŋwa ‘heart, life’ (1312-kw)
*-ḫabbil (< *ḫbl) ‘bind, tie together’ > SP wïkkwinta 'to wrap around, coil’ (658-kw)
And nasal clusters show glottal stop between the two in SP: *-NN- > SP *-N’N-
*-ll- > -n’n-: bll ‘moisten, mix’ > UA *kwallV ‘soft(en), stir’, Num -nn-, SP -n’n- (22-kw)
*-mm-/-mml- > -m’m-: wayyigammel ‘tie, load, adorn’ > SP wïkam’mi ‘put blanket over’ (938)

Clusters sometimes reduce the whole complexity to simply glottal stop -'-. Such even show a difference between closely related languages of the same branch. For example, no UA specialist would doubt the relatedness of the Tr and Wr terms in 1058 (below), or the terms of the closely related Numic languages in 1408, yet the discrepancies -y- vs. -'- and -n- vs. -'- are major differences without explanation to date.
*-rn- > -y-/-'-: šarnaqat 'cocoon', pl *sarnaqoot > Wr *ca'ïku / Tr *cayïku < *caCCïku 'cocoon' (1058-kw)
*-nɧ- > -'-/-n-: dnɧ 'rise, shine (sun, moon, star)'; dinɧ-aa 'sunrise, star' > Num tinuN/ti'uN in *ta-tinuN- 'star' (1408)
*-rq- > NUA -'-: 'arqə-taa / ʕarqə-taa 'fluke worm, parasite worm' > UA/Num *wo'a 'worm' (1224)
*-rz- > NUA -'-: 'arz-aa' 'cedar-the' > NUA *wa'aC 'juniper / cedar tree' (582-p)
*-rṣ- > -c-: 'arṣ-aa 'earth-ward, to the earth' > UA *wïcï, NUA *-y-, Num *-'- (581-p)

A remaining handful of unique clusters:
*-ʕr- > -ŋ-: ʕry / ʕr' / ʕaraa, impfv: ta-ʕra 'to contain, hold' > UA *taŋa 'bag, sack, put in container' (1418-p)
*-ʕrat > -wi 'girl' perhaps not originally a cluster (91-kw)
*-rw- > -v-/-'p-: rwy 'drink', hirwaa / hirvaa, hirvee- 'to water (s.o./s.th.)' > UA *hiCpï / *hi'pa / *hiypi 'drink' (1061)
*-kɧ- > -(x)kw-: Eg rkɧ 'fan into flames, burn, vi, be on fire' > UA *taxkwa 'ceremonial official, fire tender' (451)
*-lʕ- > -oh-/-'o-: saalʕaam 'locust' > UA *coho / *co'o 'grasshopper' (816-kw)
*-lʕ- > -w-/-ŋ-: ṣelaʕ / ṣalʕ- 'rib'; Arabic ḍlʕ 'incline/lean, limp', Arabic ḍilʕ- / ḍilaʕ- 'rib' > UA *cawa 'rib'; UA/Hp/Ca caŋa 'side, limp, rib'; Azt silaŋ 'rib'; this set is complex, as a variety of Semitic originals, with and without clusters, make it difficult to sort the variety of UA forms (744)
*-'x- > -'w-: 'ɧz (< *'xđ), impfv: yooɧez (< *ya'ɧiz) 'take, grasp' > UA *yawi / ya'wi / yaŋwi 'take, carry' (835-kw?)
Egyptian m'm' 'dom-palm tree' > UA *maCwa 'palm tree'; after initial ma…, the rest (-'m'-) scrunched to various cluster results of no consistency among UA reflexes, though Ch …mau'um… may refect it best. (227)
*-gd- > -ŋ-: gadiir 'walled place', *ya-gdiir 'cause wall to go up' > UA *yaŋi 'fence, enclosure, roofless walls' (916-kw)
In Sem-kw can expect *-gd- > -ŋ- as in 916, and in Sem-p, we might expect *-gd- > -'t- or such, so to see *-gd- > -k- in 1492 may make it invalid, unless the cluster separated (-gd- > -gVd) or some other explanation:
*-gd- > -k-: gdl 'wax / grow big'; mugdal 'big' > UA *mukaC-: Ls muká-t 'big, large' (1492-kw)
*-ryt- > -Ct-: guuryə-taa / guur-taa 'cub (female), young of animal (usually lion or dog) > UA *koCti 'dog' (1025)
These last two would feel better if they had company, more examples of the same cluster
*-rt- > -s-: ɧagor-taa 'girdle, loincloth' > UA *wikosa 'belt' (1046-kw)
*-rtɧ- > -s-/-r-: Eg wrt ɧq'w 'buzzard, great (of) magic' > *wirhukuN > *wis/rukuN 'buzzard, turkey vulture' (381)

7.3 Grammatical and Morphological Parallels

The grammatical and morphological parallels between the Near East languages and UA have been noted periodically throughout the book as they occur, but are gathered here for unified consideration.

Five Stative and Passive Affixes: Most pervasive, in all branches of UA, is the Egyptian old perfective / stative -i (final vowel -i on verbs), which final -i is also a perfective in Tep and a stative in all other branches:
(116) Egyptian old perfective/stative verb-i verb-i 'intransitive / passive / stative verb'
Three other Egyptian passives or statives are also found in UA, suffixes in both Egyptian and UA:
(117) Egyptian passive verb-w/-iw verb-wa/ verb-iwa
(118) Egyptian passive verb-tw verb-tu / verb-tuwa
(119) Egyptian stative suffix verb-ti verb-ti (WTr, Numic, others)
The Northwest Semitic passive / reflexive / reciprocal prefix is also found in UA:
(2) Northwest Semitic reflexive/reciprocal/passive prefix *na- > UA reciprocal/ reflexive prefix *na-

Five plural morphemes: Four Semitic plural suffixes match four UA plural suffixes, and one Egyptian prefix, which is also a plural prefix in Egyptian.
(1) Northwest Semitic masculine plural suffix *-iima > UA pl suffix *-ima
(904) Hebrew feminine plural suffix -oot / -ootee^{y}; the primary suffix -oot, is often augmented to -ootee(y) > UA *-tï 'plural suffix' in three branches of SUA plus Hopi in NUA. Besides being a regular plural suffix in those branches, many other instances of *-ootee^{y}* fossilized into UA terms from the Hebrew feminine plural of which we give an example in 564 below:
(564) Hebrew saapaa(t) 'lip', pl: sapoot 'lips', s^{ə}pootee^{y} 'lips of' > UA *puti 'lip' in Tbr tini-purí-t 'lip'
(1417) Aramaic -aayaa '-the' is the Aramaic definite plural suffix > Hopi -ya, one of Hopi's non-singular plural suffixes, yet it most often follows -a, as in -a-ya 'pl' to parallel Aramaic -aayaa

For three suffixes—*-iima > UA *-(i)ma, *-ootee^{y} > UA -*tï, *-aayaa > UA *-ya—the consistency is that the first vowel is usually lost in UA, while the consonant and final vowel more often remain in UA. The reason the first vowel is often lost is because most UA forms end with a vowel, which creates a dipthong or vowel cluster, which clusters in UA are usually simplified by the first vowel eliminating the second.

One Egyptian plural found in UA is a prefix, again both in Egyptian and in Tarahumara.
(121) Egyptian i- or ip- 'plural prefix on old demonstrative pronouns' (Gardiner 1969, 85; Allen 2000, 53) as in Egyptian pn, pw, tn, tw 'this'; ipn, ipw, iptn, iptw 'plural, these.'
Tr i- or ip- 'plural prefix': Tr čabóči 'spider'; Tr ičápoči 'spiders';
Tr siríame 'local/tribal leader, governor'; pl: isérigame 'leaders' (Brambila 1953, 14, 15)
Tr bineri 'alone, only, sg'; Tr a'wineri 'alone, only, pl' (< *appineri, Stubbs 1995, 413)

In addition, Hebrew's dual suffix is also a dual suffix in UA:
(905) Hebrew -ayim / -aym 'dual suffix' > Northern Ute and WMU -ïm/-yïm/-əyəm 'dual suffix'

Egyptian pw: Most UA pronouns are from Semitic or Egyptian (see 101-114, and the last item 1528); however, the one most impressive morphologically and syntactically is Egyptian -pw 'he/it' in phrases of 'noun/adjective-pw 'he is noun/adjective':
(122) Egyptian pw, originally a demonstrative pronoun 'this/it' later 'he/they' and came to be used for emphasis or topicalization, always in 2nd position in specific structures: A-pw B 'it is A who is B / A is B' or A-pw verb 'it is A who verbs'; Egyptian pw > UA *po/pu 'he, she, it, 3rd sg': Ls -pu-; Wc pï-; and My -po.
Ls yixél**vu**-l 'intelligent, alert' fits perfectly Egyptian iqr-pw 'he (pw) is one excellent, intelligent, capable';
Ls 'itéŋvu 'hot spring' ('itéŋ- 'hot'), so 'itéŋ-vu 'hot-it is' or 'it (is) hot';
(1146) Aramaic tek / tikk-aa 'twisted cord, chain-the' so *tikka-pu 'cord-it is' > UA *tikaa-pu 'rope':
Mn tïǧápo 'rope'; NP tïgapu 'rope'; and several other examples at 122.

Late Egyptian article prefixes are treated at 4.4 and are as follows:

	masculine	feminine
Indefinite singular: 'a/an'	wa-	wa-
Definite singular: 'the'	pa-	ta-
Plural 'the' for either gender	na-	na-

Several UA terms (373-380, 174, 339, 520, and others) have fossilized together the Egyptian article prefix with the Egyptian term. We do not repeat all of them here, but note the following sample:
(174) Egyptian sxt 'country, pasture, willow, n.fem' > UA *sakat / *sakaC 'willow'; UA *sakat 'willow' is widespread in 6 of 8 branches, but Hopi has the fossilized feminine prefix for this Egyptian feminine noun in Hopi tïïsaqa 'grass'.
(339) Egyptian t'-ħimat 'the-wife' (Coptic hime) > UA *tïhima 'spouse': These match the definite article form: Egyptian t'-ħimat 'the-wife'.
(373) Three synonymous variants for Tr 'bumblebee'—Tr napári, ŕapára, wapára—have undergone a vowel change from Egyptian bit 'bee' which is a feminine noun and so has the three prefixes: na-, ta-, wa-.

Hebrew and Arabic have prefixed definite articles; however, Aramaic has suffixed articles in 'noun-the' morphology: masculine noun-aa(') and feminine noun-t-aa('). The final glottal stop is in parentheses because it is written, generally only to signify a long vowel; however, it appears that UA forms may be from a dialect that was pronouncing the glottal stops, perhaps ancient mistakes in reading. In some Aramaic dialects, these forms with definite article have become the citation forms of nouns, the 'the' becoming obscure, as it is in UA also. First, note the masculine nouns to which -aa(') 'the' is suffixed:
(743) Aramaic tuumr-aa 'palm-the' > UA *tu'ya 'type of palm tree' fits Aramaic, but not Hebrew taamaar.
(604) Aramaic rə'emaan-aa / reemaan-aa 'antelope-the' > UA *tïmïna 'antelope'
(618) Aramaic di'b-aa 'wolf-the' > UA *tï'pa 'wolf' (vs. Hebrew haz-zə'eb 'the-wolf')
(617) Aramaic diqn-aa 'beard-the, chin-the'> UA *tï'na > *tï'ni 'mouth' (vs. Hebrew zaaqaan 'beard, chin')
(1130) Aramaic pagr-aa 'corpse-the' > Hp pïïkya 'skin, fur' (vs. Hebrew hap-pɛgɛr 'the-corpse')
(1403) Syriac šigr-aa 'drain, ditch, gutter-the' > Hp sikya 'small valley, ravine, canyon with sloped sides'.

(1405) Arabic šqr ‘be of fair complexion, blond, fair-haired, color of fire’
> Hopi sikya- ‘yellow’; Hopi sikyà-ŋ-pï ‘yellow(ish) thing’; Hopi sikya-qa’ö ‘yellow-corn’.
(1046) Hebrew ɧgr ‘gird (self)’; Hebrew ɧ^{a}goraa ‘girdle, loincloth, n.f.’; Aramaic *ɧagor-taa
> UA *wikosa 'belt'. The -r- devoices next to voiceless t, then the whole cluster goes to -s-.
(889) Hebrew rkb ‘to mount, climb up’; Aramaic rikb-aa ‘upper millstone-the’; Syriac rakb-aa ‘upper millstone-the’ > UA *tïppa ‘mortar, pestle’ (i.e., upper millstone): Wr te’pá ‘above’; TO čïpa ‘hole in bedrock for mashing mesquite bean’; ST topaa ‘mortar’; Ls tóópa-l ‘mortar for grinding’ (Ls o < *ï)
(634) ‘loins, hip’: Akkadian xanṣaatu; Syriac ɧaṣṣaa; Arabic xaṣr- ‘hip, haunch, waist’; Samaritan ɧarṣ-aa; Aramaic ɧarṣ- ‘hip’; Mandaic halṣa, haṣa > UA *kaca- ‘hip’
(1409) Aramaic kuuky-aa’ ‘spiderweb’ > UA *kuukyaC: Hopi kookyaŋw ‘spider’; Ls kúyxiŋi-š ‘black widow spider’; Sr kuka-ţ ‘spider’; Ktn kuka-č ‘spider’; even Cp kúka-t ‘blackwidow spider’ shows a final consonant where that glottal stop would be; otherwise, the absolutive suffix would be -l, not -t.

Sometimes the final glottal stop (whether originally pronounced or not) of Aramaic’s definite article suffix—masculine -aa’ or feminine -taa’, is apparent in UA, as in spider above (1409) and in many others (as below):
(81) Aramaic *ɧaberet > UA *hupi- > Cr hïi (because *u > Cr ï, and *-p- disappears in Cora, so Aramaic *ɧaberet-aa’ ‘woman’ > Cr hüita’a ‘woman’ (Casad 1984, 161) is a very good match;
(1055) Syriac ’aamaqqət-aa’ ‘lizard-the, n.f.’ > NP makaca’a ‘horned toad’ (with echo vowel after -a’)

Also notice how well Western Numic (Mn and NP) words for ‘deer’ reflect both the feminine -ta ‘deer’ and the masculine -a ‘buck deer’ as a distinction in Mn and NP:
(638) Semitic *raxel ‘ewe’ > Mn tïhïta 'deer'; Mn tïhïya 'old buck'; Mn(L) tïhïhta ‘deer’; NP tïhïdda ‘deer’; NP(B) tïhï’ya ‘deer’. So Mn has both and the genders match. The NP dialects show one of each as a general word, but no gender distinction, yet NP(B) tïhida when possessing s.th.’
(794) Aramaic ’iibr-aa’ ‘penis-the’ > UA *wï’aC ‘penis’

Longer Aramaic words of 3 and 4 syllables often lose the first syllable in UA, yet all else in UA very well matches that Aramaic form. Of course, a Hebrew cognate may have existed, yet many UA forms match Aramaic forms not found in Hebrew, or would not match Hebrew correspondences as in 1056:
(1054) Aramaic raqbubit-aa ‘moth-the’ > UA *(V)kupïpika ‘butterfly’
(1055) Syriac ’aamaqqət-aa ‘lizard-the, n.f.’ > UA *makkaCta(Nka)-ci ‘horned toad’
(1056) Syriac ɧady-aa ‘breast-the, n.f.’, pl: ɧ^{ə}daawaat- > UA *tawi 'chest'; UA aligns with the Aramaic plural with loss of the first unstressed syllable of the plural.
(23) Syriac bilţii-taa ‘boring worm-the’ > UA *kwici ‘worm, feces-snake’
(19) Arabic barr- ‘land’; Aramaic *barr-aa ‘field-the’ > UA *kwiya / *kwira 'earth'
(603) Aramaic rymh (= riimaa) ‘large stone’; with ‘-the’ suffixed would be
Aramaic riimə-taa ‘large stone-the, n.f.’; Syriac ryaam-taa ‘large stone-the, n.f.’ > UA *tïmï-ta

Another feature suggests that Semitic-kw is Phoenician-like, while Semitic-p is more Aramaic-like. There is evidence that some nouns from Semitic-kw used to include the Northwest Semitic definite article prefix *haC- > UA *iC- (vs. Semitic-p Aramaic suffixes masculine: -aa / feminine: -t-aa); not all Semiticists agree whether this prefix *hal-/*han- ends with -l- or -n-, but either way, that final -C assimilates to double the initial consonant of the noun in Phoenician/Hebrew and does the same in Arabic for some sounds. Some nouns from Semitic-kw appear to include the article prefix:
(1522-kw) Hebrew *ham-madwe ‘the-menstrual blood’ > hiNtwa > UA *iNtwa ‘blood’ in Hp ïŋwa, Tb ïkwa-l
(1312-kw) Hebrew *hal/han-lebb ‘the heart’ > Hp ïnaŋwa ‘heart, life’
Other forms lost a short initial syllable, which would be quite natural if subject to the prefix *haC-, causing the first short syllable to collapse, then when taken off, the resulting form would lack it:
(1378-kw) ṣ^{ə}pardeaʕ ‘frog’ > UA *kwa’ro ‘frog’; *haC- ‘the’ encouraged cluster *ha-ṣṣpardVʕ > kwa’ro ‘frog’
(597) Arabic ’arnab ‘hare, rabbit’, Hebrew f. pl: *’^{a}rnaboot, ha’rnabot > ha-tapot > UA *taput ‘cottontail rabbit’

Noun morphology with possessive suffix

Verbs or Nouns followed by the 3rd person singular suffix Hebrew -w / -o periodically appear in UA:
(628) Hebrew zaqn-o ‘chin-his’ > SUA *ca’lo ‘chin, jaw’
(567) Hebrew ya-’amiin-o ‘he-believes-him/it’ > UA yawamino ‘believe him/it’
(906) Hebrew -w ‘his/its’ > UA *-wa / *-wV ‘possessed suffix’ usually as -w in most UA languages

Semitic Verb Morphology in Uto-Aztecan

(1494) explains the morphological and syntactic similarities of the Hebrew vav-consecutive, a perfective or past-tense construction, and the formation of the Nahuatl past tense. The order of morphemes is also the same in both Hebrew and Nahuatl, and both drop the final vowel of the verb stem:
Hebrew wa-pronoun prefix-jussive verb stem (dropping final vowel), as in wa-yi-šb ‘and-he-take captive’
Nahuatl oo-pronoun prefix-verb stem (dropping final vowel), as in *oo-ni-nemi ‘past-I-lived’ > oo-ni-nen
In Cora the more clear and original wa- is prefixed.

It is natural to expect that 3rd person singular forms would be the most likely to survive, and indeed Semitic 3rd person sg forms are what we find most in UA, while 1st and 2nd person forms are almost non-existent.

(3) Northwest Semitic sg perfective ***yašiba** ‘sit, reside’ > UA ***yasipa** ‘sit, reside’
pl perfective ***yašibuu** ‘sit, reside, pl’ > UA-Tep ***yasipu** ‘sit, reside’; the two Semitic forms (sg and pl) are not specified as sg and pl in UA, but both exist in UA, having lost number significance.
(4) Hebrew bšl / **baašel** ‘boiled’ > ***kwasïC** ‘cook(ed), ripe(n)’; while most of UA reflects the baašel adjective, AYq has both the perfect verb *bašala > AYq bwasa’a (*-l- > -’-) and the adj AYq bwase/bwasi

The final vowel of the Proto-Semitic singular perfective kataba / yašiba was lost in Hebrew (kaatab) and in Aramaic (kətab), but is preserved in Arabic kataba and sometimes appears in UA:
(3) Northwest Semitic sg perfective *yašiba ‘sit, reside’ > UA *yasipa ‘sit, reside’
(87) Arabic ʕgz / ʕagaza ‘to age, grow old (of women)’ > Tr wegaca- 'grow old (of women)’
(94) Hebrew ršʕ ‘act wickedly, be guilty’ > UA *tasawa ‘be/do bad’
(580) Semitic qr’ / qara’a ‘call, cry out’ > UA *koyowa ‘yell, shout’

Of course, not all UA forms are so fully formed; many are shortened.
(576) Hebrew ’aataa^{y} / ’atii- ‘come’; Arabic ’ty / ’ataa^{y} ‘come’; Syriac ’ita / ’ɛta > UA *wica > wic ‘come’

Final vowel -uu of the Semitic **plural -uu** sometimes appears in UA and is sometimes specified as plural in the Tep branch:
(50) Hebrew -lbašu ‘put on (garment), clothe (oneself)’ (-lb- > -bb- > -kw-) > UA *kwasu ‘dress, shirt’
(3) Most UA forms reflect sg pfv yašiba, but pl pfv *yašibuu ‘sit, reside, pl’ > UA/Tep *yasipu ‘sit, reside’
(99) Hebrew rakb-uu ‘they mounted, climbed’ > UA *tï’pu ‘climb up’
Syriac rakb-uu-hi ‘they climbed it’ > UA *ciCpuhi 'climb’; Mn cibuhi 'climb with arms and legs'
(528) Semitic bayt-uu ‘they lie down, pl’ > PYp veetu ‘lie, be situated, inan pl’; both even agree in plural.
(1034) Hebrew nqm, Arabic naqama ‘avenge o.s., be angry’, pl naqamu > Wr nehkamú- 'be angry’
(1068) Hebrew hi-qšiib ‘listen, prick up ears’, impfv: (ya)-qšeeb, pl: -qšebuu / -qšiibuu > UA *kïpu ‘hear’
(1258) Hebrew plural: ʕaluu ‘they stood up’; while the two forms of Tbr were / welo ‘estar, estar en pie’ align with singular and plural, the Tepiman forms align with a reduplicated plural UA *wïwïlu-ka ‘stand, pl’
(221) Egyptian sg wr ‘big’ and pl wrw/wrwrw > UA *wïrwïru ‘big’
Note how often Tepiman verbs (often pl in Tep also) reflect Semitic plural forms: 3, 221, 528, 1258.

The Hebrew conjugation called hiqtiil in the form of hi-CCiiC is also found in UA:
(810) Hebrew hikkiir ‘recognize, know, know how to’ (hiqtiil of nkr) > Tr iki- ‘know, be aware of.’
(838) Hebrew npš ‘breathe’; nɛpɛš ‘breath, life, soul’; unattested *hippiiš > UA *hikwis ‘breathe, spirit/ heart’

Imperfective (impfv) 3rd person prefixed verb forms, both masculine (ya-/yi-) and feminine (ta-/ti-), are also throughout UA: impfv prefix ya-/ta- from Semitic-p vs. yi-/ti- from Semitic-kw.
Semitic-kw yi-/ti- (e.g., 20, 1313, 84, 797):
(20) Hebrew/Phoenician *ti-barr 'select, choose' > Ls čikwáyi- 'to choose, select' is from Semitic-kw
(1313) Semitic yi-knVʕ 'be humble' > CN iknoa 'to be humane, compassionate, humble'
(814) Hebrew ṣmḫ / ṣaamaḫ 'sprout, grow' (< Semitic *ḍamaxa), impfv: *yi-ṣmaḫ (< *ya-ḍmax):
CN camawa 'to grow, become big' is of Semitic-kw as is the impfv below in 84:
(84) Hebrew ṣmḫ, impfv: yi-ṣmaḫ (< *ya-ṣmaḫ) 'sprout' > UA *icmo of CN icmo-liini 'sprout, grow';
However, (813) has the same impfv form from Semitic-p showing both *ya- and loss of 1st C in a cluster:
(813) Hebrew ṣmḫ, impfv: *yi-ṣmaḫ (< *ya-ḍmax) > UA *yama 'sprout, grow'; UA *yama 'up, over, above'.

We see the Semitic-kw perfective in CN camawa, because ṣ > UA c and pharyngeal ḫ > w, and we see Sem-kw imperfective in UA *icmo 'sprout, grow' because the first consonant of the cluster is prominent, yi- prefix, and ḫ > o; in contrast, Sem-p UA *yama 'sprout, grow, up' loses the first consonant of the cluster, shows Sem-p ya- prefix, and did not round the final vowel, because keeping final x, though lost, is not pharyngeal and so would not round the final vowel.
Semitic-p prefixes ya-/ta- (e.g., 1035, 567, 560, 561, 796):
(1035-p) Hebrew qmṣ 'take a handful, be miserly, stingy', impfv *ya-qmuṣ > UA *yamuC 'angry, stingy'
(567-p) Hebrew ya'amiin 'he believes, 3rd m sg impfv' > UA *yawamin- 'believe'
Hebrew ya'amiin-o 'he believes him/it' > UA *yawamin-o 'believe him/it'
(560-p) Semitic *ya-bka^{y} 'he/it weeps, cries, m.sg.' > UA *yaCkaC > *yakka / *yaka 'cry'
(561-p) Semitic *ta-bka^{y} 'she/it weeps, cries, f.sg.' > NP taka (< *takka) 'cry, vi'.
(796-p) Hebrew *toʼkal 'she/it eats, f.sg.impftv' > UA *tïkkaC 'eat' of Sem-p as V-l > aC retains vowel *a*
(797-kw) Hebrew impfv: *yoʼkal 'he/it eats, m.sg.impfv'> UA *yïʼïki 'swallow, taste' of Sem-kw as V-l > i-.

Like the ya-/yi- difference in Sem-p vs. Sem-kw prefixes, respectively, UA *nihya also shows two features that align it with Semitic-kw, having ni- (instead of na-) and no rounding or sign of the glottal stop:
(991-kw) Phoenician/Hebrew ni-qraʼ 'he/it is called/named' > UA *nihya 'call, name'

Another feature of Semitic morphology apparent in UA are the pfv vowelings. Most Semitic verbs have the pfv voweling CaCaCa. However, some verbs, perhaps less than 10%, have a voweling of CaCiCa, where the midde vowel is i instead of a. Though originally CaCiCa, some of these later changed to CaCaCa. Yet UA consistently shows the original voweling: CaCiCa.
(769) Hebrew tqp 'to overpower, v'; Aramaic təqep 'be strong'; the 2nd vowel of Aramaic means it is from Proto-Semitic *taqipa (sg), *taqipu (pl), exactly as the UA forms:
UA *takipa / *takipu 'push': KH/M06-ta9: Wr tahkipúna 'empujar muchas veces [push many times';
(3) Semitic yašiba (sg), yašibuu (pl) > UA *yasipa, *yasipu
(1521) Semitic *kapina 'be hungry'; Aramaic(S) kappiin 'hungry'; Syriac kəpen / kəpin 'be hungry':
Gb kovii- 'be hungry'.
(649) Hebrew ḫaaṭaa' 'miss (a mark), do wrong' shows the later change, but Arabic xaṭi'a 'be mistaken, to err' shows the original voweling, as appears in the Sem-kw form in UA *wa(C)tiC 'lose, lost, misled'

UA shows both the huqtal participle and the huqtal perfective of the verb nky below:
(52) Hebrew mukkɛ 'smitten' (hoqṭal participle) > UA *mukki 'die, be sick, smitten'
(53) Hebrew hukkɛ 'was smitten' (3rd sg huqtal pftv) > Tb hookii 'deceased grandfather, grandson'

Semitic conjugation patterns are very specific. Only one full Semitic sg paradigm exists in UA, and that is in the Nahuatl singular pronouns deriving from the Aramaic verb hawaa 'to be':

(110)	Hebrew/Semitic sg		Hebrew/Semitic pl	maghrib Arabic	Classical Nahuatl
1st	'e-/'a-	'I (verb)'	ni-/na- 'we (verb)'	n- 'I verb'	ne'wa / nehwa 'I'
2nd	ti-/ta-	'you sg (verb)'	ti-/ta- 'you pl (verb)'	t- 'you verb'	te'wa / tehwa 'you, sg'
3rd	yi-/ya-	'he (verbs)'	yi-/ya- 'they (verb)'	y- he verbs'	ye'wa / yehwa 'he'

The Classical Nahuatl (CN) singular pronoun series—nehwa (I), tehwa (you), yehwa (he)—parallels the imperfective of the Aramaic 'be' verb—'ehwe, tehwe, yehwe. Though the Nahuatl 1st person (nehwa 'I')

differs from Semitic ’e-, the n- of the CN form is analogically like the fundamental n- of most Semitic ‘I/me’ forms. In fact, the maghrib Arabic dialect did the same thing, that is, analogized the impfv verb prefixes to be n-, t-, y- (Goldenberg 2001, 86), like the Classical Nahuatl singular series did also—nehwa, tehwa, yehwa.

Keep in mind that full paradigms hardly exist in the ancient Hebrew corpus either. Yet several verbs are found in UA exhibiting two or three or four shapes or conjugated forms of a Semitic verb’s paradigm. Consider some of the groups of items exhibiting various parts of a Semitic conjugation:

(1420) Semitic **nwr** ‘to make/become light’ with infinitve and imperfective: -**nuur**(u), and perfective **naar**; UA has both in Eu and Tr: **UA *nur / *nar** ‘aclarar el día [to dawn, become light]’: Eu nurú ‘aclarar el día’; Tbr nare ‘aclarar el día’.

(679) UA ose (< Hebrew pfv: ʕśy or prtcpl ʕoose) and (680) UA yo’ose (< Hebrew impfv: y-ʕsy / ya-ʕ^{a}sey)

	Hebrew root ktš ‘grind’	UA
(1094)	impfv -ktoš (< *ktusu) ‘pound, grind’	*tusu ‘grind’ with loss of 1st C in a cluster
(615)	*kitteš (< *kittaš) ‘grind’	Yq kitte / kittasu ‘grind’
(614)	makteš ‘mortar, grinding stone’	*ma’ta ‘mortar, grinding stone’

(559) Hebrew bky/ baka ‘cry, weep’ (perfv); yV-bkV (imperfv); Syriac bakaa / baka’ > UA *paka’ ‘cry, v’
(24) Hebrew bky/ bakaʸ ‘cry, weep’ > UA *kwïkï/*oʼkï 'cry' (Sem-kw) vs. 559 *paka’ of Sem-p
Because bilabials as first element in a cluster disappear (-bk- > -k-), the imperfective 3rd person masculine singular stem Hebrew *yVbkV ‘weep’ with imperf prefix originally *ya- (later yi-) also matches UA *yakka
(560) Semitic *ya-bkaʸ ‘he/it weeps, cries, m.sg.’ > UA *yaCkaC > *yakka / *yaka ‘cry’
(561) Semitic *ta-bkaʸ ‘she/it weeps, cries, f.sg.’ > NP taka (< *takka) ‘cry, vi’.

NP has both m and f 3rd sg of *ya-bka > yakka and *ta-bka > UA *takka ‘cry’ and consistently geminates/doubles the middle consonant in both as well. So UA has both the m.sg *ya-bkay > UA *yakka and the f.sg. *ta-bkay > UA *takka, and also the perfective stem in UA *paka’ of Sem-p and also Sem-kw’s *kwïkï/*oʼkï.

Hebrew ’kl shows various conjugated forms in UA: Hebrew **’aka**l ‘(he) ate (perfect), ***to’kal** ‘she/it eats’; *yo’kal ‘he/it eats’; ’akol / ’əkol (infinitive):
(798) Semitic ’akal ‘eat/ate’ > **UA *’aki** ‘open mouth, eat, take/put into one’s mouth’ of Sem-kw
(796) Hebrew ***to’kal** ‘she/it eats, f.sg.impftv’ > UA ***tïkkaC** 'eat' of Sem-p as V-l > aC retains vowel *a*
(797) Hebrew impfv: ***yo’kal** ‘he/it eats, m.sg.impfv’> UA ***yï’ïki** ‘swallow, taste’ of Sem-kw as V-l > i-.
(1177) Arabic ’kl / ’akala ‘eat, eat away, corrode’; Hebrew ’kl / ’aakal ‘eat, savour, have sense of taste, enjoy love’; from Hebrew infinitive ’əkol, and a semantic shift from ‘eat, enjoy’ to ‘desire’ > UA ***ukol** 'want'

Note both the Hebrew pfv **laaqaħ** and the impfv **yi-qqaħ** in UA:
(695) Hebrew **lqħ / laaqaħ** ‘take (in hand), take as wife’; Arabic lqħ / laqaħa ‘to impregnate’;
Hopi **lööqö(k**-) ‘(for a bride) to go to the groom’s house to begin the wedding ceremony’;
Hopi(Seaman) löhqö / lööqö ‘she married’; Hopi(Seaman) löhqöqna/ lööqökna ‘they gave her in marriage, he married her’.
(696) pre-Hebrew *ya-lqaħ > Masoretic Hebrew *yi-qqaħ; final pharyngeal rounded UA vowels:
Hebrew *yi-qqaħ > UA *yokoC ‘to copulate’, Azt yekoaa ‘taste, copulate’.
(1465) Hebrew lqħ, imperative forms: qaħ and **qəħaa** > Hp ŋï’a ‘grab, catch’; WMU güű / küű- ‘grasp, catch, get, take, vt’; Kw ku’u ‘catch, get, receive’.

(1031) Hebrew qn’ ‘be jealous’, impfv: -qna’ > UA *nawa ‘be jealous’ of Sem-p, as ’ > w, and no ŋ, with loss of first C of the cluster -qn-.
(1032) Hebrew qn’ ‘be jealous’, impfv: -qna’ > Ls ŋe’i ‘get even’; My na’ibúke ‘is jealous’. My na’i- aligns well with Ls ŋe’i, because Sem-kw shows q > ŋ, 1st C prominence, NUA ŋ > SUA n, no rounding for ’.
(1033) Hebrew qn’ ‘jealous’; Hebrew qannaa’ ‘zealot, jealous one’ > Kw kïnii-ga-dï ‘one covetous’

Three different morphological shapes of the root Semitic kbd ‘be heavy, honor, sweep’ appear in UA:
Semitic/Hebrew kabbed ‘to honor, sweep/clean, make respectable’ (qattel ‘intensive’);
and impfv: *-kbudu / *-kbod; Hebrew hikbad / hikbiid ‘to sweep’:
(1353) Semitic *-kbudu / Hebrew *-kbod > UA *poci ‘sweep’
(1354) Hebrew *hikbad- ‘sweep’ > *(hi)paca ‘sweep’
(1355) Aramaic(J) -kabbed ‘to clean, sweep’ > UA *kaper ‘be clean, good’

(1126) Hebrew yṣb or yṣg (hiqtiil means ‘to set, place’) or yṣʕ / Arabic waḍaʕa ‘lay, put down, set, place’ UA *yaca ‘set, put’ and (1127) UA *moci ‘set, put’ reflect the qal perfect and hiqtiil participle, respectively

Hebrew ʕlw / ʕly, pfv: **ʕalaa** ‘ascend, go up, grow’; and Hebrew impfv: **taʕalɛ** ‘it/she grows, goes up’:
(681) UA ***wïla**/i ‘grow’: Ca wél ‘to grow, rise up high’; Cp wéle ‘to grow’; Ls wola/i ‘grow (of plants or anim subj)’; and part of Hp wïŋwa ‘grow, grow up’ (-lw- > -ŋw-)
(682) UA ***tïwïl** ‘grow’: Cp tewe ‘to grow of plants’; TO čïwïl-him ‘to grow’. Tb wilaa’lat ‘climb, climb on’
(1258) Hebrew plural: ʕaluu ‘they stood up’; while the two forms of Tbr were / welo ‘estar, estar en pie’ align with singular and plural, the Tepiman forms align with a reduplicated plural UA *wïwïlu-ka ‘stand, pl’

Aramaic gəmal / Hebrew gaamal ‘complete, ripen, wean’ (cognate to Arabic *ğamula ‘be beautiful’) is found in the the perfective (936, 937, 939) and in the imperfective (1175) and in a waw-consecutive conjugation (938). In the imperfective (1175), its first consonant can be expected to be lost because the pattern or conjugation sets it as first consonant in a cluster:
(1175) Hebrew gml, impfv **-gmol** ‘to complete, ripen, wean’ > ***mo(i)** ‘ripen’
(936) Note 3 meanings in both Semitic and UA: Semitic: ‘complete’ and ‘beautiful’ and ‘be proper, befit’ > UA ‘quit/stop (when complete)’ and ‘look good’ and ‘be proper, fit, wrap (in garment/blanket)’.
Tr gamea ‘1 to be able, 2 to look good to, like, 3 to fit, be enough’ (intervocalic liquids r/l often lost in Tr);
Tb(V) kam’-(ut) ~ ’aŋgam’ ‘it fits’; Tb(H) kam’mut, pfv aŋkam’ ‘to fit, be proper’ (l > ’ in Tb cluster);
Ca qami (before C), qamñ (before V) ‘to leave, quit, stop’.
(937) Wr kemá; Tr gemá; Tr komabi / gemabi 'wrap oneself in a blanket'; Tr gimí-mea 'wrap oneself (as with a blanket)'; CN keemi 'put on, wear (clothes)'; CN keemi-tl 'garment'; Pl kimilua ‘wrap, cover, vt’; CN kimil-li 'bundle of clothes, blankets'; CN kimiloaa 'wrap in a blanket, vt';
(938) Hebrew wayyigammel > Numic wïkam’mi ‘put on, cover/wrap in blanket’; for same SNum languages with m 2nd & liquid 3rd C, see ṭmr > tïm’ma ‘bury’. 939 is Sem-kw perfective.

Semitic *psx has both the impfv (*-psax) and an adjectival form (*pissex) which appear in UA:
(639) Hebrew psẖ (< *psx) ‘be lame, limp’; Arabic fsx, ya-fsaxu ‘dislocate, disjoint’; from the imperfective stem *-psax, and bilabials (b, p) disappear as first consonant in a cluster, so *sakV is what we would expect in UA and is what we see in CU, and WMU assimilated/raised the vowel from a > ï/ü:
CU sakï- ‘to limp, v’; WMU süġű-y / sügű-y ‘to limp, be lame, vi’.
(640) Hebrew psẖ (< *psx) ‘be lame, limp’; Hebrew pisseaẖ ‘limping’, pl: pisẖiim (> piskiim) ‘limping’ (verbal adj) > UA *piski / *pisiki ‘bad, rotten’

Sets 540-543 show four different morphological shapes of the root bṭẖ ‘trust, believe’:
540 Hebrew bṭẖ ‘trust, v’; Hebrew biṭẖa(t) ‘trusting’; Hebrew *baṭiiẖ ‘trusted’
> UA *pittiwa 'believe, be true/real, trustable'
541 Hebrew baaṭuuẖ ‘trusting, confident’ > UA *paso ‘true, consider true, believe, truly, indeed!’
542 Hebrew bṭẖ ‘trust, v’, from the impfv stem -bṭaẖ we expect UA *cawa ‘believe’ and loss of -b
543 Hebrew baaṭuuẖ ‘trustful, confident’ UA *puttuwa (> *puttucuwa) ‘know’

Nouns often become verbs, or many Semitic nouns appear in UA as denominalized verbs:
(63) Syriac sirq-aa ‘comb-the, n’ > UA *cika ‘to comb, sweep' (denominalized verb)
(35) Aramaic birkaa ‘blessing’ > UA *kwika ‘sing’ (denominalized verb)
(86) Hebrew ṣəʕaaqaa ‘yelling, screaming, call for help, n’ > UA *coaka ‘cry, v’ (denominalized verb)
(1162) Hebrew ʕaṭiišaa ‘sneeze, noun fem.’ > *ha’t(w)isa (> *ha’(N)kwisa) ‘to sneeze, vi’
(138) Instead of the Egyptian verb bši ‘to vomit’, the noun bšw ‘vomiter’ is made a verb with the verbalizing suffix -ta in UA *piso-ta ‘to vomit’; likewise,

(170) Instead of the Egyptian verb txi ‘to drink, be drunk’, the noun txw ‘drunkard’ is made a verb ‘be drunk’
(1274) Syriac kaukb-aa’ ‘star-the’ > Sr kupaa’ (< *kuppaa’) ‘to shine (of stars)’
(178) Egyptian x’i ‘disease’; Egyptian x’yt ‘slaughter, corpse-heap’ > UA *ko’ya ‘fight, kill, die’
(581) Hebrew ’arṣ-aa ‘earth-ward, to the earth’ > UA *wïcï > Num *wï’i ‘fall
(614) Hebrew makteš ‘mortar, grinding stone’ > UA *ma’ta ‘mortar, grinding stone’ but Ca *mattaš ‘crush, squash’
(942) Hebrew qiinaa ‘funeral song, dirge’ > Ls ŋináŋna ‘feel sorry for, be broken hearted’ (kwSem q > ŋ)
More examples could be assembled here.

Two-word sequences typical of Semitic or Egyptian are sometimes found in UA. For one word, with its three, four, five, six, or more sounds of the word, to align with that number of the corresponding sounds of the related language’s word is one thing, but for two words—and in the same order—to align both sounds and syntax and for a longer length is more notable, and even less probable by chance. Examples follow:
Egyptian su ‘he/it’ (is) p’ʕt ‘quail’ > su-p’ʕt ‘quail’ > UA *supa’awi ‘quail’ (475-6)
Egyptian iqr-pw ‘skillful, excellent, capable, intelligent’ (is) ‘he/she’ > Ls *yikelvu ‘intelligent’ (122, 219)
Aramaic *tikk-aa ‘cord-the’; with pw, *tikk-aa-pw ‘cord-the-it is’ > UA *tïkapu ‘rope, thread’ (122, 1146)
Egyptian’s prefixed definite articles—p’ ‘the, masculine’; t’ ‘the, feminine’; n’ ‘the, plural)—appear in UA as well, and are also in prefixed position in UA, and they match the gender of the noun that they are prefixed to, though they are not recognized as definite articles in UA; examples are found at 174, 185, 339, 357, 373-380
yry / yoore (m) / toore (f) ‘instruct, teach’ (hiqtiil 3 sg impfv), toore le/la ‘teach to him/her’
> Tb tooyla ‘teach (him/her)’ (1344)
Semitic daqar panaa-w ‘till/dig its surface’ > UA *tekipanawa ‘work’ (827)
pny / bə-paney ‘on the surface of’ > UA bepán ‘on, on top of, over’ (1398-p)
bə-taxat ‘at-under’ > UA *pïtaha ‘under’ (1390-p)

Also in UA, we see forms aligning with Hebrew vav-consecutive forms, a perfective or past-tense construction—wa-pronoun prefix-jussive verb stem—in 938, 1215, 1518.

At 609 and in section 7.7, Syntax are discussed and the grammatical particle Hebrew ha- ‘interrogative particle’ and UA *ha- ‘interrogative particle’.

7.4 Basic Vocabulary

(animal terms, body parts, basic nouns of nature) from the Near-East tie are numerous, as well as most pronouns (not listed here, but see 101-114). Animals are listed first, roughly from largest to smallest (insects), then birds, then reptiles and fish. The Near Eastern tie provides two terms for antelope, two terms for mountain lion, two for dogs, two for foxes, two for coyotes, two for squirrels, four for lungs, four for hair, etc. **Body parts** are listed generally from top (hair) to bottom (feet), then **man** and **woman**. The **basic nouns of nature** start in the sky (sun, moon, 4 terms for star) and come down to earth. All of these are necessarily abbreviated from the numbered set, which can be checked for details:

(604) Aramaic rə’emaan-aa / reemaan-aa ‘antelope-the’ > UA *tïmïna ‘antelope’
(29) Hebrew ṣəvii ‘gazelle’; Arabic ẓaby-; Aramaic ṭaby-aa ‘deer, gazelle’ > Hp cöövi-wï ‘antelope’
(147) Egyptian m’i ‘lion’ > UA *mawiya ‘mountain lion’ (*’ > w of Sem-p)
(566) Hebrew ’ari ‘lion’ > UA *wari ‘mountain lion’
(803) Hebrew kəfiir (< *kapiir) ‘young lion’ > PYp kaper ‘wildcat’; Wc kapuvi ‘bobcat’
(618) Aramaic di’b-aa ‘wolf-the’ > UA *tï’pa ‘wolf’
(406) Egyptian b’ ‘buck, ram, soul’ > UA *pa’aC / *pa’at ‘bighorn sheep’; UA *pa’a ‘all living creatures’
(734) Hebrew mə-ṣuudat ‘net, prey, game’ > UA *masot (< *masuta) ‘deer’
(638) Semitic *raxel ‘ewe’ > UA *tïhïC ‘deer’: Mn tïhïya 'old buck'; Mn tïhïhta ‘deer’, and genders match
(1025) Aramaic guuryə-taa / guur-taa ‘cub (female), young of animal (lion or dog) > UA*koCti 'dog'
(711) Hebrew kɛlɛb, kalb- ‘dog’; Arabic kalb- ‘dog’; pl: kilaab = *kiloob
> Tb(V) ’iklooba-l 'fox'; Tb(M) yekalooba-l ‘grey fox’
(447) Egyptian wtw ‘pup (fox, dog)’ > UA *woci 'dog'
(129) Egyptian wnš ‘jackal’; wnšt ‘jackal, f’; pl: wnšiw ‘Wolfs-hund’ > UA *wancio / wancia ‘fox’
(391) Egyptian ishb ‘jackal, fox’ > UA *isa’a(N)pa ‘coyote’
(580) Hebrew/Arabic/Aramaic qr’ / qara’ ‘call, cry out’ > UA *koyowa ‘yell, shout’; *koyoC ‘coyote, fox’
(756) Hebrew śn’ ‘hate’; *śannaa’ ‘enemy, hating one’ > Ch(L) šïnawavi ‘Mythic Coyote, the pre-human, immortal personage’; UA *sïna’a-/*sïnawa ‘coyote, trickster/cosmic hater/enemy of mankind (Sem-p)

(675) Arabic ħnp ‘be pigeon-toed, walk with toes inward’ (like Arabic ħanpaa’ ‘tortoise’) > UA *hunap ‘badger’
(613) Hebrew *dobboot ‘bears, f pl’, unattested *dᵊbbootee^{y} ‘bears, construct pl’ > UA *poci / *posi ‘bear’
(724) Hebrew parʕoš ‘flea’ (jumper, Hebrew prʕš ‘jump’) > UA *paro’osi ‘jackrabbit’
(596) Hebrew ʼarnébet ‘hare’; Arabic ʼarnab ‘hare, rabbit’ > UA *waʼna ‘rabbit net’
(1088) Arabic xuld ‘mole’; Syriac ħld ‘to burrow, drive a mine underground’; Aramaic ħild-aa ‘cave-dweller-the’
Proto-Semitic *x > UA k, so *xuld-aa / *xild-aa > UA *kita ‘groundhog’
(1089) Hebrew qippod ‘hedgehog’; Arabic *qunpuđ; Aramaic quuppaad ‘hedgehog, mole’ > UA *kïNpa ‘prairie dog’
(57) Arabic singaab ‘squirrel’; Hebrew *siggoob ‘squirrel’ > UA *sikkuC ‘squirrel’
(957) Arabic qarqađaan ‘squirrel’ > *koŋi ‘squirrel’
(579) Arabic *pa’r- > fa’r- ‘mouse’ > UA *pu’wiN (< *pa’wiN) ‘mouse’
(68) Hebrew gebiim ‘swarm of locusts’(only in pl) > SP qïïvi ‘grasshopper’
(69) Hebrew gobay ‘locust’ > Eu okoboi ‘grasshopper’; Kw haakapayni-ži ‘grasshopper’
(1321) Hebrew ħargol ‘type of locust’; Arabic *ħargal / *ħurgul ‘locust’ > Tr urugi-pari ‘grasshopper, sp.’
(28) Arabic şurşur ‘cricket’ > UA *corcor ‘cricket’
(88) Hebrew ʕaluqa(t) ‘leech’; Arabic ʕalaqat; Syriac ʕilaq- ‘leech, anything clammy or sticky’ > UA *walaka ‘snail’
(363) Egyptian srqt / s’qt / slqt ‘scorpion (a constellation)’ > UA *saka ‘scorpion’
(479) Egyptian d’rt ‘scorpion’ > UA *suyi 'scorpion, sting'
(832) Syriac srṭ ‘scratch’; Arabic šrṭ ‘tear, scratch’; Aramaic ṣarṭaan ‘scratcher, crab, crayfish’ would be
Hebrew ṣarṭoon > CU sïčú-či ‘crab’ and CU sïčú-ppï ‘fingernail’; UA *siCtuN / *suCtuN 'claw, nail'
(1409) Aramaic kəkay / kwkyh ‘spider’ > UA *kukkaC ‘spider’
(1409) Aramaic kuuky-aaʼ ‘spiderweb’ > Hopi kookyaŋw ‘spider’; Ls kúyxiŋi-š ‘black widow spider’
(141) Egyptian bit ‘bee’ > UA *pita / *piti > *pica/pici
(737) Hebrew ṣirʕaa ‘hornets’ > UA *saŋa ‘yellowjacket, stinging one’
(784) Hebrew ʕ^{a}ṭallep ‘bat’; Aramaic(J) ʕ^{a}ṭallep-aa ‘bat-the’ > UA *hoʼnapi ‘bat’ (explained at 784)
(854) Hebrew saas ‘clothes moth’ (< *sws); Arabic suus ‘mothworm’ > Tep *soso-kimar ‘butterfly’
(1054) Aramaic raqbubit-aa ‘moth-eaten, moth-the’ > UA *…kupïpika / *(C)Vkupïpika 'butterfly'
(17) Semitic đabboot ‘flies’ > UA *sikwoti ‘flies’ (Sem-kw)
(620) Semitic đabboot ‘flies’ > UA *tapputi ‘fleas’ (Sem-p)
(390) Egyptian dwt ‘mosquito, gnat, sandfly’ > UA *suti ‘mosquito, gnat’
(310) Egyptian s’ ‘maggot’ > UA *sa’a / *si’a ‘louse’
(971) Syriac qarduun-aa ‘louse-the, nit-the’ > UA *’aCtïN > *’atï(N) ‘louse’
(1058) Arabic šarnaqat ‘cocoon’, pl šarnaqaat would be Hebrew *sarnaqoot
> UA *ca’ïku / *caCCïku ‘cocoon attached to plant'
(853) Aramaic ħippušit-aa ‘beetle-the’ (Arabic *xunpusaa’/xunpus ‘beetle’) > UA *wippusa ‘stink beetle’
(261) Egyptian sd ‘tail’ > Hp sïrï ‘tail’

Birds:
(381) Egyptian wr(t) ħq’w ‘buzzard, lit: great (of) magic’ > UA *wirhukuN 'buzzard, turkey vulture'
(15) Semitic baaz ‘falcon’ > UA *kwasa ‘eagle’ (Sem-kw)
(142) Egyptian bik ‘falcon’ > *pik ‘hawk, sp’
(475) Egyptian p’ʕt ‘quail’; Egyptian sw ‘he, she, it, pronoun’: sw-p’ʕt > UA *supa’awi ‘quail’
(1082) Hebrew śəlaaw, pl: salwiim ‘quail’; Syriac salway ‘quail’; Samaritan šalwi > UA *solwi ‘quail’
(960) Arabic qarqara ‘gurgle, coo (pigeon)’ > UA *kakkara ‘quail’
(725) Hebrew toor ‘turtle-dove’ > UA *tori ‘domestic bird’
(824) Hebrew hayyownaa / hayyoonat ‘dove’ > UA *hayowi ‘dove’
(878) Hebrew ʕayṭ / ʕeeṭ ‘bird of prey’; Aramaic ʕayiṭ-aa’ ‘bird of prey-the’ > UA *wiCtiki ‘bird’
(1117) Aramaic(CAL) kwkby; Syriac kuukkəbbe ‘owl’ > UA *kuku ‘ground owl, burrowing owl’
(1361) Modern Syriac/Aramaic papuke ‘owl’ > UA *poko ‘burrowing owl’
(1167) Aramaic pəraħ ‘to fly, flower’; Hebrew pɛraħ ‘blossom’ > UA *pïyaw ‘feather, to fly’

Snakes / Reptiles and Fish:
(115) Egyptian sbk ‘crocodile’, Greek Sobek > UA *supak / *sipak ‘crocodile’.
(332) Egyptian qrħt ‘serpent spirit’ / qrħ ‘friend/partner’ > UA *koNwa ‘snake, twin’
(201) Egyptian dnnwtt ‘snake species > UA *sinawi 'snake'
(1055) Syriac ʼaamaqqət-aa ‘lizard-the, n.f.’ > UA *makkaCta(Nka)-ci ‘horned toad’
(9) Arabic ḍabb-V ‘lizard’ > UA *cakwa ‘lizard’ (Sem-kw)
(365) Egyptian xdw / xddw ‘fish, coll. pl’ > UA *kicu/*kucu ‘fish’
(168) Egyptian rm ‘fish’ (Coptic rame, often in the pl rmw) > Tr ŕamú ‘small fish’

(204) Egyptian tbt ‘fish’ > UA *(pa-)topa ‘fish’
(234) Egyptian mḫyt ‘fish (collective), lit. swimmers’ > UA *muti ‘fish’
(455) Egyptian swr ‘fish, sp.’ > CN šowil-in 'catfish’
(456) Egyptian sḫty ‘fish, sp.’ > Wr so’cí ‘fish’
(185) Egyptian ḫnt’sw ‘lizard’ > UA *-hoto- ‘lizard’:
(1239) Aramaic yall-aa’ / yarl-aa’ ‘lizard’ > UA *yul ‘lizard, sp.’; Ls yulú’ ‘lizard, sp’
(298) Egyptian ʕbxn ‘frog’ > *wapkan > UA *wakaN-ta > *wakatta ‘frog’
(1378) Hebrew *ṣ^{ə}parde^{a}ʕ ‘frog’ > UA *kwa’ro ‘frog’

Body Parts, Man, Woman

(89) Hebrew śeeʕaar ‘hair’; Arabic šaʕr / šaʕar ‘hair’; Arabic šaʕira ‘be hairy’ > UA *suwi ‘body hair’
(1132) Hebrew pɛraʕ ‘hair, locks’; Arabic farʕ- < *parʕ- ‘long hair’ and Arabic farw-u < *parw-u (nom) / parw-a (acc) ‘fur, skin, pelt’; Syriac perʕ-aa ‘bud, shoot, blossom-the’ > UA *pï’wa ‘hair’
(1133) Syriac baʕw-aa ‘camel hair-the’; i.e., animal fur/ hide > UA *po’wa / *poCwa ‘hair, fur, hide, skin’
(742) Hebrew ṣɛmɛr ‘wool’ > UA *comi / *comya ‘hair’
(1098) Hebrew qubbaa; Aramaic qubbə-taa ‘vault, dome, tent’; Syriac qbb ‘to stand on end, bristle (of hair), to over-arch, form a dome’ > UA *kuppa ‘hair of head, head’
(1099) Hebrew góbah ‘height (of a man), height of other things’; Arabic ǧabha(t) ‘forehead’ > UA *kopa is ‘forehead’ (in Tep, TrC), ‘face’ (in Num), ‘head’ (in Cahitan)
(93) Hebrew rooš ‘head’ (< *ra’š); Arabic ra’s- ‘head’ > UA SNum *toCci ‘head’
(1078) Arabic muxx- ‘brain’; Akkadian muxxu ‘skull’: Hebrew moḫ ‘marrow’ > UA *mo’o ‘head’
(511) Egyptian ḫ’ ‘back of the head, back side’ > UA *ho’o ‘back’
(851) Hebrew panaa-(w) ‘face-(his)’ > UA *pana ‘cheek’
(245) Egyptian xnt ‘face, n; in front of, prep’ > Tbr kota ‘face’
(532) Arabic baaṣirat ‘eye’, Hebrew *booṣer ‘eye’ > UA *pusi ‘eye’
(1279) Aramaic yəgar (< *yagar) ‘hill, heap of stones’ > UA *yakaC / *yakaR (AMR) ‘nose, point, ridge’
(1070) *na-qšab ‘what is perked up, the ear’ > NUA *na(N)kapa / Aztecan *nakas
(617) Semitic ðiqn- ‘chin’ > UA *tï’na ‘mouth’
(508) Egyptian rmn ‘row of rowers’ > UA *raman ‘tooth/teeth’; Wr(MM) táme ‘jaw, jawbone’; see 508
(698) Arabic *lahgat ‘tongue’, unattested NW Semitic plural *lahgoot > UA *laŋi / *laŋu ‘tongue’
(563) Hebrew saapaa(t) ‘lip, edge, shore’ > UA *sapala (< *sapata) ‘lip’
(137) Egyptian(F) bbyt ‘region of throat’ > UA *papi ‘larynx, throat, voice’:
(962) Aramaic qooʕ-aa ‘throat, gullet, windpipe-the’; qooʕai-k ‘neck-your’ > UA *kuwi ‘throat’
(1014) Syriac qədaal-aa’ ‘neck, nape of neck’; Arabic qaðaal ‘occiput’ > UA *kuta / *kura ‘neck’
(999) Hebrew gaaroon ‘throat, neck’ (Sem-kw) > UA *iyoN ‘back of neck, nape of neck’
(56) Hebrew šɛkɛm ‘shoulder’ > UA *sïka ‘arm’ / *sïkuN ‘shoulder
(51) Hebrew *kaatep ‘shoulder’ > UA *kotapa / *kotapo ‘shoulder’
(188) Egyptian nḫbt ‘neck, back of the neck’ > UA *nohopi > nopi ‘arm, hand, arm’
(925) Semitic ’agap ‘wing, feather, arm, shoulder’ > UA *aŋapu ‘wing’ (Sem-kw)
(926) Semitic ’agap ‘wing, feather, arm, shoulder’ >UA *wakapu > *wakaC/*wiki ‘wing, feather’ (Sem-p)
(1234) Hebrew zəroʕ ‘arm, forearm, power’; Arabic ðiraaʕ ‘arm, forearm’ > UA *toC ‘with the hand’
(523) Egyptian mni’ ‘hand-arm’ > UA *man ‘hand’
(746) Hebrew ’ɛṣbəʕ-oot ‘fingers’; Syriac ṣibʕ-taa ‘finger’ > Hp civot ‘five’; *-c(i)po in TO hïtaspo ‘five’; and -spo in Nv utaspo ‘cinco’ point to *cipo / *cipu (Tep s < *c); Aztecan *cikwa (Sem-kw)
(262) Egyptian ʕnt ‘nail, claw’ > UA *wati 'claw, finger'
(1056) Syriac ḫady-aa ‘breast-the, n.f.’, pl: ḫ^{ə}daawaat- > UA *tawi 'chest’
(744) Hebrew ṣeelaaʕ / ṣalʕ- ‘rib’; Arabic ḍilʕ- / ḍilaʕ- ‘rib’ > UA *cawa ‘rib’: Ca čáwa-’al ‘rib’, Hp cïŋï ‘rib’; CN šillan-tli ‘side’; Cahitan *sána’a ‘rib’
(7) Semitic *bahamat ‘back’ > UA *kwahami ‘back’ (Sem-kw)
(910) Hebrew gab ‘back, elevation’; Syriac gəbiib-aa ‘hunchbacked’ > Ls ŋavá-ŋva-š ‘stooped, as old man’
(281) Egyptian sm’w / zm’w ‘lungs’ > UA *somwo > *soŋo ‘lungs’
(282) Egyptian wf’ ‘lungs’ (Coptic wof) > Tbr wopa^{N}-s ‘lungs’
(1421) Arabic saḫr- / suḫr-, pl: suḫuur ‘lungs’; Arabic masaaḫir ‘lungs’ > SP soo-vi ‘lungs’; Tb mošooha-t ‘lungs’
(1428) Syriac raa’taa / raataa ‘lung(s)’ > Cora ta’atime ‘lungs’
(337) Egyptian r’-ib ‘stomach’ > *to’i 'bone, belly'; *topa 'belly, stomach'
(218) Egyptian swn ‘to suffer, know’ > UA *suna ‘to suffer, heart’ / SUA *sura ‘heart, seed’
(139) Egyptian bnty ‘breast(s, pair of)’ > UA *pici ‘breast’
(140) Egyptian šnbt ‘breast’ > UA *sanaC- ‘breast’ in Tb piišana-t ‘breast’

(777) Hebrew ṭabbuur / ṭibbuur ‘navel’; Aramaic(J) ṭiibbuur ‘navel’ > UA *sikuN / * sik^{w}ur ‘navel’
(1138) Hebrew šor ‘navel, navel cord’; Arabic surr ‘navel cord’ > Sr ṣuur ‘navel’
(171) Egyptian sxn / zxn ‘kidney fat, kidney tallow, pancreas’ > UA *sikun / *sikur / *sikuC ‘kidney’
(1105) Akkadian kaliitu ‘kidney’; Hebrew kilyaa ‘kidney’; Syriac kooliit-aa ‘kidney’ > UA *kali ‘kidney’
(1003) Arabic kirš / kariš ‘stomach, paunch, belly’ > UA *kïca ‘belly, waist’
(295) Egyptian xpd ‘buttock’, xpdw ‘buttocks ’> UA *kupta ‘buttocks’ and UA *kupitu ‘buttocks’
(606) Arabic dubr/dubur ‘back(side), buttocks’ > UA *tupur ‘hip, buttocks’
(1383) Arabic qaʕda(t) ‘sitting, backside, buttocks’ > Hp kïri ‘buttocks’
(634) ‘loins, hip’ are Arabic xaṣr-; Samaritan ħarṣ-aa; Mandaic halṣa > UA *kaca ‘hip’
(1282) Aramaic ʕaṭmaa ‘thigh, n.f.’, pl: ʕaṭmee > UA *uma ‘thigh, upper leg’
(294) Egyptian xpš ‘upper arm, thigh’: UA *kapsi ‘thigh’
(301) Egyptian mnty ‘thighs, dual’ > UA *macci / *maCti ‘thigh, upper leg’
(132) Egyptian sbq ‘calf of leg’ > UA *sipika ‘lower leg’:
(685) Hebrew ʕaaqeb ‘heel, footprint’ > Hp -laqvï in Hp kïk-laqvï ‘tracks all over’ (kïk ‘foot’)
(1197) Hebrew ʕaaqeeb ‘heel, hoof, footprint’ > UA(SUA/Tb) *woki / *woku’i ‘track, footprint’
(858) Hebrew qarsol ‘ankle’ > UA *-kwinco- ‘ankle’ (Sem-p)
(859) Syriac qursəl-aa ‘ankle bone’; Akk kursinnu; ‘Hebrew qarsol ‘ankle’ > UA *koci ‘ankle’ (Sem-kw)
(973) Hebrew gɛlɛd ‘skin’, gildaa-w ‘skin-his’; Arabic *gild ‘skin’ > UA Tepiman *’ïlida ‘skin’
(5) Hebrew bááśaar ‘flesh, penis’ > UA *kwasi ‘tail, penis, flesh’ (Sem-kw)
(550) Aramaic bəsár ‘flesh’ > UA *pisa ‘penis’ (Sem-p)
(794) Aramaic ’ebr-aa / ’iibraa’ ‘pinion, member male member’ > UA *wï’aC ‘penis’
(616) Semitic *đakar ‘male, man’ > UA *taka ‘man, male, person, self, body’
(169) Egyptian rmṯ ‘man, person, mankind’ > UA *rïmatí / *rï’matí ‘young man’
(205) Egyptian ṯ’y (ṯ’w) ‘man, male’ > UA *tawa / *tawi > *tïwi ‘man, male’
(572) Hebrew ’iiš ‘man, person’ (with negatives ‘no one’) > UA *wïsi ‘person’ (Sem-p)
(76) Hebrew ’aadaam ‘man’ > UA *otami / *wVtam ‘man, person’
(81) Hebrew ħabéret ‘marriage companion (feminine), wife’ > UA *hupi ‘woman, wife’
(339) Egyptian ħmt / ħimt ‘woman, wife’; Coptic hime; Egyptian t’-ħimat ‘the-wife’ > UA *tïhima ‘spouse’
pl: ħmwt; > UA *hamut ‘woman’
(87) Arabic ʕagaza ‘grow old (of women)’ > Tr wegaca- 'grow old (women)’ / UA *okaci ‘(old) woman’
(574) Hebrew ’išaa / ’ešɛt / ’išt- ‘woman, wife of’ > Hp **wïïti / wïhti** ‘woman, wife’ (Sem-p)
(1130) Aramaic pagr-aa ‘corpse-the’ > Hp pïïkya ‘skin, fur’
(411) Egyptian ḫʕ / ḫʕw ‘body’ > UA *hoŋa 'body’
(1476) Hebrew ʕɛṣɛm ‘bone’ (pl: ʕəṣaam-iim > ocomim > cumi) > UA *cuhmi 'bone’ (explained@1476)

Nouns of Nature

(163) Egyptian rʕw ‘sun’ > UA *tawa ‘sun, day’;
(1077) Semitic *manzal ‘star, moon’, Hebrew maazzaal ‘star’ > UA *mïcaC / *macaC ‘moon’;
(154) Egyptian sb’ ‘star’ > UA *si’pu > *su’ ‘star’;
(1274) Aramaic kookb-aa’ ‘star-the’ > UA *kuppaa’ ‘shine (like stars)’: Sr kupaa’ ‘to shine (like stars)’
(1408) Syriac *dinḫ-aa* ‘sunrise, light, the ascendant or predominant star’ > *-tinuN- of Numic **tatinuN-pi* 'star'
(156) Egyptian *gnḥt* ‘a (particular) star’ > SP *kaŋa-* ‘morning star’
(1165) Semitic baḫr ‘sea/water’ > UA *pa (with pharyngealized vowel) / *pa’wï ‘water’;
(229) Egyptian mw ‘water’; Egyptian mwy ‘watery’ > Hp mowa-ti ‘be wet, moist’; Ls páá-muwi-š ‘wet’
(491) Egyptian phrw ‘water’ > UA *parawa 'juice, soup, stew’
(98) Hebrew rqʕ ‘beat (out)’; Hebrew raaqii^{a}ʕ ‘extended surface, sky’ > UA *tukuN-pa ‘sky, metal’
(264) Egyptian šmrt ‘bow’, pl: šmrwt ‘bows’ > UA *ko-samalo ‘rainbow’
(683) Syriac ʕmṭ ‘become dark, cloud over, be obscure’ > UA *(w)umaC / *(w)ïmaC ‘rain’
(709) Arabic ṭll / ṭalala ‘spray, sprinkle, rain a fine rain, drizzle, bedew’; Hebrew ṭal ‘night-mist, dew’;
> Hopi cölö-(k-) ‘to drip (a drop)’; Hopi cölölö-ta ‘be dripping, be sprinkling (rain)’
(1038) from Hebrew (hiqtil) yooreh ‘to water, send rain’, pfv: hoora, inf: hooroot > UA *horo ‘rain, fall’
(760) Hebrew šɛlɛg ‘snow’; Arabic θalğ- ‘snow’ > UA *sïk ‘snow’
(603) Aramaic rymh / riimaa ‘large stone’; rimə-taa ‘large stone-the, n.f.’; Syriac ryaam-taa ‘large stone-the’
> UA *tïmï-ta > *tïN-(pV) ‘rock’
(591) Hebrew ’adaamaa / ’^{a}daamaa ‘earth’ > UA *tïma ‘earth’
(150) Egyptian t’ ‘earth, land, ground, country’ > UA *tïwa ‘sand, dust’
(19) Arabic barr- ‘land (vs. sea)’; Hebrew baar ‘field’; Aramaic bar-aa ‘forest, prairie-the’
> UA *kwiya / *kwira ‘earth’ (Sem-kw)

(75) Hebrew tebel ‘firm (dry) land’; Assyrian taabal ‘land’ > UA *tïpaC / *tïpal 'earth’
(208) Egyptian(H) ṯẖn ‘shine, gleam’; Egyptian ṯẖnw ‘Libya’ (desert) > TO tohono 'desert, the south’
(162) Egyptian šʕy ‘sand’ > SUA*siwal / NUA siwaN ‘sand’
(1141) Hebrew ẖool ‘sand’; Aramaic ẖaal-aa > UA *(h)ola (Tep) / *otta (Num)‘sand’
(280) Egyptian ẖm’(t) ‘salt’ > UA *omwa / *oŋa ‘salt’
(322) Egyptian q’yt ‘high-lying land, hill’ > UA *kawi ‘mountain, rock’:
(868) Aramaic ṭwr- / ṭuur-aa ‘rock, hill, mountain-the’ > UA *toya ‘mountain’
(274) Egyptian dhnt ‘mountain top’, pl: dhnwt > UA *ton(n)o ‘hill’
(1241) Arabic ǧabal ‘mountain(s)’ > UA *kaipa / *kaapa ‘mountain’
(527) Semitic baraq ‘lightning’ > UA *pïroq ‘lightning’ (Sem-p)
(885) Arabic naar ‘fire’ but written na’r / na’ar (< Sem/Arabic nwr) > UACV-878 *na’y- / na’ay ‘fire’
(401) Egyptian ẖnt/ẖnw ‘watercourse, swampy lowland’ > UA *hunuC ‘canyon, gorge, ditch’
(1403) Syriac šigr-aa ‘drain, ditch, gutter-the’ > Hp sikya ‘valley, ravine, canyon’
(646) Hebrew náẖal (< *naxal) ‘river valley, wadi, stream’; Akkadian naxallu ‘wadi, gorge’:
> Ktn naka-č ‘gully, ravine, cliff’ (Sem-p)
(647) Hebrew náẖal (< *naxal) ‘river valley, wadi, stream’ > SP noiC / noi-ppi ‘canyon, wash’ (Sem-kw)

Trees:
(743) Aramaic tuumr-aa ‘palm-the / date-palm-the’ > UA *tuʼya ‘type of palm tree’:
(569) Hebrew ’egooz ‘nut tree’; Aramaic ’emguuz-aa ‘nut-the’ > UA *wokoN / *wo(N)koC ‘pine’
(74) Hebrew təbuuʼaa(t) ‘produce, yield from the land, harvest’ > UA *tïpï’at ‘pinion nut’
(92) Hebrew yáʕar ‘wood, forest’ > UA *yuyiC ‘evergreen sp’
(892) Arabic ṣanawbar ‘pine sp.’ > UA *salaC / *sanawap ‘pitch, gum’; Sh sanawap-pin ‘pine tree’
(1116) Hebrew zɛ́pɛt (< *zipt-) / zaapet ‘pitch’ > UA *copï ‘pitch, torch’
(582) Aramaic ’arz-aa’ ‘cedar-the’ > UA *wa’aC / *wa’aN 'juniper or cedar tree’
(689) Hebrew ʕaroʕer ‘juniper tree’; Arabic ʕarʕar ‘juniper’; Samaritan ʕarʕar
> UA/Tr gayorí / kaorí / kawarí / aorí / aborí / waorí / awarí ‘juniper’
(599) Hebrew ’ayil / ’eel- ‘mighty tree’; ’yl ‘tree and sometimes oak’ > UA *iyal ‘poison oak’ (Sem-kw)
(1337) Hebrew ’ayil ‘mighty tree’; Arabic ’ayyil / ’iyyal > UA *wi’a(N)/*wiya(N) ‘acorn, oak’ (Sem-p)
(1012) Hebrew šiqma(t) ‘sycamore tree’; Syriac šeqma(t) > UA *sïŋŋa(C) 'cottonwood and/or aspen tree’
(174) Egyptian sxt ‘field, country, pasture, willow, n.f.’ > UA *sakat / *sakaC ‘willow’
(961) Hebrew dɛqɛl ‘date-palm’; Arabic daqal ‘palm tree’ > UA *taku ‘palm tree’
(227) Egyptian m’m’ ‘dom-palm (tree)’ > UA *mahawa / *ma(C)wa ‘palm tree’:
(489) Egyptian xt ‘wood, stick, tree’ > UA *kut ‘tree, wood, firewood’
(666) Arabic ẖaṭab ‘firewood’ > UA *hucakwa / *husaba ‘pitch’ > *’usaba-i ‘pitch’

Other plants:
(266) Egyptian šnw ‘hair, grass’ > UA *soni / *soŋo ‘grass, straw, blanket’
(644) Arabic xuḍar ‘vegetation, greenery, meadow’; Semitic xḍr > ẖḍr > UA *husa ‘grass’
(73) Akkadian dašuu > diišu ‘grass, spring’; Hebrew dɛšɛ’ ‘grass, vegetation’ > Hp tïïsï ‘weeds’
(720) Hebrew **nebɛl** ‘skin-bottle, skin’, Syriac nbl / **n’bl** > Nahuatl no’pal ‘cactus fruit made alcohol’
(400) Egyptian sʕr ‘thorn bush(es), thorny undergrowth, thicket]’ > UA *sawaro ‘saguaro cactus'
(198) Egyptian ḏ’rt ‘bitter gourd’ > UA *sawara 'gourd':
(987) Arabic qarʕ- ‘gourd, pumpkin’ > UA *kuyawi ‘gourd’
(267) Egyptian twr ‘reed’ > UA *toli > *to’i ‘reed, cattail’: CN tool-in ‘reeds’
(1216) Hebrew qaanɛ ‘reed, stalk’ > UA *kana ‘willow’
(1135) Hebrew qaanɛ ‘reed, stalk’; Aramaic qanyaa ‘reed, stalk’ > UA *pa-kaN ‘reed, phragmites’
(1136) Hebrew ’ébɛh ‘reed, papyrus’; Arabic ’abaa’ > UA *wapi ‘foxtail’

7.5 Unusual Semantic Combinations in Egyptian/Semitic Preserved in Uto-Aztecan

(98) Hebrew rqʕ ‘stamp, beat (metal) out, spread out’; Hebrew raaqii^{a}ʕ ‘extended surface, expanse, sky’
> UA *tukuN- in * tukuN-pa ‘sky’ and ‘metal’ in the Takic languages.
(283) Eg qm’ ‘create’ and ‘mourn’ > UA ‘make, create’ and ‘mourn’
(332) Egyptian qrẖt ‘serpent’, without fem -t is Egyptian qrẖ ‘friend, partner’ > UA/CN koŋwa ‘snake, twin’
(406) Egyptian b’ ‘ram, soul’ > UA *pa’a ‘mountain sheep, all living beings’
(411, 412) Egyptian ẖʕ ‘body’ and ‘joy’ > UA *hoŋ ‘cheerful, contented’ and ‘body’
(289, 292) Egyptian phr ‘turn’ and (290) ‘medicine’ > UA ‘turn’ and ‘medicine’

(1220) Semitic etqaraš ‘be cold’ and ‘what is fixed’ > Hopi hïkya ‘cool off, vi, be set in a fixed position, vi’
(994) Ls qáya/i- ‘blow down (a tree)’, that is, ‘uproot’ and Ls qáya/i- ‘heal’ are listed as separate verbs in the Luiseño dictionary, though phonologically identical, yet the corresponding Syriac verb ʕqr also means both ‘uproot’ and ‘heal’.
(1485) Semitic *rxm (> rħm) ‘be wide’ and ‘have compassion’ > UA *taha 'pity, have compassion’ in most; but the two meanings of CU tű́aa ‘open space, gap, area’ and CU tű́aani ‘pitiful, pitiable’ in light of Semitic rħm ‘compassion’ and ‘wide’ are noteworthy in this Sem-p item.
(1007) Semitic *xdl (> Hebrew ħaadal) ‘cease, cease doing’; OSArabic xdl; Akkadian xadaalu ‘cease’;
Arabic xadila ‘stiffen, become rigid’ > Hp hïrïï-ti ‘come to a stop, harden’; Hopi Hp hïïrïla ‘be hesitating, pausing, stopping’. Note Hopi’s two rather different meanings (stop, harden) are both in Semitic (cease, stiffen/rigid).
(1009) MHebrew qmṭ ‘heap together, bind’; Aramaic qmṭ ‘draw together, pack, bind’;
Syriac qmṭ ‘lay fast hold of, take, contract, shrink, shrivel, wrinkle’:
Hp homi(k-)[1] ‘in competition with others, grasp, grab, or catch s.th. thrown’.
Hp homi(k-)[2] ‘shrink, draw together, gather up, shrivel up’.
Again notice two identical but separate forms in the Hopi dictionary due to different meanings, yet Semitic also has both meanings, like Semitic ʕqr ‘uproot, heal’ in Ls at 994.
(329) Egyptian qd / qdd ‘wander around, sleep, surround’ > SP qarï ‘sit, dwell’ and SP qarï ‘protect’ (or ‘surround’)
(13) Semitic snw ‘be beautiful, shine, bright colors’ > Hopi soniwa ‘be beautiful, bright (of colors)’
(1399) bxr (> bħr) ‘test, choose, be/make choice’; Amorite bexeru ‘elite soldier’ > UA *bïhïrï ‘expensive, opponent’
(538) Hebrew bad ‘part, member, alone’ and in phrases ‘except, apart from, beside(s)’
> Tr biré and NT parï both mean 'one/some' and both also act as a negative particle
(19, 20) Semitic brr / barr(a) ‘land, choose’ > UA *kwiya ‘earth, choose, consider one’s own’; other sets are 1024.

7.6 Uto-Aztecan Often Preserves Egyptian Phonology Better Than Coptic Did

Coptic	<	Egyptian	>	Uto-Aztecan	
še	<	šm	>	*sima	(131)
Sobek	<	sbk	>	*supak	(115)
sobt	<	sbty	>	*sapti	(133)
mui	<	m’i	>	*mawiya	(147)
siu	<	sb’	>	*sipu’i / *si’pu / *su’	(154)
ji	<	it̲’	>	*itu’i	(157)
sooše	<	sxt	>	*saka	(175)
		ħbi	>	*hupiya	(180)
		ħnqt	>	*hunaqa	(181)
hotpe/hotep	<	ħtp	>	*huppi	(182)
tebi	<	d̲b’	>	*si’pu (< *sipu’i)	(199)
too’be	<	d̲bt	>	*supa	(200)
neme	<	nbi	>	*napi	(243)
soote	<	st̲’	>	*sutu’i	(258)
šopš	<	xpš	>	*kapsi	(294)

Egyptian, like its Afro-Asiatic parent language, originally had three basic vowels—a, i, u. Most languages, with time, would naturally develop more than three, like Classical Hebrew did its seven or so, but notice in the list above how often the UA reconstructions show only the same three basic vowels of Aftro-Asiactic—a, i, u—as opposed to Coptic’s variety.

Other patterns are consistent in the Egyptian-UA connection itself. For example, initial i/y is consistently lost in stems of more than three consonants. Such a loss of initial consonants does happen in Egyptian itself: Egyptian itnw or Egyptian tnw ‘be difficult’; Egyptian igr/igrt or gr/grt ‘furthermore, moreover’, and the UA forms usually lack that initial i, but reflect the rest quite consistently:
Egyptian irt̲t ‘milk’ > UA *rïti/*rïçi ‘milk’ (306)
Egyptian i’bty ‘left’ > UA *opoti ‘left’ (300)
Egyptian irtyw ‘blue’ > UA *tïyawi/*tayawi 'blue/green’ (307)
Egyptian išdd ‘sweat’ > UA *-sul/-sud ‘sweat’ (308)
Egyptian itrw ‘river’ > UA *t(r)wV/*tiwï ‘river’ (309)

Also note the consistent pattern of Egyptian Ctt > UA *Coti (C = any consonant):

Egyptian Ctt > UA *Coti (< *Cotti; otherwise, we might expect Cori or such)
Egyptian ftt ‘jump’ > UA *poti ‘jump’ (463)
Egyptian itt ‘fly’ > UA *yoti ‘fly’ (215)

C**onsistencies in semantic patterns** also occur. What might be dubbed the UA semantic shift down the UA arm—from ‘neck/shoulder’ to ‘arm’ to ‘hand’—happened in UA with Hebrew škm and with Egyptian nḫbt, but also happened in Egyptian, though less dramatically, with Egyptian rmn ‘shoulder’ > ‘arm’ and Egyptian qʕḫ ‘shoulder, upper arm’ > *qḫ > Cpt keh ‘arm.’

7.7 Syntax, Word Order, and Verbal Nouns

Word order was introduced on pages 15-17. Some people may want to claim it significant that UA and perhaps most Native American languages show basic SOV order while some Semitic languages more often show VSO order. However, the facts are that (1) most languages can vary their order due to emphasis (topicalization) or other things, regardless their most frequent or basic order; (2) Hebrew can also have SOV order though more often it has VSO order; (3) much of the book of Daniel in Aramaic has SOV order; (5) and while most UA languages have SOV order, some show VSO order as well as SVO, and (6) for languages to change their basic order when in the midst of languages with a different order happens often and can do so quickly. So basic word order is not a very stable measure or feature of language relatedness. Nevertheless, it is good to look at such syntactic matters to see how certain changes may have occurred.

Though some Semitic languages, like Hebrew and Arabic, often exhibit VSO order, such is not always the case. Hebrew can also exhibit SOV order:
Judges 17:6 ’īš ha-yyašar bə-ʕeenaa-w ya-ʕase ‘Each man does what is right in his own eyes.’
Man the-right in-eyes-his he-does (subject-object-verb)

While most UA languages show basic SOV order, some exhibit VSO order like Hebrew and Arabic.
Cr Verb-Subject-Object (Casad 1984, 168)
TO čikpan o hegai uwi ‘That woman is/was working.’
work is/was that woman
TO huhu’id o g ban g čuwi ‘The coyote is/was chasing the rabbit.’
chase coyote rabbit

The change from Semitic prepositions to UA postpositions is similar to the change within Semitic itself, a change from prepositions to postpositions in Semitic (Goldenberg 107-8). In UA, the change appears to entail preposition-noun > noun preposition-it, which looks like noun-postposition. For example, the UA postpositions often correspond to Semitic preposition + pronoun: taxt-e ‘under-it/him’; qereb bo ‘midst-in it’. A good example is (562) UA bobica ‘wait for’ from Hebrew -bbiiṭ b-o ‘look at in/for-him/it’ with its constituents reversed, the very kind of order expected in such a change as -bbiiṭ b-o ‘look at-him’ > bo bica ‘at-him look’ or ‘prep-object-verb’ syntax. Much more detailed study remains to be done in this area.

7.8 The Widespread Uto-Aztecan Words

Of some 2500 cognate sets in UA, only 45 appear in 25 or more of the 30 UA languages or in seven or eight of the eight branches. Yet 26 of those 45 most widespread UA words are in this work—about 60%.

4 Hebrew baašal ‘cook, ripen’ > UA *kwasïC ‘cook, ripen’
5 Hebrew baaśaar ‘flesh, penis’ > UA *kwasi ‘tail, penis, flesh’
56 Hebrew šɛkɛm ‘shoulder’ > Num sïkum / UA *sïka ‘shoulder, arm’
78 Hebrew ḫeṣ ‘arrow’ > UA *huc ‘arrow’
570 Hebrew ’axar ‘follow, another, after’ > UA *wakay ‘two, after’
1077 Semitic *manzal ‘star, moon’, Hebrew maazzaal ‘star’ > UA *məcaC / *macaC ‘moon’
531 Hebrew boo’ ‘coming, way’ > UA *pow ‘road, path’
532 Arabic baaṣirat ‘eye’, Hebrew *booṣer ‘eye’ > UA *pusi ‘eye’
565 Hebrew makar ‘sell’ > UA *makaC ‘give, sell, feed’
616 Arabic/Hebrew *ɖakar ‘male, man’ > UA *taka ‘man, male, person, self, body’

617 Semitic/Hebrew điqn- ‘chin’ > UA *tï’na ‘mouth’
614 Hebrew makteš ‘mortar’ > UA *ma’ta ‘mortar’
701 Hebrew *-lmad ‘learn’ > UA *mati ‘know’
52 Hebrew mukke ‘smitten’ > UA *mukki ‘sick, dead’
1165 Semitic baẖr ‘sea/water’ > UA *pa / *pa’wï ‘water’
139 Egyptian bnty ‘breast(s, pair of)’ > UA *pici ‘breast’
154 Egyptian sb’ ‘star’ > UA *si’pu / *su’ ‘star’
158 Egyptian iṯi ‘rob, take’ > UA *ïci ‘steal’
523 Egyptian mni’ ‘hand-arm’ > UA *man ‘hand’
163 Egyptian rʕw ‘sun’ > UA *tawa ‘sun, day’
179 Egyptian x’yt ‘slaughter, carnage’ > UA *ko’ya ‘kill pl obj’s, die pl subj’s’
280 Egyptian ẖm’t ‘salt’ > UA *omwa / *oŋa ‘salt’
284 Egyptian qm’ ‘create, beget’ > UA *kumwa / *kuŋa ‘husband’
332 Egyptian qrẖt ‘serpent spirit’ > UA *kowa / *koŋo / *koro ‘snake’
1 Northwest Semitic *-ima > UA -im, -m, -mï ‘plural suffix’
101 Aramaic/Syriac (’a)naa’ ‘I’ > UA *nï’ ‘I’
105 Semitic *-kVm > UA ’ïm ‘you’

7.9 The Semitic Liquids and Velars / Uvulars in Uto-Aztecan

One of the most common sequences among Semitic roots is initial q-, k-, or g- and second consonant liquid -r- or -l-. So addressing them together is convenient and again provides data for further analyses.

The liquids as initial consonants have been largely treated in the body of the book: initial r- at sets 93-100, 600-604, 887-889, and initial l- at 695-708. The liquids’ behaviors in consonant clusters are treated at 7.2 on consonant clusters. Here we list the initial l- forms, but mainly address the intervocalic liquids. Intervocalic -l- is more straightforward, more often remaining each language’s liquid. However, intervocalic -r- > -r- or -y- or other. Uto-Aztecan’s nasal-liquid spectrum is introduced at 1.45-46 (pp. 52-56).

Among NUA languages, Numic has -r-, and Tb and Tak languages have -l-, all presumed to be from intervocalic PUA *-t-, many of which are, but not all. Hopi has both -r- and -l-, but many Hopi l align with PUA *w, but not all, and some -r- seem to be from intervocalic stops. A few NUA -n- correspond to SUA liquids. Many SUA languages have only one liquid: e.g., CN has l, but not r, and Eu has r, but not l. However, many SUA languages have both -l- and -r- or show separate reflexes for the two: My, Yq, Wr, Tr, Tbr. Significant is that in those languages that have both liquids, Semitic-p’s -r- usually reflects as -r- and -l- as -l-. For example, in (724), Semitic parʕoš ‘flea (jumper)’ from the verb prʕš ‘jump’ > UA *par’osi / *paro’osi ‘jackrabbit’, most languages (Op, Eu, Yq, My, PYp) show -r-, one (Tr) has -l- and Wr has variants with each. Notice in the several items listed below that most reflexes show -r- < *-r-, and -l- < *-l-, though liquid reversals also happen and are common in other language families as well. Even in Numic (below) we see Semitic -r- > Num -r-, though it has been reconstructed as intervocalic *-t- becoming -r-.

The following two My terms are evidence of a distinction between Semitic-p’s -r- and -l-:
(527-p) My bérok-te ‘to lightning’ (< Semitic brq ‘lightning’ verb and noun)
(549-p) My béloh-ko ‘to shine’ (< Semitic blg ‘shine’)
The two Semitic-p forms in My are in identical environments with -r- in 527 and -l- in 549, and the -r- and -l- of UA align with Semitic -r- and -l-, and the definitions match perfectly as well.

Initial *l- > l-:
l- ‘to/for’; Aramaic le ‘to/for him’ > UA *li 'to, for' (1187)
lo ‘to him/it, has’ > UA lo (1026)
l’y / loo’e ‘grow weary/tired’ > UA *loi ‘be tired’ (705)
lahgat ‘tongue’, pl: *lahgoot > UA *laŋi / *laŋu 'tongue' (698-kw)
lwz / lawz ‘almonds’ > UA *lawas ‘pine nut cache’ (702)
lwy / laawaa ‘turn, bend, twist’ > UA *líwa/i ‘be tightly twisted’ (706)
lmd / loomed ‘learn’ > UA *lomi ‘know’ (699)
lummad ‘learned, trained, taught’ > UA *luma ‘good, beautiful, fit, nice’ (700)
lmm ‘gather, collect, befall, overcome’ > UA *lïmïmï ‘burn, fall in (a structure)’ (703)
laqlaq ‘stork’ > Ca la’la’ ‘goose’ (704)

lqẖ / laaqaẖ ‘take (in hand), grasp, take as wife’ > UA *loko- ‘marry’ (695)
lqẖ / *ya-lqaẖ > *yi-qqaẖ ‘take, take as wife’ > *yïkoC / *yokoC ‘copulate’ (696)
lqẖ, -qqaẖ; imperative forms: qaẖ and qəẖaa > UA *ŋïha / *ŋïhi ‘grasp, catch’ (1465)
l’m ‘to bandage, wrap, dress’ > UA *taluma ‘blanket, garment’ (1129)
***-ll- > -n-**
lebb, hal/han-lebb ‘the heart’ > Hp ïnaŋwa ‘heart, life’ (1312-kw)
Initial *l- lost, perhaps due to later stress making lˀ- so short of a syllable that it is lost as when 1st C of cluster:
lappiid-aa ‘torch-the, light pot-the’ > pita ‘fire’ (883-p)
lẖy / ləẖiy ‘chin, jawbone’; Arabic laẖy- ‘jawbone’ > Hopi öyi ‘chin’; Ls ’óóyi-l ‘jaw, chin’ (1431)

Velars and Uvulars
Let us examine the transfer of Semitic initial velars and uvulars into UA, whose 2nd consonant is often a liquid. Semitic-p generally preserves initial q-, k-, and g- as PUA *k-, though Takic more finely distinguishes *qa and *ka as qa and ka (see at 6.6). Semitic-kw, in contrast, seems to have lost initial q-, k-, g-, except in Takic, where Semitic-kw initial q- and g- both correspond to Takic initial ŋ- (see at 5.13), but seem to have been mostly lost in the other branches.

Semitic-kw initial g-/ q-/ k- > ø
(981-kw) gaz ‘bird of prey’, gaz-aa ‘falcoln-the’ > UA/Tak/Tb *’asa-wïr ‘eagle’
(973-kw) gɛlɛd ‘skin’ > Tep *’ïlida ‘skin’
(984-kw) gullaa / gullat- ‘basin, bowl, ball’ > SUA *ola ‘ball’
(1137-kw) gómɛ ‘papyrus’ > UA/Eu/Wr *oma ‘reed’
(999-kw) gaaroon ‘throat, neck’ > UA/SNum *iyoN ‘back of neck, nape of neck’
(1057-kw) gursiptu ‘butterfly’ > UA *asiNpu(tonki) 'butterfly’
(974-kw) kakkar ‘valley’ > UA *aki ‘arroyo, canyon, valley’
(980-kw) klm ‘address s.o.’ > Ls ’ulómi ‘call s.o. names’
(993-kw) qəwuṣoot ‘locks (of hair)’ > UA *woC ‘hair’
(982-kw) qll / qaliil ‘be small, insignificant, light’ > Tep/Cah/Tbr *ali ‘little’; Tak añii
(1217-kw) qalal ‘be small, contemptible’; *qillal / -qallel ‘declare accursed, consider bad’ > Tak/Wr *’alal ‘bad,wrong’
(972-kw) qippoz ‘arrowsnake’ > Tr aposini ‘venomous serpent’
(990-kw) qr’ / qara’a ‘call, cry out’ > UA *aya ‘call’
(991-kw) ni-qra’ ‘he/it is called/named’ > UA *nihya ‘call, name’
(975-kw) qéreb ‘inward part, midst’ > UA *’ïrapa ‘inside’
(976-kw) qarob ‘near’ > Tr ayobe ‘soon, near in time’
(977-kw) qariib ‘near’ > Tep/PYp *alip 'soon'
(593-kw) qardammu ‘enemy, opponent’ (Akkadian) > UA *tïmmu ‘opponent’
(971-kw) qarduun-aa ‘louse-the, nit-the’ > UA *aCtïN ‘louse’
(998-kw) qeren / qarn- ‘horn, corner, tip’ > SP yïnnï ‘crown of the head’
(997-kw) kəraaʕ ‘lower leg’ > *kVyu’u > UA *yï’u ‘leg’
(988-kw) qarʕ- ‘gourd, pumpkin’ > UA *ayaw ‘squash’
(989-kw) qarʕ- ‘gourd, pumpkin’ > UA *ayaC / *ayoC ‘turtle’
(1272) qšr ‘to peel, shell, derind, debark, skin, husk’, f. impfv ta-qšir > UA *asi’a ‘bark, peel, shell, n’
(969-kw) qešet, qašt- ‘bow, weapon’ > UA *aCta ‘atlatl, bow’
Some q > Hp h
(1010-kw?) qlp ‘to peel, shell, scrape off, strip off’’ > Hp hàapo(-k-) ‘get loosened, chipped’
(1009) qmṭ ‘draw together, lay hold of, take, contract, shrink, shrivel’ > Hp homi- ‘grab, shrink, draw together, shrivel’
(1008-kw) qrb ‘approach, be near’, qariib ‘near’, Syriac qərib ‘come near, draw nigh’ > Hp hayiŋw- ‘draw near’
Several etyma seem worth contemplating as feasibly from qr’:
(992) Semitic qr’ / *qara’ ‘call, name, cry out, shout, announce’ > Hopi eyoyo-ta ‘ring, peel (bell)’; Ls ’uyá’a ‘feel bad, sad’ (i.e., cry); Ls ’úúyi ‘howl’; Ls hááyi ‘scream’; Ktn yu’ ‘cry, buzz, sing’ of impfv pl yV-qrə’u ‘they call/cry’?; SP qwarava-ya’i ‘cry from pain’ vs. SP oroŋwi ‘roar, growl’; WMU oróġoa’nI’ni ‘groan’; CU ’oróĝwa’ni ‘suffer’

In contrast, Semitic-p kept initial q-, g-, and k- (see also 6.6); some examples follow:
(717-p) qlp ‘peel off, shell, rub away’ > UA *kïlipi ‘shell, shuck, degrain, v’
(1409-p) kuuky-aa(’) ‘spider-the’ > UA *kuukyaŋw ‘spider’
(575-p) kama’ ‘truffle’ > UA *kamo’-ta ‘sweet potato’
(755-p) kutónet ‘shirt-like tunic’ > UA *kutuni ‘shirt’
(803-p) kapiir ‘young lion’ > PYp kaper ‘bobcat’

(1015-p) kabara ‘be older, big, grow, increase’ > Num kabara ‘tall, long’ though reconstructed *kapata
(1117-p) kuukkəbay ‘owl’ > UA *kuku(pu) ‘burrowing owl’
(1274-p) kookb-aa’ ‘star-the’ > UA *kuppaa’ ‘to shine (as of the stars)’
(738-p) qayiṣ / qeyṣ ‘summer’ > *kuwïs 'summer'
(861-p) qəša’ ‘be hard, severe, harsh (of taste)’ > UA *kïsa 'sour, harm(ed), bad'
(864-p) *quuppoot ‘baskets’ > UA *koppot ‘basket’
(959-p) qml ‘be lean/thin, wilt, wither’ > UA *komal ‘thin’
(967-p) qušṭ-aa ‘bow-the’ > UA *kuCta-pi ‘bow’
And many more. A puzzle is when we see q- > ø in Takic (e.g. 982, 1217), which may mean a loan from Tepiman or another nearby branch of UA, because normally Sem-p q- > q- and Sem-kw q- > ŋ- in Tak.

Intervocalic -l-:
Turning now from initial velars/uvulars to our main focus: intervocalic liquids. Intervocalic Semitic -l- seems to be surprisingly consistent as -l- in UA (or -r-, especially in languages lacking -l-), in etyma from both Semitic-kw and Semitic-p: Semitic-kw -l- > UA -l-, and Semitic-p -l- > -l-; and to -l-, -r-, or -d- in the Tepiman branch; sometimes doubled -ll- > -n-; and some items are not yet clear. Details can be sought at each set, but below is a rough listing of data with intervocalic -l-:

branch	Hopi	Tb	Tak	Num	Tep	Eu	Tr/Wr	Cah	Tbr	CrC	Azt
inventory	l/r/y	l/y	l/r/y	r/y	l/r/d/đ	r/y	r/l/y	r/’/l/y	r/l	r/’/l/y	l/y
(31) ṣll	l		l	n							l
(6-kw) blʕ		l	l				r				
(710) tlʕ			l		d		l		l		l
(712) hll	l	l	l					l			
(930-kw) gll			l								
(931/984-kw) gll	l				l						l
(935-kw) galam			l								
(934) gəloom				r				l			
(973-kw) gld					l/but Nv r						
(980-kw) klm			l								
(982-kw) qll			l/ñ		l			l			
(1217-kw) qalal			l				l				
(630-p) xly			l		l/r/d		(r?)	?			
(709) ṭll	l										
(713) ṭlʕ		l									
(714-p) pl’			l								
(715) dll	l										l
(716) dlq	l										
(717-p) qlp					l						
(645-kw)ɦbl/*xbl	l										
(681) ʕlw	cluster	l	l								
(677) ʕgl					l/d						
(917-kw) gʕl			l								
(1521-kw) gly			l								
(947-kw) qlb			l								
(765-p) xlq			y			r				r	
(1105) kali	l			n							

Intervocalic *-r-: Intervocalic *-r- changed somewhat differently in Semitic-kw vs. Semitic-p. The most common or general rule is that Semitic-p *-r- > UA -r-, Tep -d-, but Semitic-kw *-r- > UA -y-, Tep -đ-. (Likewise, Proto-Mayan *r > y in branches of Mayan; and in Egyptian also, -r- > -y/i-.) Many UA liquids in clusters were nasalized in Numic. Some overlap and exceptions also dot the data.

Semitic-kw intervocalic *-r- > UA *-y- in most branches, > Tep d/đ (see details at numbers listed):
(19/20-kw) Semitic brr / barr(a) ‘land, choose’ > UA *kwiya ‘earth, choose/take’; but the Yq pl and Tbr kwira show -r-
(64-kw) Semitic krr ‘circle, dance’ > UA *kiya ‘have a round dance’
(65-kw) Semitic mrr ‘go’ > UA *miya ‘go’
(976-kw) Semitic qrb ‘approach, draw near’; Hebrew qaaroob ‘near’ > Tr ayobe/ayowe/ayowi ‘soon’
(1367-kw) Syriac mrq ‘rub off, scour, polish, cleanse, vt’ > Sr mïyï’-kin ‘1 wipe out, 2 cause to shimmer’

(914-kw) Semitic grr ‘ruminate (chew cud), saw’ > UA/Tak/Hp ŋayaya ‘do circular/back-and-forth motion’
(920-kw) Hebrew gršʼ ‘drive out’ > UA ŋoya ‘chase’
(932-kw) Aramaic gwr / gwr-aa ‘traveling away from home’ > ŋoya ‘leave, go away, go/come home’
(643-kw) ’aɦare^{y} / ’aaɦoor ‘back, behind’ > UA *(a)hoyi ‘back, follow, return’
(66) ’mr / ’aamar, impfv: yoomar / yoomer ‘say’ > UA *umay / *may ‘say’
(933-kw) gwr / *yə-gayyar ‘to commit adultery’ > Hopi yoŋyày-ti ‘be adulterous, have an affair (with)’
(950-kw) gəraamaa-w ‘bones-his’ > UA/Hp *ŋya(m) ‘clan, relative’
(999-kw) gaaroon ‘throat, neck’ > UA/SNum *iyoN ‘back of neck, nape of neck’
(1483-kw) dwr ‘to go round, turn, revolve, move in a circle’ > UA/Hp/Yq *ruya ‘roll, turn, twist’
(868) ṭwr- / ṭuur-aa ‘rock, hill, mountain-the’ > UA *toya ‘mountain’
(605-p) ṣwr / ṣuur-aa ‘rock-the’ or Samaritan Aramaic ṣor-aa > Tep hoda < UA *soya ‘rock’
(623-kw) zrʕ / zaaraʕ ‘sow (seed)’; Arabic zaraʕa ‘sow, plant’ > CN cayawa ‘sew, scatter seed’
(625-kw) zéraʕ ‘seed, offspring, descendants’; Arabic zarʕ- ‘seed’ > Hopi cayo ‘child’
(1156) ɦrk / ɦaruka ‘set in motion, move, stir, be agitated’ > UA *huyuka ‘move’
(670) ɦɛrɛṣ ‘earthenware, vessel, potsherd’ > Ca wayisma-l ‘plate, dish’
(1037-kw) yooɾɛ ‘to water, send rain’ (< *yawri) > UA/Tak *yawya / *yuya / *yawi ‘rain, snow’
(728) yr’ / yiiraa’ ‘(he/it) fears’; yir’a(t) ‘fear, n’ > UA *iya-paka ‘fear, v’
(1344) yry / yoore (m) / toore (f) ‘instruct, teach’ (hiqtiil 3 sg impfv), toore le/la > Tb tooyla ‘teach (him/her)’
(997-kw) kəraaʕ ‘lower leg’ > UA *yï’u < *kVyu’u ‘leg’
(941-kw) -nʕar ‘shake, grunt, roar’ > *ŋïy ‘shake, be dizzy’
(62) śrq / srq ‘to comb’ > UA *siyuk / *ciyuk ‘to comb’
(727) swrr ‘turn, revolve, dance’ > UA *suyuyu ‘spin, whirl’
(1167-kw) pərɑɦ (< *prx) ‘to fly, depart, flutter, a blossom’ > UA *pïyaw ‘feather, to fly’
(726-kw) prq / paraq ‘drag away, tear away’ > UA *piyok ‘pull, drag’
(1164) ṣɦr ‘dry up, become yellow’ > UA *sa’wa / *sawari / *sawiya ‘yellow’
(67-kw) ṣaaráʕat ‘skin disease, leprosy’ > CN siyo-tl ‘rash, scab, leprosy’
(991-kw) ni-qra’ ‘he/it is called/named’ > UA/Num *nihya ‘call, name’
(1478) Hebrew ṣar ‘enemy’ > UA *say- ‘enemy, opponent’; NP sai ‘enemy’; Wr sahí ‘ opponent’;
Tr saye/sayi-ra 'enemy’, pl: na-sayira; Tr na-sayé ‘confront each other’; My sáyyo ‘enemy’.
(990-kw) qr’ / qara’a ‘call, cry out’ > UA/NUA *aya ‘call’
(580-p) qr’ / qara’a ‘call, cry out’ > UA/Azt/TrC *koyowa ‘yell, shout’
(1357) qr’ / qara’a ‘call, cry out’; many Semitic bird words from this root > UA/Num/Hp *kuyuC / kuyuŋV ‘turkey’
In contrast to Sem-p (987-p) qarʕ- ‘gourd, pumpkin’ > UA *kuyawi ‘gourd’ Tr/Wr/Tb all -y-, Semitic-kw has
(988-kw) qarʕ- ‘gourd, pumpkin’ > UA *ayaw ‘squash’
(989-kw) qarʕ- ‘gourd, pumpkin’ > NUA/Azt/Tbr/Wc *ayaC / *ayoC ‘turtle’
(976-kw) qarob ‘near’ > Tr ayobe ‘soon, near in time’
(977-kw) qariib ‘near’ > UA *alip 'soon'
(1008-kw) qrb ‘approach, be near’, qariib ‘near’, Syriac qərib ‘come near, draw nigh’ > Hp hayiŋw- ‘draw near’
(1489-kw) qrb ‘approach, be near’ > Ls ŋááya ‘be close, be near’
(975-kw) qéreb ‘inward part, midst’ > UA/Tep *’ïrapa ‘inside’
(964) qɛrɛn / qarn- ‘horn’ > CN koyooniaa ‘perforate’
(998-kw) qeren / qarn- ‘horn, corner, tip’ > SP yïnnï ‘crown of the head’
(730) śrp ‘to burn completely’; Hebrew śərepa(t) ‘fire’ > UA/Tep/Wr *saypa / *saya ‘to burn’

Semitic-kw final -Vr > -i, or -ar > -ay

(5-kw) Hebrew baaśaar ‘flesh, penis’ > UA *kwasiC / *kwasiy ‘tail, penis, meat’ (all 8 branches)
(885-kw) Semitic naar ‘fire’ written na’r / na’ar ‘fire’ > UA *na’ay / na’aya ‘fire’ -y- in Tr/Wr/My, -d- in Tep
(651-kw) ɦoṭɛr ‘rod’ > UA *(h)uci ‘tree, stick’
(1372-kw?) dbr ‘turn one’s back’; dubr / dubur ‘rump, back(side), buttocks’ > Ktn tïhpi-c ‘loin, back’;
in contrast is Sem-p (606-p) dubr / dubur ‘rump, back(side), buttocks’ > UA/Tep *tupur ‘hip, buttocks’
(607) dobɛr ‘pasture, vegetation’ > UA *tupi ‘grass, vegetation’
(610) daabaar ‘speech, word > thing, matter’; Hebrew haddaabaar ‘the thing, the word’ > UA *(hi)-tapi(ri) ‘thing’
(611) dbr ‘speak’; daabaar ‘speech, word, discourse, saying, report, tidings’ > UA *tapay(a) / tapiya ‘speak’
(81) ɦabéret ‘marriage companion (feminine), wife’ > UA *hupi 'woman, wife’
(974-kw) kakkar ‘valley’ > UA *aki ‘arroyo, canyon, valley’
(92-kw) yáʕar ‘wood, forest, roadless terrain’ > UA *yuwiN ‘ponderosa pine’
(89) śeeʕaar ‘hair’; Arabic šaʕr / šaʕar ‘hair, pelt’ > UA *suwi ‘body hair’
(1245) śeeʕaar ‘hair’; Arabic šaʕr / šaʕar ‘hair, pelt’ > UA *suwi ‘jackrabbit’
(985) ksr / kasara ‘break’ > UA/Tr/Wr *kasi ‘break’

(742-kw) ṣɛmɛr ‘wool’ > UA *comi / *comya ‘hair’
(79) ɧmr ‘to pitch, cover, smear’ (with s.th.); ɧammar ‘to color or dye red’ > UA *humay ‘smear, spread, rub, paint’
(1181) šmr ‘keep, watch over, have charge of, restrain (within bounds)’ > UA *summay /sumiya ‘think about’
(10-kw) šabber ‘break, break in pieces’ > UA *sakway ‘break, ruin’

Semitic-p intervocalic *-r- > -r-
(28-p) ṣurṣur / ṣurṣuur / ṣarṣuur ‘cricket’ > UA *corcor ‘cricket’
(527-p) baraq ‘lightning’ > UA *pïrok ‘lightning’ / My berok- ‘lightning’, Tbr virikí-t
(566-p) ’ariy / ’arii ‘lion’ > UA *wari ‘mountain lion’
(875-p) boqer ‘morning’, bəqar-iim ‘mornings’ > UA *pi’ari ‘tomorrow’
(1496-p) brd ‘be cold, to hail’, barad/baaraad ‘hail, n’ > UA/Tr * bara- ‘be cool, time of rains’
(660-p) ɧaram / ɧurmat- / ɧariim ‘woman, wife’ > Wr oerume / oorume ‘woman’
(1401-p) brɧ ‘flee, slip away, pass through, glide past’ > My bóroh-te ‘tiene diarrea’
(1180-p) gabr-aa, pl: gabr-iim/iin ‘great man’ > UA *kïri ‘man, old man, elder’
(1499) zry (< *ɖry)‘to scatter, sow’; Aramaic dry /dəraa ‘to winnow, scatter’, verbal n: dəree / dərii > Tr/Wr *tari ‘seed’
(723) ṭariya ‘to be juicy, moist, fresh’ > UA/Wr *-cori ‘wet/moist’
(1038-p) yoorɛ ‘to water, send rain’, pfv: hoora, inf: hooroot ‘watering’ > UA/TrC *hora / *horo ‘rain’
(1396-p) kpr, impfv: *-kpor ‘cover’ > Tr pora ‘cover’
(803) kəfiir (< *kapiir) ‘young lion’ > UA / PYp kaper ‘bobcat’
(1420-p) nwr, impfv: nuur(u), pfv: naar ‘make/become light’ > UA/Eu *nur / *nar ‘become daylight’
(1202-p) ʕwr > ʕaara / ya-ʕwaru ‘be/make blind, go away with (s.o./s.th.)’; IV aʕaara ‘lend, loan’ > UA/Tep *wara 'sell'
(745-p) ṣhr ‘be bright, clear’; Arabic ẓhr ‘appear, arise’ > UA *cihari / *ci’ra/i, Num sï’aN 'sunrise, east, morning'
(1222) ṣpr ‘to whistle, hiss, chirp’ > UA/Tep *ciporika 'whirlwind'
(1250) šrg / šrq ‘slip, slide’; or šrʕ / zlq ‘slip, slide, glide’ > NUA/Tr *siro ‘slide, slip’, CN -l-
(1266) tpr / -tpor ‘sow together’ > UA/Tep/TrC *pura/i ‘tie’
(1016-p) qbr ‘bury’ > UA *kopor ‘dig’, *kopa ‘(make) a hole’
(725) toor ‘turtle-dove’ > SUA *tori ‘domestic bird’, CN -l-
Even Numic and the rest of NUA show intervocalic -r- (< *-r-) in Sem-p items (though formerly understood as lenited intervocalic *-t- by previous Uto-Aztecanists):
(674) ɧrb ‘lay waste, destroy’; impfv ye-ɧrab ‘massacre’, or hoqtal impfv: *yuɧrab > SP yurava ‘be overcome’
(1322) ɧrr / ɧaaraa ‘be hot, burn’, Ethiopic/Arabic ɧarra ‘be hot’ > UA/TrC *uru / Num *ïrï ‘hot’
(1399-p) bxr (> bɧr) ‘test, choose, be/make choice’; Amorite bexeru ‘elite soldier’ > UA *bïhïrï ‘expensive, opponent’
(1015-p) kabara ‘be older, great, big, grow, increase’ > UA/Num *kaparaC ‘long, tall’
(1484-p) dwr ‘to go round, turn, revolve, move in a circle’ > UA/Hp/SNum *turu ‘whirl, roll, twist’
(667) ɧwr / ɧuur ‘look, behold, gaze’ > UA/Tak *hura ‘come up, look in/over’
(655-p) *xrr / xarra ‘to snore’ > Ls xaráá-ya ‘to snore’
(1297-p) prk ‘crush’ > SP puruqqwi ‘to break to pieces’
(1066-p) ṣrʕ (< *ɖrʕ) ‘be weak, lean, emaciated’, verbal nouns ɖarʕ, ɖuruuʕ > UA *corowa / *corwa > coŋo ‘be hungry’
(737-p) ṣirʕaa ‘hornets’ > UA *saŋa ‘yellowjacket, stinging one’
(1299-p) ṣrɧ ‘groan, cry out’ (< *ṣrx) > UA *ïsoroN- ‘snore’; UA *sork
(1138-p) šor ‘navel, navel cord’; Arabic surr ‘navel cord’ > Sr ṣuur ‘navel’
(1511-p) šrd ‘to quake, be terrified’ > Ktn šariri’ ‘trembling’
(1201-p) təmuuraa ‘exchange, substitution’; ha-ttəmuuraa ‘what is exchanged, exchanging’ > Num *tïmïrï ‘buy, trade’
(729-kw) ’eebaar-aa / ’eebr-aa ‘limb, arm, wing, pinion, male member’ > UA *pïra ‘arm, right arm’
(1440-kw) ’rɧ ‘be on the road, wander’; Hebrew ’oraɧ ‘way, path’ (Akkadian urxu) > Ch ’uru^{w}a- ‘travel, go, walk’

Semitic-p final -ar > -a, as final -r does not raise the preceding vowel like Semitic-kw final -l does:
(565-p) mkr / maakar ‘sell’ (3rd masc sg pfv) > UA *maka / *makaC ‘give’
(1331-p) ’kr / ’akara ‘till (the ground)’; ’ikkaar ‘agricultural worker’ > UA *wika 'digging stick'
(550-p) Aramaic bəśár ‘flesh’ > UA *pisa ‘penis’
(616-p) dakar ‘male, man’ (Aramaic) > UA *takaC / *takaN ‘man, person, body’
(631-p) *xamar ‘wine’; Arabic ximiir ‘drunkard’ > UA *kamaC 'drunk’
(789) ṭhr / ṭaahar ‘be clean (dietarily, of animals/food)’ > UA *cahar ‘fork(ed)’
(1072-p) yáʕar ‘wood, forest, roadless terrain’ > UA *yuwa ‘open country, outside’
(90-p) naʕar ‘boy’ > UA *nowa ‘son’
(1022-p) maaɧaar ‘next day, tomorrow’ (< *ma’xar) > UA mawa, moosta, muu’a, mowahusu ‘tomorrow’
(1421-p) saɧr- / suɧr-, pl: suɧuur ‘lungs’; also masaaɧir ‘lungs’ > Tb mošooha-t / mosooha-t ‘lungs’

Puzzles include the Hp and SP forms in 921 below: in Sem-kw, we would expect Hp ŋayo and SP (q)ayu, and in Sem-p, we might expect qaro / qoro for both, but each shows a characteristic of Sem-kw and another of Sem-p.
(921-kw) grm 'gnaw, break/crush (bones)', inf: garom
> Hp ŋaro- 'crunch down on'; SP qayu 'grind up (like a dog crushing bones)

Semitic-p forms showing some -r- > -y- in NUA is puzzling
(1373-p) Arabic đrr 'strew, spray' > Ktn tïyïyï'y 'drizzle (weather)' (Sem-p, Semitic đ > t);
(1365-p) 'gr / 'agar 'to hire, harvest' > Tb waahay' 'work' (-r- > - y'-)
(570-p) 'axar 'behind, after'; *'axer 'other/another' > UA *wakay/waxay 'two, after'
(1486-p) 'rk 'be long (time or space/length)' > UA wïïyak 'long'
(994-p) ʕqr 'uproot, weed, heal' > UA/Tak *qaya/i 'uproot, weed, clean, wash, heal'
(1515) ʕrq 'flee, escape, shun, avoid' > UA/Tak/Hp *wayaq 'go out (fast)'

Final -r/-l > CN -l, though lost in other UA languages:
(60-p) Arabic muskir 'alcoholic beverage'; unattested *ma-škar / *mi-škar > CN meškal-li 'mezcal, alcoholic drink'
(866-p) ṭmr 'hide, bury, cook underground with coals' > UA *tïmal- (tamal-li) 'what is baked underground'
(720-p) n'bl / nebel 'skin-bottle, skin (of wine)' > no'pal- 'prickly pear cactus fruit' (often fermented to alcohol)
(873-p) 'pl / yu'pal 'get dark, (sun, planet) go down' > UA *yu'wal 'night, get dark'

7.10 Other Consistencies and Phonological Phenomena

Besides sound correspondences and a substantial number of lexical similarities according to those correspondences, related languages tend to share other patterns, systems, and even systems of systems. The facts that every marker for passive/stative in Egyptian is found in UA, and that five of the UA ways of doing passive/stative align with either Hebrew or Egyptian are rather remarkable.

Egyptian and Semitic also frequently add explanatory power to other matters that have stumped Uto-Aztecanists for decades. For example, underlying Egyptian forms offer a much better explanation than other proposals for the medial m, ŋw, ŋ, n segments in 'salt' (280), 'lung' (281), and 'husband' (283), as outcomes of the underlying cluster -m'- (-m + glottal stop-). In fact, Uto-Aztecanists have quite ignored the forms with *m*, only discussing the NUA ŋ and SUA n correspondence.

Manaster-Ramer's meticulous uncovering of some medial clusters, such as the p in UA *kapsi 'thigh' (Manaster-Ramer and Blight 1993b), which item for decades was reconstructed as *kasi (VVH 1962, Miller 1967), was followed by finding Egyptian xpš 'thigh' to match *kapsi perfectly, with the 1st and 3rd consonants supported by several other sets showing the same correspondences, as well as a dozen other sets exhibiting the same behavior of p > ø as first consonant in the medial cluster (4.3).

Similar to English debt, pronounced det, the bilabial stops as first element of a cluster were lost in pronunciation (**-bC-/-pC- > -C-)** as noted in 294, 295, 296, 297, 298, 299, 300, 486, 757, 794 at p. 124, *kapsi among them. In fact, the loss of bilabial stops as first element in a cluster was so consistent that it took 80 years to discover and reconstruct *kapsi, while a possible tie with Hebrew and Egyptian reveals a similar and consistent pattern in a dozen other cases. Whether due to clustering or not, Coptic lost many medial bilabial stops as well: Egyptian sbg 'Mercury, the planet/bright star' > swg' > Coptic sowke; Egyptian tbwt 'sandal' > later Egyptian twt/twy; Egyptian sb' 'star' > Coptic siu.

Another consistency is that as 3rd consonant, Egyptian final -i quite consistently yields UA *-iya:
147 Egyptian m'i 'lion'; Coptic mui > UA *mawiya 'mountain lion'
180 Egyptian ħbi 'be festive, make festival' > UA *hupiya 'to sing, song'
165 Egyptian rwi 'to dance' > UA *tawiya / *tuwiya 'to dance'
387 Egyptian ħwi 'fliessen, fluten [flow, flood]' > UA *huwiC 'canyon, water way' (slightly shortened)
In addition, the final *-i/y stands as a consonant in producing gemination of the next consonant in NUA.

Another consistency is Tara-Cahitan's and especially Wr's anticipation of a glottal stop to precede the consonant it formerly followed: 154 sb' > si'pu 'star'; 199 db' > si'pu 'clothing'; 157 it' > i'tu 'take'; 724 Hebrew parʕoš 'flea (jumper)' > *pa'rosi 'jackrabbit'.

Also quite consistent within the Semitic-UA tie is some pre-classical Hebrew phonology. The vowelings match very early Northwest Semitic voweling patterns, as noted in (1), (2), and (3). Consistent with that earliness are two consonant distinctions that are earlier pronunciations than those reflected by the 23 letters of the Biblical Hebrew text: the Proto-Semitic pharyngeal ħ and *x merged to ħêt, ʕ and *ġ > ʕ, and Proto-Semitic *đ and *z merged to Hebrew z. However, there is evidence in UA that the Semitic-p language

distinguished those pairs. There are many instances of UA *hu/o/u reflecting a pharyngeal ħ; and several other sets reflect Proto-Semitic *x > *k when Hebrew ħeţ is from Proto-Semitic *x.

In contrast to explanatory power answering many questions, other questions remain, so here are also listed groups of data for further contemplation and analyses.

Other consistencies and patterns:

Weak third consonants, like y, w, and ', in Semitic verbs are more often lost or not apparent in the Semitic conjugations. However, in UA they often appear though not expected in Semitic:
sly / salaa / saliya 'think no more on (s.th.), forget, comfort, delight, take pleasure in'; Hebrew šalaa 'rest' > Hp salayti 'be gratified, fulfilled, pleased by/from' (1501)
bahiya 'empty, vie, compete' > Hp kwahi / kwàyya 'suffer loss'; kwaha- 'deprive of, take at expense of' (38-kw)
baqiya 'stay, be left behind' > Hp kwayŋya- 'behind' (954-kw)
snw 'gleam, shine, be beautiful' > Hp soniwa / sonwa-y 'be beautiful, pleasing, bright' (13)
bky / Syriac pfv bakaa / baka' > UA *paka' 'cry, v' (559-p)
dwy / dawaya / daawɛ / daawaa 'be miserable, faint, sick' > UA *tïwoya / *tï'oy / *tï'mo 'sick(ness)' (1284)
dʕw / daʕaa 'to call, name' > UA *tï(N)wa 'name' (1059)
ħţ' (< *xaţi'a) / ħaaţaa' 'miss (a mark), do wrong' > UA *wa(C)tiN / *waCtiC 'lose, lost, misled' (649-kw)
ħţ' (< *xaţi'a) / ħaaţaa' 'miss (a mark), do wrong' > Ktn 'ačaw 'miss (the mark)' (650-p)
Aramaic sw' / swy / səwaa' 'to long, desire' > UA *suwaC 'to want'; UA *sïwaC 'to want' (1207)
ʕlw / ʕly / ʕaalaa 'ascend, go up, grow' > UA *wïla/i 'grow'; Hp wïŋwa (681)
pl' 'to be extraordinary, wonderful' > UA *palaw 'pretty' (714-p)
pġy / f.pfv: paġyaa 'inquire, seek' > UA *paya 'call, summon' (1067-p)
pty / pətaa / pəta' / pətiy 'be enlarged, wide, broad' > UA *pïttiya / *pït(t)ï'a '(be) heavy' (812)
pətaa'aa / pətaawaa 'wide, enlarged' > UA *patawa 'wide' (1168)
ṣb' / ṣəbee 'wish, prefer, be pleased with, delight in' > UA *supiC 'like, want' (901-p)
qn' / impfv -qna' 'be jealous' > UA *nawa 'jealous' (1031-p)
qn' / impfv -qna' 'be jealous' > UA *ŋa'i 'get even, be jealous' (1032-kw)

Semitic-p 3rd consonant y verbs in Hebrew and Aramaic end their impfv with -e, but UA is consistent in showing impfv -a, not -e
hwy / yehwe 'he is' (Aramaic) > UA *yïhwa 'that, he, she' (112)
bky / impfv masc: *ya-bka^{y} 'he/it weeps, cries' > UA *yaCkaC / *yakka 'to cry, sg' (560-p)
bky / impfv fem: *ta-bka^{y} 'she/it weeps, cries' > UA *takka (> NP taka) 'to cry' (561-p)
*-ʕr- > -ŋ-: ʕry / ʕr' / ʕaraa, impfv: ta-ʕra 'to contain, hold' > UA *taŋa 'bag, sack, put in container' (1418-p)
ʕśy / yaʕaśɛ 'make, make (write) books, create' > UA *yo'osa 'write, paper' (680)
Aramaic tehwe 'you are, sg' > UA *tï / *tïhwa 'you, sg' (111)
tly 'hang'; *yutla 'be hung' > UA *yula 'hang' (1247)

Some of the below include problematic / inconsistent data to think about and for future study.

-h- is well preserved in Semitic-kw:
ghh 'be cured, healed, freed, bend' > Sr ŋöhääh 'go around a bend'; Hp ŋaaha 'untie', Hp ŋahï 'remedy' (909-kw)
khh / kehah 'be inexpressive, dim, dull, colorless, disheartened' > Ktn 'a-kïhahïk 'sad' (903-p or kw?)
bahiya 'empty, vie, compete' > Hp kwahi / kwàyya 'suffer loss'; kwaha- 'deprive of, take at expense of' (38-kw)
bhl 'cease, become quiet, tranquil, calm, gentle' > *kwaha '1. tamed, 2. peaceful, tranquil, gentle' (39-kw)
bahamat 'back, hill, high place' > UA *kwahama 'back' (7-kw)

Examples of -w- > -v-: While lenition (weakening) is the more common kind of consonant change, fortition (strengthening) also occurs in language change. We have already noted other instances of strengthening in Semitic x > UA k (also Semitic x > Semitic k), and r > t, initially at least. We see that w > v occurs also. I've heard some Arabic speakers say v for Arabic w, and in Modern Hebrew, the original w is pronounced v. Hebrew rwy / raawaa (> raavaa in some dialects) 'drink one's fill', impfv pl: yirvəyuun. In Talmudic Aramaic, an actual b (> v) is an alternate form due to strengthening of w > b: Aramaic(J) raabe, f: raabaa 'moist, saturated with liquid'. Also Hebrew ʕerwaa / ʕervaa has as its cognate Samaritan irba. Likewise, in UA, Semitic w > UA v occurs often enough, and intervocalic -v- is then re-interpreted as from PUA *-p-, though other times we see PUA *w > v in only a few languages, such that -w- occurs in most UA languages, and it can be seen that w > v within UA itself.

Note examples of intervocalic *-w- > -v-, often causing UA forms to seem from UA *-p- instead of *-w-:
(147) UA *mawiya ‘mountain lion’: *mawiya > mavid in some Tep languages and in Eu. [Egyptian m’i ‘lion’]
(1287) UA *na-wakay ‘four’: most languages show -w- in reflexes of *na-wakay, but *-w- > -v- in Eu návoi.
(1037) UA *yuwiN > *yuviN ‘ponderosa pine' (in Num) and > *yuy ‘conifer sp’ (in Tak), and w > v happens often enough in Num: Kw yïvi-bï 'ponderosa or yellow pine'; Ch yuvimpï ‘pine sp’; CU yïvï-pï ‘pine tree’.
(569) UA *woko(N) ‘pine’ > Eu vokót/gokót. [Hebrew ’egooz ‘nut tree’]
(286) UA *pi’wi ‘clean, vt’ > Eu pigwide/pivide. [Egyptian px’ ‘purge, clean’]
UACV-1730 *wokin 'drag': Tb wïïgiin~’ïïwïïgin 'drag it'; Hp lölökinta 'drag, pull behind'; *w > v in Sr vööhkin ‘pull, drag’; even if Tb’s first vowel does not agree, 4 of the 5 segments agree in Tb and Hp with identical semantics: *wVkin.
UACV-1873 *awa ‘tell’: TO aag(a); TO aagiđ; UP ’aagï; LP ’aagi; NT áága; ST ’a’aga; Eu áwa; My hiáwa ‘decir’; Tbr amwá / omwá; Tb aawiinat~aawiin ‘tell to’; Hp aa’awna, aawin-/awin- ‘tell, inform, relate, announce’; but Sr aav ‘tell a true story’ seems to show *-w- > -v- in Sr again.
(575) UA *kamo’-ta 'sweet potato': Cr kámwah; CN kamo’-tli; ST kamav 'camote’ with ’ > w > v. [kam’- ‘truffle(s)’]
(347) UA *wiru 'play a reed flute': Ca wíiru; Ls wíiru; Sr wiirui’n 'play a reed flute'; Sr wiirui’ni-t 'reed flute'; WMU viyu’/eviiyu’ni 'flute' is very similar to Sr except w > v. [Egyptian wr ‘reed flute’]
(165) UA *tawiya / *tuwiya > *tuya ‘dance’; redupl *tu(w/v)tui: AYq tatawiilo ‘turn around, vi’; Sr tuhtu’ 'dance, vi’; Ktn tuhtu’ ‘dance, vi’; Ktn tuhtuhyït ‘dancer, n’; Ls tóótuwi-š ‘guardian spirit, person who performs a certain dance, the tatahuila’; Gb tóvtu’ax 'tatahuila, kind of dance'; Gb tóvto’ar 'the tatahuila dancer'; Ktn tïvi-t ‘certain type of dancer’; CN i’tootiaa ‘dance, v’; CN mi’to’-tli 'dance, n’; Pl ihtutia 'dance, vt/refl’; *tuya > PYp tuuda ‘dance, vi’; TO čuuđ. [Egyptian rwi ‘dance, v’]
(799) UA *yaway > Tbr yavá-n 'river’ at ‘canyon’ [Hebrew yə’or ‘river’]
UACV-845 UA *sawi ‘fear’ > Eu sevíce ‘tener miedo, v’ at ‘fear’ *sawi
UACV-1413 UA *yaway(a)wa / *yawayo ‘lung’: CN mimiyawayo-tl ‘lungs’; Ca yávayva ‘lung, liver’
(322) Egyptian q’yt ‘high land, hill’ > UA *kawi ‘mountain’: Eu kavít / kawí(t) / hawi ‘hill’
(163) Egyptian rʕw ‘sun, day’ > UA *tawa > Eu tavi ‘sun’; Numic tava
(566) Semitic ’ari ‘lion’ > UA *wari > Tbr wawi / wowi / vavo ‘mountain lion’; Cr waábe’e ‘coyote’; Eu bo’i / wo’i
(1512) *tiwa > Eu tivé ‘tener vergüenza’
(756) Hebrew *śannaa’ ‘enemy, hater’ > UA *sina’a / *sinawa > Num sïnáwa-vi ‘coyote’ as the trickster often representing the cosmic ‘hater’ or ‘enemy’ of mankind; Eu zináva ‘get angry’
(719) Hebrew towlid ‘bear a child, fem impfv > Ls tóvli 'to bear a child, lay an egg’
(1061) Semitic rwy ‘drink’ hirwiy > UA hivi (< *hipi?) ‘drink’
(1464) Hebrew śə’or ‘sour (leavened) dough’; Aramaic sii’uur / sy’wr > UA civu (< *cipu?) ‘bitter’
(738) Hebrew qayiṣ > UA *kuwïs 'summer': Eu kuvés-rawa ‘summer’; Tr kuwésa ‘be summer’
(758) Hebrew š’l ‘ask’ > UA *sï’wï and Ls şóovini 'ask for'
(689) Semitic ʕarʕar ‘juniper’ > UA *wa’wari > wa’wori > abori ‘juniper’
(381) Egyptian wr ẖq’w ‘buzzard’ > UA *wirhukuN ‘buzzard’: Wc wirïkï; Cr viskï ‘buzzard’
(1046) Aramaic ẖagort-aa ‘girdle’ > UA *wikosa 'belt': Eu wikosa/vikosa
?*nayawa > SP nayava/naya’pa ‘seem, look like’

Liquids *l/*r > s in a cluster with or when adjacent to a voiceless consonant

(381) Egyptian wr(t) ẖq’ ‘turkey buzzard’ > UA *wiruku in most UA languages, but r > s in Hp wisoko, Tb, and Cr
(1279) *yagar ‘point’ > UA *yaka ‘nose, summit’ Hopi yakas- (combining form)
(91) Aramaic *naʕar-taa ‘girl’ > UA *nawis-t ‘girl’
(1301) Semitic mlk ‘to lead’ > Tb mïškït ‘to lead, vi’; Tb(H) mïškip ‘in front’
(778) Hebrew ṭabbuur ‘navel’ > Tb šappuš-t ‘belly’
(290) Egyptian t’-phrt ‘medicine’ > Tb tiipoohiš-t ‘medicine, herb medicine’
UACV-918 Hp momospala ‘honey’ and PYp mumur ‘bee’; Hp also devoices r > s as in buzzard, necklace, etc.
(1422) Syriac kmr / *kamar ‘be sad’ > Tb hammaššat ‘be sad’
(1022) Hebrew maaẖaar ‘next day, tomorrow’ < *ma’xar (what is after) (Brockelmann); Hebrew moẖoraat ‘tomorrow’; Aramaic məẖar, maẖr-aa ‘next day-the’ > CN moostla ‘tomorrow’. In CN, -r- > -s- in a cluster with a voiceless C.
(1046) Aramaic ẖagort-aa ‘girdle’ > UA *wikosa 'belt': Eu wikosa/vikosa; Cah wikosa. -rt- > -s- as also the -rẖ- > -s- in ‘turkey vulture’ as in both cases clustering with a voiceless consonant causes devoicing of r > s, like Nahuatl y > s.

Sibilants, especially ş > ’ in Numic

(581) Hebrew ’arṣ-aa ‘earth-ward, to the earth’ > UA *wïcï > Num *wï’i ‘fall
(748) Hebrew šibbeṣ, šibbaṣ- ‘to weave patterns’ > SP sikwa’a ‘to braid’
(33, 32-kw) Hebrew biṣṣar ‘make inaccessible’ > UA/Num *kwi’ay / *kwi’aC 'surround, fence'

(1020) Syriac blṣ ‘to bud, blossom’ > Ca če-kwála’an ‘open (eyes or mouth)’
(532) Hebrew *booṣer(et) > UA *pusi ‘eye’ > Numic *pu’i

Samech s > c (the c vs. s results of the four Semitic sibilants (s-like sounds) await more research)
(1255) Hebrew sgd, impfv: -sgod ‘bow down, kneel’, infinitive səgod > UA *coko ‘knee, kneel’
(1307) Hebrew nes ‘flag, standard, ensign’ > UA *naci ‘standard outside kiva’
(895) Hebrew *hi’asep ‘be gathered, die, be put in family cemetery’ > UA *hi’acapa ‘bury, grave’ > Tep hi(’)asapa
(1462) Hebrew śapat ‘lip, speech, edge, shore (of sea), bank (of river)’ > UA *capa- 'ridge, edge'

Egyptian w > Tepiman w: normally PUA *w > Tep g, but instances of *w > Tep w do occur and may be loans, but collecting such samples to look at (more than these exist) may tell us something:
Egyptian (226) wnm ‘eat’; (147) m’i ‘lion’.

Initial ’ > h in Sem-kw?, which is merely initial devoicing of the first vowel when glottal stop is negligible:
(1220) Syriac ’etqaraš ‘to shade’ > *hïkya ‘shade’
(1192) Syriac ’aynaa ‘who, what, m’; Syriac ’aydaa ‘who? what? f’ (< *’ayn-taa)
Tb haayn ‘what’; acc: haaynta; the other UA forms show *hinta / *hitta ‘what, acc’, that is, a cluster, clear in Tb and a cluster is clear in Ls: Ls hií-ča, acc. hí-š, ‘what?’ (*hita > hila, thus *hinta > hita / hica); Sr hiit, acc. hiiti; Eu hat/hit, gen. híte, acc: hitá ‘what’; Sr hiit; Ktn hit; Yq híta; My híta; CN tle ‘what’; Wr ihtá

Afro-Asiatic and PUA *h > Tep h; the usual correspondence is PUA *h > Tep ’ yet Tep sometimes retains h within UA itself (the first two) and also in the Near-East to UA tie (the last four):
UACV-560c *ihoho (> Tep *i’oho...) 'to cough': B.Tep314 *’i’ohogïi 'cough'; TO i’ihog; LP ihoga/ihosana; PYp i’osin
UACV-789 *hay... ‘edge, shore, end’: Cp háyve 'end, edge, shore'; Cp háye 'finish, tire of'; Ca háyva 'edge, end';
Ls háylu / háyla 'edge, end'; like Cp háye 'finish, tire of' is PYp had 'finish, vt' (UA *y > Tep d)
(184) Egyptian ẖtp ‘set (of sun)’ > Tep huru ‘set (of sun)’ and Eu hurun, but Eu h not from *s like Tep
(208) Egyptian ṯẖnw ‘glisten, Libya’ (the glistening desert) > TO tohono ‘desert’
(895) Hebrew *hi’asep ‘be gathered, die, be put in family cemetery’ > UA *hi’acapa ‘bury, grave’ > Tep hi(’)asapa
(463) Egyptian ẖʕ / ẖʕw ‘body’; Egyptian ẖʕwt / ẖʕʕwt ‘joy, rejoicing’; Egyptian ẖʕi ‘rejoice’ > *hoŋa 'body’:
TO hon 'body'; PYp hona 'body'; Ls héŋča ‘happy’. The cluster of -ʕw- > -ŋ-.
(824) TO hoohi 'mourning dove' (< *howi < UA *hayowi ‘dove’) with consonant harmony (*howi > hoohi),

In UA, w > kw (many more to be gathered)
*suwi > Mn sukwi ‘pubic hair’
*wacuwini > Mn wahcïhkwihtu ‘four’

Hebrew Semitic-p non-initial -t- > -c- or –s-
(1195) Arabic qimma(t) ‘top, summit, peak’ > UACV-2368 ***kumisa** 'top, tuft, crest’
(613) Hebrew dVbbooteey ‘bears’ > Tep *posi, CrC *huce, with loss of first syllable of short unstressed V
(594) Hebrew ’axootee^{y} ‘sisters’ > UA *kooci / *koosi
(633) Semitic xaataan / xooten ‘in-law, father-in-law’ > UACV-1791 *kusana ‘sibling-in-law’:
Ktn -kuhana ‘sister-in-law’ (< *kusana); Gb kúsna’ ‘brother-in-law’.
(1462) Hebrew śaapaa(t) ‘lip, speech, edge, shore, bank’ > UA *capa- 'ridge, edge': Eu zápsi (capsi) ‘loma [hill]’
(1046) Hebrew/Aramaic ẖagort-aa ‘girdle’ > UACV-177 *wikosa 'belt'; the -rt- > -s- as also the -rẖ- > -s- in ‘turkey vulture’ such that in both cases clustering with a voiceless consonant causes devoicing of r > s.
(1386) Syriac qatqet ‘laugh’; Aramaic qty / qatqet ‘to laugh’ > UA *kasi ‘smile’: Ca kaskási ‘smile’
(381) Egyptian wr(t) ẖq’ ‘turkey buzzard’ > UA *wiruku in most UA languages, but r > s in Hp wisoko, Tb, and Cr
(1400) Syriac baatar ‘after, following’ (< b-’atar, which equates to Hebrew b-’ašer); Hebrew ba’ašer ‘because’;
Arabic ’aθar ‘track’; Arabic ’iθra ‘immediately after’; these three language forms are cognate in Semitic, and the UA form is phonologically like Hebrew, but semantically like the more original meaning in Arabic and Syriac, i.e., ‘in the track of’ or ‘after, behind’: AYq veasi ‘behind, beside, on the other side of’.

Masoretic e = UA a: (614) makteš ‘mortar’ > UA *maCta / *mattas ‘mortar’;
(851) paane ‘front, face’ > UA *pana ‘cheek’; (592) ’abneṭ, pl: ’abneṭ-iim ‘sash, girdle’ > UA *natti ‘belt’; 1198;
(1307) Hebrew nes ‘flag, standard, ensign’ > UA *naci ‘standard outside kiva’
Occasional *x > h, not usual *x > k/x: Eu kawí(t) / hawi ‘hill’ and 655, 1007, 1008, 1009, 1010, 1011.
Semitic-kw medial *-mm- > -(m)’m- in Numic (820, 830, 936, 938) and *-nn- > -(n)’n- (22, 715, 945)

7.11 Measuring up to Methods for Establishing Language Relationships

In *Language Classification: History and Method*, Campbell and Poser (2008) enumerate several requirements for establishing language relationships: morphological resemblances, established sound correspondences among some basic vocabulary, sorting loans from cognates by sound correspondences, and hopes for morpheme lengths of enough segments to eliminate chance resemblances.

Morphology
Throughout, Campbell and Poser (2008, but especially in Chapter Five, 74-86) put a premium on morphology, the examples being from Indo-European, which is packed with specific morphology, especially the older or better preserved languages, with fully conjugated verbs and elaborate noun declensions of case, gender, and number. Morphology is indeed important, which makes securing relationships more difficult for language families lacking rich morphologies, such as those with non-conjugating verbs and undeclined nouns void of case, gender, etc. Polynesian languages are good examples of morphological scarcity. Even morphologically rich languages often lose that richness. In English, for example, verbal conjugation is greatly reduced, case marking remains only in pronouns, grammatical gender is lost, and its plural is generalized, with only a few archaic plurals remaining (oxen, children, brethren). This does not mean, however, that language connections cannot be firmly established for languages without rich morphology.

There is yet another matter regarding morphology. Consider the fact that Yiddish is classified as a Germanic language because it is mostly German; however, in Yiddish the Semitic infusion inserts Semitic roots into the Germanic grammatical machinery. So Yiddish is excused from retaining Semitic conjugations and morphology, even though it began with Hebrew-Aramaic speaking Jewish peoples entering central and northern Europe to gradually take on substantial amounts of German vocabulary and morphology; even its pronouns and basic vocabulary, like body parts, are mostly from German.

Tendency Toward Fossilized Morphology
Uto-Aztecan, like Yiddish, is also a language mix or an infusion into unrelated languages. However, unlike Yiddish, UA retained the Semitic pronouns and much basic vocabulary, much more than Yiddish did. Furthermore, UA, in spite of its mischsprache status, has retained a surprising quantity of the Near-East morphology (see 7.3), often in a fossilized state: UA has four Semitic plural suffixes, one Egyptian plural prefix, four Egyptian stative/passive suffixes, and one Hebrew passive/reciprocal prefix. Semitic-p contributes many Aramaic nouns whose citation forms include the suffixed definite article (see 7.3 and 8), which articles are also included in the citation forms of some Aramaic dialects, and for ‘deer’ (638) are found the feminine suffix for female deer and the masculine suffix for bucks. UA also has a great number of fossilized Semitic verb forms of the following types: 3rd person perfective verb forms, both singular and plural; Semitic 3rd person imperfective/prefixed forms mostly with the 3rd masc prefix ya-/yi-, some with the fem prefix ta-/ti-, and a few with both the masc and fem forms (560-561), and others of the impfv stem without a prefix. For some verbs, both the perfective and imperfective exist, like camawa (< *ṣamaḫa) (814) and icmo (< *yi-ṣmaḫ) (84) and laaqaḫ > looqo (695) and *yilqaḫ > Hebrew yi-qqaḫ > UA yoko (696). Some imperatives appear (1459, 1465), but no regular 1st and 2nd person forms, only 3rd person forms or impfv stems without any person prefixes, which package of forms is quite as expected. No complete paradigms exist, except perhaps the 1st, 2nd, 3rd sg impfv series of the Aramaic verb ‘to be’ in the Nahuatl sg pronoun series nehwa, tehwa, yehwa (111-112).

If a language with Semitic percentages comparable to Yiddish were found in the Americas, would its connection with Semitic be accepted? The traceable history of Yiddish and its same-continent geography allow its Semitic infusion to be accepted without question. Yet UA has a higher percentage of Semitic vocabulary than Yiddish has, and more grammatical parallels, but the intervening oceans may discourage assent. But should it be so? If so, then the matter is not being decided by hard language evidence, but by paradigmatic bias.

Sound Change
The sound correspondences that Semitic-p and Egyptian have in common with UA underlie a sizable vocabulary, including much of it basic vocabulary. The set of sound correspondences of Semitic-kw with UA differ from those of the Egyptian-and-Semitic-p set, which identifies Semitic-kw as a classic loan source of another sizable amount of data/etyma, a loan source more like Phoenician in contrast to Semitic-p with its Aramaic tendencies. In addition, Semitic-p shows some pre-exilic sound distinctions (5.7, 5.8, 5.9) while the Phoenician-like Semitic-kw does not, consistent with the Phoenician alphabet lacking those distinctions.

Morpheme Length
Also among matters mentioned is morpheme length (Campbell & Poser 7.10, pp. 200, 171). As explained on page 13 of this work, the probabilities for chance correlations of morphemes of CV length is high, maybe 1/30 or 1/50, or for CVC length 1/500 or much less (1/100) if sounds that are "close" are accepted. That is, 1000 CVC items in two languages could have 2 to 30 similarities by coincidence. Items of CVCV length have smaller chance probabilities, and thus a sufficient number of them make a decent case, but they are still subject to probabilities such that a limited number of CVCV or 4-segment items can be suspect. However, as we begin finding items 5, 6, and 7 segments long, as well as hundreds of 4-segment matches, how do we logically dismiss it?
Items 7 or 8 segments long:
(853) Aramaic ħippušit 'beetle' > UA *wippusi 'stink beetle' (both with geminated -pp-)
(567-p) Hebrew ya'amiin-o 'he believes him/it' > UA *yawamin-(o) 'believe (him/it)'
(381) Egyptian wr(t) ħq'w 'buzzard, lit: great (of) magic' > UA *wirhukuN 'buzzard, turkey vulture'

Items 6 segments long:
(1246) hassim'al 'the left' > UA aašiŋan 'left'
(87) Arabic ʕgz / ʕagaza 'to age, grow old (of women)' > Tr wegaca- 'grow old (of women)'
(604) Aramaic rə'emaan-aa / reemaan-aa 'antelope-the' > UA *tïmïna 'antelope'
(1045) moškat 'bracelet, fetter, belt > Tb mohkat 'belt'
(57) Arabic singaab 'squirrel' = Hebrew *siggoob 'squirrel' > UA *sikkuC 'squirrel' (-gg- > -kk-)
(88) ʕalaqat 'leech' > UA *walaka 'snail'
(892) ṣanawbar 'stone pine' (type of pine) > UA *sanawap 'pine tree'
(832-p) *sarṭoon 'scratcher, crab' > *saCtun > siCtun / *suCtun 'claw, nail, crab'
(28-p) ṣurṣur 'cricket' > UA *corcor 'cricket'
(864-p) quppat, pl *quuppoot 'large basket(s) > UA *koppot 'basket' (both with -pp-)
(603) rymh (= riimaa) / riimə-taa 'large stone-the' > UA *tïmï-ta 'rock'
(99-p) Syriac rakb-uu-hi 'they climbed it' > UA *tippuhi > cippuhi 'climb' (-kb- > -pp-)
(1274-p) kookb-aa(') 'star-the' > UA *kuppaa' 'to shine (as of the stars)' (-kb- > -pp-)
(796-p) to'kal 'she/it eats' > UA *tïkkaC 'eat'
(1446-p) bar kəbaan-(aa) 'belt', kbn 'gird' > UA *pakkaC 'belt'
(778-p) ṭabbuur / ṭibbuur 'navel' > Tb šappušt 'belly'; NP sibudu 'navel'; Cr sipu; Hp sivon-
(658-kw) *-ħabbil (< *ħbl) 'bind, tie together' > SP wïkkwinta 'to wrap around, coil'
(614) makteš 'mortar' > UA *maCta 'mortar' and Ca *mattaš 'crush, squash, vt' (with *-tt- and -š)

Items 5 segments long:
(1409) Aramaic kuuky-aa 'spider-the' > UA *kuukya 'spider'
(926-p) 'agap 'wing, pinion, arm, shoulder' > UA *wakapu 'wing, feather'
(925-kw) 'agap 'wing, pinion, arm, shoulder' > UA *aŋapu 'wing, arm'
(617-p) diqn-aa 'beard-the, chin-the' > UA *tï'na 'mouth'
(675) ħnp 'be pigeon-toed, bow-legged w/ toes pointing in, turtle, lizard' > UA *hunap 'badger, bear'
(52) mukkɛ 'smitten' (*mu-nkay > mukkɛ) > UA *mukki 'die, be sick'
(677) ʕagol 'round' > UA *wakol 'round'
(683) ʕmṭ 'cloud over, become dark' > UA *(w)umaC / *(w)ïmaC 'rain, be cloudy / overcast'
(1130-p) pagr-aa 'corpse, body' > UA *pïkyaa 'skin, animal hide, flesh'
(182) Egyptian hotpe 'peace(able)' > UA *huppi 'peace(able)'

Near-East Answers to Heretofore Unresolved Uto-Aztecan Issues

The body of this work or the 1528 sets are laid out primarily to demonstrate the consonant correspondences. A greater attention to consonants in Semitic and Egyptian is natural, since the consonants carry the meaning; vowels carry grammatical meaning, such as tense/aspect, adjective and noun forms, etc. Yet the vowel correspondences are also treated at 7.1 and are quite consistent. In every language family, subsets of apparent exceptions are sometimes later explained, by specific phonological environments or rule ordering or other influences. Nevertheless, whether explained yet or not, apparent exceptions plague most language families. As Salmons (2012, 111) says in *A History of German*, "we expect, as we saw earlier, for sound change to be regular, but we find messiness in real historic data." Likewise, in this tie between UA and the Near-Eastern infusions, the sound correspondences are consistent most of the time, perhaps more often than they are within UA itself. In fact, the Near-East tie explains many of the correspondence inconsistencies within UA itself that Uto-Aztecanists could not explain previously (6.1, 6.2, 6.3, 6.5, 6.6, 6.7). Nevertheless, some apparent exceptions still sprinkle the data short of perfect neatness as Salmons notes, and within UA itself are many unexplained inconsistencies in sound correspondences. For example, no Uto-Aztecanist would deny the relatedness of the Ls and Sr forms in 571 below, yet nowhere have Uto-Aztecanists specified a correspondence of w:' in UA at all, let alone between Ls and Sr. The Near-East tie with UA shows *' > w sometimes (but remains glottal stop sometimes), so this and many sets are of stunning interest in light of Semitic, though not all sound changes are all understood yet, within UA itself, regardless this proposed tie.

(571) Semitic ya'ya' / yaa'ayaa' 'beautiful' > Ls yawáywa 'be pretty'; Sr yï'aayï'a'n 'be pretty, beautiful'

Likewise, no Uto-Aztecanist would object to the cognates in 1058 of the closely related sister languages of Wr and Tr, yet no sound correspondence of y:' has been proposed to exist between Wr and Tr.

(1058) Arabic šarnaqat 'cocoon', the pl šarnaqaat would correspond to Hebrew *sarnaqoot / sarnaqootee^{y}: UA *ca'ïku / *caCCïku 'cocoon': Wr ca'égori 'rattles of cocoon'; Tr čayéguri 'cocoon attached to a tree'. Tr and Wr do not have a ':y correspondence, though -y- from a cluster of an alveolar pair -rn- is natural enough.

Similarly, in the closely related Central Numic languages in 1408 below, two of them show -n-, two show -'-, and one shows neither, yet no one has suggested a correspondence of -n-:-'- in CNum or anywhere.

(1408) UA *ta(C)tinuN-pi 'star': Mn tazinópï 'star'; TSh taciumpi 'star'; Sh(C) taci'ïm-pin/ttaC 'star'; Sh(M) tacï'ïm-pin 'star'; Cm tacinuupi 'star'.

In 381 below, a cognate for 'buzzard' exists in most UA languages and in 7 of 8 branches. An intervocalic liquid -l/r- appears in most UA languages, but Hp, Tb, and Cr show -s-. Yet no correspondence of -l/r- with -s- has been proposed for those 3 languages, though in this case the suggested Egyptian source with a cluster of -rtẖ- may explain the devoicing of r > s preceding two voiceless consonants.

(381) Egyptian wrt ẖq'w 'buzzard, literally: great (of) magic'; the attested Egyptian form is the feminine wrt ẖq'w, but the syncopated cluster -rtẖ- became the liquid -r/l- in most UA languages, but -s- in Hp, Tb, and Cr: UACV-343 *wirhukuN 'buzzard, turkey vulture': Hp wisoko; Tb wišokombiš-t 'song of the turkey buzzard'; Sr wirok-t; Ktn wirukuh-t; Yq wiiru; My wiiru; Tr wirú; Tbr wilú; Wc wirïkï; Cr viskï.

Another periodic inconsistency in UA itself is variation in which some UA languages show doubled or geminated consonants while others do not. In 832 below, Sh and the SNum languages show reflexes of a doubled consonant (like its Semitic source), but most languages have lost that gemination (a few are listed):

(832) sarṭoon 'scratcher, crab' > UA *saCtuN 'claw, nail, scratch, crab' (Hebrew o > UA u): Sh ta-sittun 'toenail'; Kw ta-šito'o-bï 'toenail'; Ch tasíco'o 'toenail', masico'o 'fingernail'; SP šïču, ma-šši(n)čo'-N; CU sïčú-či 'crab'; CU sïčú-ppï 'fingernail'; but the Takic languages lost that gemination, showing only a single intervocalic -t- > -l-: Ca sálu-l 'claw, nail'; Ca saluki 'scratch'; Cp ṣul'a; Gb čúr 'hoof, nail'.

In 'deer' we see medial *-h- in all languages except SP showing *-k-:

(638) Semitic *raxel 'ewe': Mn tïhïya 'old buck'; Mn(L) tïhïhta 'deer'; NP tïhïdda; TSh tïhïya(n); Sh tïhïyan; Cm tïhïya 'horse'; Kw tïhïya; Ch tïhíya; SP tïġia (< *tïkia) 'deer'. All show -h-, but SP -ġ- < PUA *-k-.

In UACV-995, we see *-p- > *-kw-, like Semitic-kw b > UA *kw: *yïpanaC 'autumn': Mn yïbano 'be autumn'; NP yïbano; TSh yïpani; Sh yïpani; Kw yïvana; SP yïvannaC / yïvwannaC; CU yuvwa- / yïgwa-.

In spite of exceptions in UA itself, 95% of the Semitic-UA sets accord with the proposed correspondences, and the exceptions are included to contemplate potential explanations; furthermore, the Semitic-to-UA percentage is at least as high as the percentage of UA correspondences within UA itself.

8 The Aramaic Leaning of the Semitic-p Language

Curiously, Semitic-p exhibits considerable affinity with Aramaic, a Northwest Semitic language closely related to Hebrew and also spoken in Palestine at various times. Some vowelings of Sem-p are more like Aramaic than Hebrew. For example, Hebrew báášaar 'flesh' is apparent in Sem-kw as UA *kwasi (5), but the vowels of Aramaic bəsár 'flesh' appear in Sem-p's UA *pisa (550). UA words for finger not only show the Sem-p expected s instead of c for the sibilant, but also show a voweling only found in Aramaic dialects, like Syriac sebʕa (> UA sivwa). Hebrew would show rounding for an initial aleph: Hebrew 'eṣbaʕ would be something like UA *wicpo, but nothing like that exists in UA. In addition, UA's absolutive suffix *-ta is found throughout much of UA and is quite identical to Aramaic's feminine definite article *-taa, which is also a suffix and is also dropped when the noun is possessed, as in UA:

(1273) Aramaic ***-taa*** 'the' (feminine suffixed definite article, dropped when possessed)
> *UA ***-ta*** 'absolutive suffix (dropped when possessed).
(1274) Aramaic(S) kookb-aa' / kookəb-aa' 'star-the'; Syriac kaukab 'star'; Syriac kaukb-aa' 'star-the': Sr kupaa' 'to shine (as of the stars)' (a verbalized noun, even with final glottal stop). All as expected: vowels generally rise from Semitic to UA (o > u); and Aramaic's suffixed definite article causes the last two consonants to cluster, and Sr -p- instead of -v- shows that a cluster underlies it, such as -kp-.

	Hebrew/Semitic sg		Hebrew/Semitic pl	maghrib Arabic	Classical Nahuatl
1st	'e-/'a-	'I (verb)'	ni-/na- 'we (verb)'	n- 'I verb'	ne'wa / nehwa 'I'
2nd	ti-/ta-	'you sg (verb)'	ti-/ta- 'you pl (verb)'	t- 'you verb'	te'wa / tehwa 'you, sg'
3rd	yi-/ya-	'he (verbs)'	yi-/ya- 'they (verb)'	y- he verbs'	ye'wa / yehwa 'he'

The Classical Nahuatl (CN) singular pronoun series—nehwa (I), tehwa (you), yehwa (he)—parallels the imperfective of the Aramaic 'be' verb—'ehwe, tehwe, yehwe. Though the Nahuatl first person singular (I) form (nehwa) differs from the verb form, the n- of the CN form is analogically like the fundamental n of most Semitic 'I/me' forms. In fact, the maghrib Arabic dialect did the same thing, that is, analogized the impfv verb prefixes to n-, t-, y- (Goldenberg 2001, 86), just like the Classical Nahuatl singular series—nehwa, tehwa, yehwa. The Hebrew pattern is 'ehye, tihye, yihye, with y vs. the w of Aramaic. So UA better matches the Aramaic pattern. Reflexes of Aramaic *hawa occur elsewhere in UA also:

At (1345) Aramaic hwy / hawaa 'exist, be, become'; Syriac həwaa > UA *hawa in Ls and Tb.
Aramaic hawaa contrasts with Hebrew hayaa, and the UA forms are like Aramaic, not Hebrew.
At (101) Uto-Aztecan *nï' 'I' does not align with Hebrew 'anii, because final -i is Uto-Aztecan's favorite final vowel, so if Hebrew 'anii 'I' were the source, there would not be a change in the final vowel. However, Uto-Aztecan *nï' 'I' does align very well with Arabic, Aramaic, and Syriac 'anaa' with loss of the 1st unstressed vowel, as happens in Syriac as well: *'anaa' > Syriac naa'—and 2nd V centralized *a > ï. WMU and other UA languages even have the final glottal stop as do written Arabic, Aramaic/Syriac.
At (105/106), Tr tumu / tumuhe (ustedes, vosotros, subj) and SP ŋumi 'you, your, pl obj pronoun' both resemble the Aramaic vowels of Aramaic antun 'you pl, subj' and -kon 'you (obj), your pl' after earlier Semitic *m > n.

In contrast to Hebrew/Phoenician z and Arabic/Proto-Semitic *đ, UA *t < Aramaic d:
(616) Semitic *đakar 'male, man'/ Aramaic dakar > UA *taka 'man, male, person, self, body'
(618) Aramaic di'b-aa 'wolf-the' > UA *tï'pa 'wolf' (vs. Hebrew haz-zə'eb 'the-wolf')
(617) Aramaic diqn-aa 'beard-the, chin-the'> UA *tï'na > *tï'ni 'mouth'
(in contrast to Hebrew zaaqaan 'beard, chin')

In addition, two of those three forms match perfectly the Aramaic form with definite article suffix, but not the Hebrew forms at all. In fact, besides Aramaic's suffixed feminine definite article *-taa, many UA forms include Aramaic's suffixed masculine definite article also *-aa. In fact, in some Aramaic dialects, the citation form would include the definite article. Also in Tb, Voegelin translates the Tb citation forms as 'the' whatever. In fact, notice how well the Western Numic languages' (Mn and NP) words for 'deer' reflect both the feminine -ta 'deer' and the masculine -a 'buck deer' as a distinction in Mn and NP.

At (638) Semitic *raxel ‘ewe’ > Mn tïhïta 'deer'; Mn tïhïya 'old buck'; Mn(L) tïhïhta ‘deer’;
NP tïhïdda ‘deer’; NP(B) tïhï’ya ‘deer’. So Mn has both and the genders match. The NP dialects show one of each as a general word, but NP(B) tïhida when possessing s.th.’
At (604) Aramaic(J) rə’emaan-aa / reemaan-aa ‘antelope-the’ > UA *tïmïna 'antelope’
At (618) Aramaic di’b-aa ‘wolf-the’ > UA *tï’pa ‘wolf' (vs. Hebrew haz-zə’eb ‘the-wolf’)
At (617) Aramaic(J) diqn-aa ‘beard-the, chin-the’> UA *tï’na > *tï’ni ‘mouth’
(in contrast to Hebrew zaaqaan ‘beard, chin’)
At (1130) Aramaic pagr-aa ‘corpse-the’ > Hp pïïkya ‘skin, fur’ (vs. Hebrew hap-pɛgɛr ‘the-corpse’)
At (1403) Syriac šigr-aa ‘drain, ditch, gutter-the’
> Hp sikya ‘small valley, ravine, canyon with sloped sides’.
At (1405) Arabic šqr ‘be of fair complexion, blond, fair-haired, color of fire’
> Hopi sikya- ‘yellow’; Hopi sikyà-ŋ-pï ‘yellow(ish) thing’; Hopi sikya-qa’ö ‘yellow-corn’.
At (1046) Hebrew ħgr ‘gird (self)’; Hebrew ħ^{a}goraa ‘girdle, loincloth, n.f.’; Aramaic *ħagor-taa
> UA *wikosa 'belt'. The -r- devoices next to voiceless t, then the whole cluster goes to -s-.
At (743) Aramaic tuumr-aa ‘palm-the / date-palm-the’ > UA *tu’ya ‘type of palm tree’:
Wr tu’ya ‘palmilla’; Tr ŕu’ya ‘kind of palm tree’. It fits Aramaic, but not Hebrew taamaar.
At (889) Hebrew rkb ‘to mount, climb up’; Aramaic rikb-aa ‘upper millstone-the’; Syriac rakb-aa ‘upper millstone-the’ > UA *tïppa ‘mortar, pestle’: TO čïpa ‘hole in bedrock
for mashing mesquite bean’; ST topaa ‘mortar’; Ls tóópa-l ‘mortar for grinding’ (Ls o < *ï)
At (794) Aramaic ’iibr-aa’ ‘penis-the’ > UA *wï’aC ‘penis’
At (1025) Aramaic guuryə-taa / guur-taa ‘cub (female), young of animal (lion or dog) > UA*koCti 'dog':
Sr koči’; Tr kočí. Ktn guci; Wr ku’cí ‘puppy’.

Longer Aramaic words of 3 and 4 syllables often lose the first syllable in UA:
At (1054) Aramaic raqbubit-aa ‘moth-the’ > UA *…kupïpika / *(C)Vkupïpika 'butterfly’
At (1055) Syriac ’aamaqqət-aa ‘lizard-the, n.f.’ > UA *makkaCta(Nka)-ci ‘horned toad’
At (1056) Syriac ħady-aa ‘breast-the, n.f.’, pl: ħ^{ə}daawaat- > UA *tawi 'chest'; UA aligns with the Aramaic plural with loss of the first short unstressed syllable of the plural.

When the 3rd consonant is Semitic y or ’ in Syriac/Aramaic (CCy/CC’), it is often not apparent in the Semitic perfect *CaCay > CaCaa, but UA sometimes shows the final glottal stop of Aramaic:
At (559) Hebrew bky/ bakaa^{y} ‘cry, weep’ (perf stem); Syriac bakaa / baka’ > Hopi pak- ‘cry’;
Tb pahaa’at / ’apahaa’ 'cry, bawl, howl' (Tb h < *k); Ktn paka’ ‘ceremonial yeller, clown who shouts all day to announce a fiesta’.

Sometimes the final glottal stop of Aramaic’s definite article suffix seems evident in UA, whether it is the masculine -aa’ or feminine -taa’:

Aramaic *ħaberet > UA *hupi- > Cr hïi (because *u > Cr ï, and *-p- disappears in Cora, so
Aramaic *ħaberet-taa’ ‘woman’ > Cr hüita’a ‘woman’ (Casad 1984, 161) is a very good match;
(1409) Aramaic kuuky-aa’ ‘spiderweb’ > Hopi kookyaŋw ‘spider’; even Cp kúka-t ‘blackwidow spider’ shows a final consonant where that glottal stop would be; otherwise, the absolutive suffix would be -l, instead of -t.
(1055) Syriac ’aamaqqət-aa’ ‘lizard-the, n.f.’ > NP makaca’a ‘horned toad’ (with echo vowel after -a’)
(967) Aramaic qušṭ-aa ‘bow-the’ > UA *kuCta-pi ‘bow’: Cp kútapi-š; Gb -kúčap (poss'ed); Ls kútupi-š ‘ash tree, bow’; AYq kuta wiko’i 'bow’. A reconstruction of *kuCtaC with a consonant cluster is needed given Takic intervocalic *-tt- (as *-t- > -l-). Aramaic form quuštaa ‘bow’ is identical except for the usual loss of s in a cluster, and final -pi < Egyptian p’y ‘his’. Tak -p- (instead of -v-) is again evidence that the final glottal stop of the Aramaic definite article was originally pronounced in UA.

Like many other matters remaining for future study, we ought to do a precise numerical count of the number of UA forms that better match Aramaic than other Semitic forms. The results may be significant.

9 Conclusions

Though a first introduction, this initial investigation into Uto-Aztecan ties to Near-Eastern languages yields numerous consistencies, morphological parallels, and several hundred lexical similarities for each dimension. Some inconsistencies remain to be clarified or tossed, and questions to be answered—remember this is an exploratory study—yet the proposed tie answers many previous questions. Many language relationships/families have been established with one-tenth of what is presented here. Some Semiticists might question an assumed lack of the common Semitic words. I say assumed, because many common Semitic words do appear in UA, though less common ones became more prevalent. Some are indeed missing—Hebrew yad 'hand' and šmʕ 'hear'—but for others, it is reversals of prominence rather than lack: e.g., the common Hebrew ʕayn 'eye' does have rare appearance in UA, while the rare Semitic bṣr 'see/eye' serves as the common UA word for 'eye'; the common Hebrew 'iiš 'man' and 'išaa 'woman' are found in UA, but not as prominently as Semitic *đakar 'male, man' > UA *taka 'man' and Hebrew ђaberet > UA *hupi 'woman', which are more common in UA.

Some may question the citing of cognate forms from various Semitic languages instead of only one. We addressed this matter at 1.25, page 33, and mentioned that we know next to nothing of some ancient dialects and even what we have of Classical Hebrew vocabulary in existing texts is but a fraction of what existed in the spoken dialect(s); so when a match with the expected Hebrew reflex of an existing Arabic form is found, for example, there is little reason to doubt its existence in the ancient spoken cognate language Hebrew. In fact, that is what the philologists who compiled the Hebrew lexicons have always done: validate the Hebrew terms based on cognate terms. We mentioned the lack of a word for squirrel in the Hebrew Old Testament (page 33), yet we find two Arabic words for squirrel in UA, whose sound correspondences match unattested Hebrew cognates. Another example is Semitic *km' 'truffle' (575) found in both Arabic to the south and Ugaritic (of Northwest Semitic) to the north, so the term's existence in Hebrew, located between the two, would be likely, even though Old Testament authors had no occasion to talk about truffles either.

Of interest are the Aramaic features (at section 8), Aramaic vocabulary, and many nouns with the Aramaic masculine definite article suffix -aa' fossilized into the forms, besides the productive UA *-ta suffix which resembles and behaves similarly to Aramaic's feminine article suffix *-taa' 'the'. Regarding Semitic-kw and Semitic-p, we might try to assign the Phoenician/Hebrew similarities to one and the Aramaic to the other; however, both seem to have some items with Aramaic morphology, but Semitic-p more so. Data on most dialects of Northwest Semitic is limited, if available at all; nonetheless, some scholars (Young 1993, 54-62, 85-86) see an Aramaic influence or substrate among the dialects of ancient Israel, especially northern Israel. What is not known is the degree or extent, though it may have been more significant or pervasive than presently known. The data of this work are relevant to that void in present knowledge.

Marsha White (1997), in a review of Young 1993, summarizes Young's substance more clearly and concisely than either I or Young might: "Young … suggests that Biblical Hebrew goes back to the adaptation of the pre-Israelite Canaanite prestige language…. Thus, from the beginning of Israelite history there were two linguistic strata: literary/formal and dialectical/colloquial. This situation of diglossia persisted throughout pre-exilic Israelite history…. The best explanation for … so many Aramaisms in the early literary language is that they were in the lower (i.e., spoken) form of the language, and that Archaic Biblical Hebrew was open to elements from the underlying dialects. The strong presence of Aramaisms in the oldest Biblical Hebrew undermines the theory that Aramaisms equals late" (White 1997). Spolsky (2014, 30) also mentions a possible Israelite diglossia in which the daily vernacular may have been closer to Aramaic and cites other sociolinguistic examples of peoples' writing in one language while speaking another, their own but differing colloquial (Spolsky 2014, 36).

This all aligns well with the likelihood of Aramaic substrata serving as underlying dialects to the literary language of Canaanite / Hebrew, perhaps throughout the Northern Kingdom's centuries. What language did the mothers (Leah and Rachel) of the 12 tribes speak? Aramaic! In addition, Aramaic was somewhat a lingua franca throughout most of the area through most centuries. So did the Israelites really set aside Aramaic upon entering Canaan? Or did they adopt degrees of bilingualism while adding the Phoenician / Canaanite literary language? The latter is likely nearer the case in some areas, if not most.

Rendsburg (1997) refers to "Israelian [northern kingdom] Hebrew as a dialect bundle, because almost certainly there were minor differences … the Galilean variety no doubt shared many features with

Phoenician and with Aramaic too. However, the available data generally do not allow us to isolate such minor differences" (Rendsburg 1997, 67). I might add that the differences may not all have been minor.

Relative to the Semitic-kw and the Semitic-p infusions, we have a good start in sorting the two (pp. 239-41), but that process is not complete. Their separate sound correspondences (Appendix A) in many instances have helped to distinguish many lexical items' affiliation, whether of Sem-kw or Sem-p. Yet as both have similar correspondences for some sounds (s, t, m, etc), some items resist sorting; thus, the matter remains opaque at times. Given this body of data, anyone wishing to, can continue work on and contribute to the sorting. The availability of this sizable corpus of raw data provides potential for many studies.

As to the original look of these diffused elements transplanted into the Americas, much remains to be figured out about the processes involving the language mixing, fossilizations, trimming, and molding into this unique result called Uto-Aztecan. Of course, every language mix is a unique product, though the processes toward such results often share commonalities. We have mentioned Yiddish, for example.

Yiddish yields noteworthy parallels to Uto-Aztecan. One parallel is that in both Yiddish and Uto-Aztecan, the Semitic items fit into a larger non-Semitic grammar. Kerler (1999, 9) explains that "the Germanic derivational machinery sets the major patterns for the morphological and to some degree syntactical integration of the other components" (of Yiddish). Likewise, in UA the fossilized Semitic pieces have largely been put into a larger non-Semitic grammar to a great degree. Bakker and Muysken (1995) explain that it is typical in language mixes that the vocabulary of one language largely fills the grammatical framework of another. In Uto-Aztecan, a sizable Near-Eastern vocabulary fills whatever grammar, fitting the description of language mixes better than Yiddish does, for in Yiddish, German provides both most of the framework and most of the vocabulary and pronouns, while in UA, the Semitic infusions contribute much basic vocabulary and most of the pronouns.

Another parallel is that both involve a smaller Semitic-speaking population transplanted into a foreign land amidst other larger populations. Larger languages normally exert a heavy influence on a smaller language, at the least, if not lead to language loss via the complete adoption of the larger language(s). Examples are many. Native American languages have been heavily subject to the recently arrived European languages: English, Spanish, Portuguese or French. Many have succumbed to language loss, and even the surviving languages show the effects of two to four centuries of European language influence. Yiddish, the language of central European Jews (originally Mediterranean Jews), results from the original Hebrew-Aramaic idiom being subject to many centuries of mostly German influence, as well as Slavic and other languages, collecting words from various stopping places along the way. Kriwaczek (2006, 40-48), Weinreich (1980), and Harshaw (1990, 5-7) outline its evolution from Roman Empire times, spreading from Greece, Italy and France into Slavic- and German-speaking areas and elsewhere by the first millenium's end. Harshaw (1990, 32) and Weinreich (1980, 34) note Leo Wiener's percentages as 70% German, 20% Semitic, and 10% Slavic. Other estimates similarly put the Semitic component to be between 15-25%, so the great majority of the vocabulary is from outside influences, mostly German. Kriwaczek (2006, 114) cites Wexler's (1993) view that much of the Hebrew might be of later adoption from written sources via Judaic religious instruction, education, and culture. If so, the implication is that without written sources, much less or very little Semitic would have survived to the present.

Uto-Aztecan's percentage of Near-Eastern components remains to be determined and tallied. Nevertheless, at first glance, Uto-Aztecan's percentage of Near-Eastern components seems to exceed Yiddish's Near-Eastern percentage considerably. *Uto-Actecan: A Comparative Vocabulary* (2011) includes some 2700 Uto-Aztecan cognate sets. Those with substantial similarity to Semitic or Egyptian, and according to the proposed sound correspondences, are about 30%. But for common words or the more widespread/frequent UA words, about 60% align with Near Eastern etymologies.

In 7.4 we see a large amount of the common vocabulary (animals, body parts, nouns of nature) in UA from the Near Eastern sources. As for other vocabulary, among the 2700 Uto-Aztecan cognate sets, the vast majority of those sets have cognates or reflexes, that is, descendant words in less than half of the 30 UA languages. Only 45 cognate sets have reflexes in 25 or more of the 30 UA languages or appear in 7 or 8 of the 8 UA branches. Yet 26 of those 45 sets appear in this work (see 7.8). That amounts to about 60% of the widespread UA words. In other words, Semitic and Egyptian seem prominent in the origins of UA.

In fact, all three of the idioms mentioned (Semitic-kw and Semitic-p and Egyptian) appear to have contributed to common UA words found in all or nearly all branches. From Semitic-kw are (4) UA *kwasï

'cook, boil, ripen' and (5) UA *kwasi 'tail, penis'; from Semitic-p are (532) UA *pusi 'eye' and (531) UA *pow 'road'; and from Egyptian are (280) UA *omwa 'salt', (284) *kumCa 'husband', and (508) UA *t/raman 'tooth'. It appears that all three were present in what is called Proto-Uto-Aztecan, the original mixture from which the UA languages descend. Some may object, citing glottochronology's presumed time-depth of 5,000 years for UA, but holding fast to glottochronological estimates is more a hobby of anthropologists, archaeologists, and non-specialists than of linguists. Most linguists know better and view glottochronological estimates like colds—they usually pass with little permanent damage.

Language mixture may also explain many final vowels in UA, a final vowel added to the traditional Semitic form. The phonology of some languages do not allow ending words with consonants, but must end with a vowel and thus a vowel is added to consonant-final foreign words. Arends, Kowenberg, and Smith (1995, 103-4) note such a tendency (to add final vowels) for most Surinam creoles: sneki 'snake'; poti 'put'.

One might also wonder how verb-initial languages like Hebrew and Egyptian (VSO) could spawn verb-final languages like UA. First of all, Biblical Aramaic is largely a verb-final language. What's more, such changes are not unusual, but, in fact, frequent in language change. Perhaps the three most common causes of such change seem to be the case for UA as well. First, topicalization as a fronting tool can help bring nouns (subjects and objects) to the front, turning original verb-initial patterns into noun-initial syntactic patterns. This actually happened in the history of Egyptian—changes away from VSO (verb initial) in later Egyptian due to topicalization patterns. Second, UA's use of the Hebrew ha- 'interrogative prefix' may be an example. The Hebrew ha- 'interrogative prefix' is first element in Hebrew yes-no questions, while the UA *ha- 'interrogative particle' is usually second element in UA sentences, and interestingly the first element is always a noun. Both facts are quite consistent with each other, because a topicalization of a noun followed by a question about it essentially reveals the Hebrew structure, yet also explains its consistent second position in UA: My sandal—is it in the house? Third, being among (neighbors to, surrounded by) verb-final languages (SOV) would change most languages to become SOV before long, and SOV is probably the most frequent word order among North American Indian languages. White Mesa Ute changed to English word order in a century or so. Fourth, there are non-SOV and even VSO patterns in some UA languages.

As mentioned, a salient implication suggested by the data is that Egyptian and two dialects of Northwest Semitic and other unknowns, likely of American origin, had merged by Proto-Uto-Aztecan times. Such is admittedly a strange combination, but many languages are strange combinations—like English. Modern English kept only 15% of the Old English vocabulary (Baugh and Cable 1978, 55), having replaced the other 85% with infusions from French and Latin, etc. In fact, after the Norman French conquest of A.D. 1066, a thorough mixing of Norman French with Old English resulted in Modern English being as much a mix of Old English and Norman French as border Spanish or "Spanglish" is a mix of English and Spanish. Though most of our common words are from Old English, the percentages of a printed page would contain comparable amounts of French, and an unabridged dictionary would show much more Latin and French in modern English than what survived from Old English into modern English. Though the details differ from language to language, many languages are mixtures to varying degrees.

Of course, much more investigating, data-collecting, sorting, cross-checking, and analyses must yet take place, and objective discussion is welcome. Let the open-minded add to the refining scrutiny and help truth emerge. Academicians claim to be seekers of truth, and minus a few duped by reality-challenged philosophers deeming truth to be ever relative or non-existent, the rest of us should work toward it.

Academicians supposedly encourage open-minded, independent thought or critical thinking, yet they often construe critical thinking to mean rethinking the values system of one's upbringing, apparently confident that students will 'see the light' and be 'liberated' from the presumed 'mythologies' of religion or traditional values, but academics' responses are less than enthusiastic should such an investigation confirm what they were sure could not be so. When evidence is presented to suggest conclusions outside their paradigms, such as pre-Columbian transoceanic crossings or Semitic speakers in ancient America, many of their reactions show their paradigms to be as dogmatic as they think religious ones are.

A very interesting difference between Sem-p and Sem-kw is that Sem-p kept ʕ and ġ distinct, and kept ḫ and x distinct, whereas Sem-kw did the known Canaanite mergers of ḫ and x to ḫ, and also the merger of ʕ and ġ to ʕ. Among some Israelites, if not all, this merger occurred later, that is, sometime between 300 BC and the first centuries AD (Kutscher 1982, 13-18; Sáenz-Badillos 1993, 81; Blau 1998, 12, 30). The fact that Sem-p shows the distinction in contrast to Sem-kw having merged them, losing the distinction, could be

interpreted as a difference in time depth—that Sem-p separated earlier from the Near-East and Sem-kw later. However, that would not need to be the case. The fact that the Phoenician alphabet has two letters for the four sounds suggests that the merger had already taken place in Phoenician by the development of the Phoenician alphabet (1500-1200 BC), whereas Israelite Hebrew bore with using some symbols to represent two sounds each (ʕayn for ʕ and ġ, ḥeyṭ for ḥ and x, šin for š and ś) for a millennium or so, like English uses *th* for both ð (this, Heather) and θ (think, Timothy). Thus, the Phoenician merger of the four Proto-Semitic consonants to two happened a millennium before the Israelite merger of the four to two. If the Semitic-kw speakers came on a Phoenician vessel, that would explain their merger and much else.

Much remains to be worked out, but less than remained to be figured out in UA previously, as these data explain much that was not explainable before (6.1-6.7). As well, the specific Egyptian and Semitic data may eventually help identify the Old World times and places from whence the dialects came.

This corpus may provide enough promising data for varieties of other analytical studies. For example, the Semitic-p *ti'na 'mouth' (< Aramaic diqn-aa, 617) vs. Semitic-kw ca'lo 'chin' (< Hebrew zaaqn-o 'chin-his', 628), from the same Semitic cognate pair, offer a potential to illuminate much. Several other pairs of the same word, one from each, provide examples of the potential.

If these proposed ties are as viable as the statistical probabilities suggest, they provide a leap forward in explaining scores of previous unknowns, only some of which might have been attainable after many more decades of comparative UA work. Keep in mind, as if 1500 matches were not enough, that there is another way to know whether this is a valid case or not: if it be truth, then this is only the beginning of findings.

APPENDIX A: Sound Correspondences of the Semitic and Egyptian Infusions in Uto-Aztecan from Semitic-K^{w}, Semitic-p, and Egyptian: C- (initial), -C- (medial), C (all environments)

Semitic, Egyptian	UA terms from Semitic-kw in UA	UA terms from Semitic-p in UA	UA terms from Egyptian
b	kw	b/p	b/p
p	p	p	p
’	ø/’	w/’	w/’
ḫ	hu/w	hu	hu
x (> ḫ Phn)	hu/w	k/h	k
ʕ	w/o/’	w/o/u	w/o/u
ġ (> ʕ Phn)	w/o/’	k	-- (not in Egyptian)
ṣ/d	c	s	s
ṭ	c/s	t/c	-- (not in Egyptian)
t	t-, medially -r-/-l-	t-, -r-/-l-	t-, -r-/-l-
d	t-, medially -r-/-l-	t-, -r-/-c-	t-, -r-/-l-
k	ø-, -k-	k	k
g	ø-, -k-, but Tak ŋ	k	k
q	ø-, -k-, but Tak ŋ	k, but Tak q	k, but Tak q
h	h/ø	’/ø	’/ø
m	m	m	m
n	n	n	n
l	l	l	-- (not in Middle Egyptian)
r	t-, medially -y-	t-, -r-	t-, -r-/-y-
ð (> z Phn)	s/c	t	-- (not in Egyptian)
z	s/c	c	-- (not in Egyptian)
θ (> š Phn)	s	s	s
s_1 (> š)	s	s	s
s_2 (> ś)	s	s	s
s_3 (> s)	s/c	s	s
y/i	y/i	y/i	y/i
w	w	w	w

APPENDIX B: English Index to Cognate Sets

Able: 219 Egyptian *iqr* ‘capable, intelligent’ > UACV-1280 **yikar* ‘knowing, intelligent, able, good’
Able: 936 Hebrew *gml* / *gaamal* ‘complete’ > Tr *gamea* ‘1 to be able, 2 to look good to, like, 3 to fit, be enough’
Above: 887 Semitic *rkb* ‘mount, climb up on’ > CN *tlakpa-k* ‘above, on top’
Accompany: see buy
Acorn: 367 Egyptian *tḫwy* ‘pea’ > Wr *tohi* ‘acorn’
Address: 980 Arabic *klm* ‘address s.o.’ > Ls *’ulómi* ‘call s.o. names’
Adhere: XX Arabic *dabiqa* ‘stick to, attach, adhere’ > UACV-2181 **cupa* 'adhere'
Adhere: XX Hebrew *dbq* ‘cling to, stick to’ > UA **tupuka* ‘cover’
Adobe: 200 Egyptian *ḏbt* ‘brick’ > UACV-2 **supa-* ‘adobe’
Adultery: 933 Syriac **yə-gayyar* ‘to commit adultery’ > Hopi *yoŋyày-ti* ‘be adulterous, have an affair (with)’
Afraid: 1318 Hebrew *ygr* / *yaagor-* / yooger ‘to be afraid’ > Ca *yuki* ‘get scared, be afraid’
Afraid: 1458 Arabic *’bd* ‘be wild, untamed, shy, run away, to last, endure’ > UACV-853 **ïkwiya* ‘be afraid’
After: 1400 Syriac *baatar* ‘after, following’ > AYq *veasi* ‘behind, beside, on the other side of’
Alarm: 1366 Syriac *twh* / *təwah*, ‘be alarmed, startled’ > Sr *tahitahi’* ‘hurry up, vi’
Alcohol: 181 Egyptian *ḫnqt* ‘beer’ > UA **hunaka* ‘drunk, alcohol’
All: 241 Egyptian *nb* ‘any, every, all’ > UACV-20 **napi* ‘all, every’
All: 1029 Hebrew *maanaa* ‘divide, count’ (inf **manoot* ‘counting’) > UA **man(n)u* 'all, every, the count (of)'
Also: 354 Egyptian *grw* ‘also, further’ > Wr *garí* ‘also’
Also: 1329 Hebrew *’ap* ‘also, yea, even’ > TO *ep* ‘again, also, too, another one, somebody else’
Angry: 1289 Hebrew *šgʕ* ‘be raging, mad’ > CN *šiikoaa* ‘be jealous, be angry, be displeased’
Ankle: 858 Hebrew *qarsol* ‘ankle’ > UACV-40 **-kwinco-* in UA **ta-(k)wi(n)co-ko* 'ankle’
Another: 570 Arabic *’aaxar* ‘another, one more’ > PUA **wakay/waxay* ‘two’
Ant: 1460 Modern Aramaic *šikwana* ‘ant’ > UACV-44 **siku* ‘ant’
Antelope: 29 Hebrew *ṣəvii* ‘gazelle’ > Hp *cöövi-wï* ‘antelope’
Antelope: 604 Aramaic *rə’emaan-aa* / *reemaan-aa* ‘antelope-the’ > UACV-51 **tïmïna* 'antelope’
Anus: 358 Egyptian *kns* ‘pubic region’ > Wr kohsí ‘anus, vagina’
Arise: 713 Arabic *ṭlʕ* ‘to arise, come up’ > Tb *tulu’ula-* ‘to get up from sitting’
Arm: 188 Egyptian *nḫbt* ‘neck, nape of the neck’ > UACV-1120 **nohopi* > *nopi* ‘hand, arm’
Arm: 1234 Hebrew *zəroʕ* ‘arm, forearm, power’ > UACV-1124 **toC* ‘with the hand, instr. prefix’
Arm: 729 Aramaic **’eebaar-aa** ‘limb, arm, wing, male member’ > UA ***pïra** ‘arm, right arm’
Around: 370 Egyptian *ḫ’* ‘behind, around’ > UA **huwï* ‘around’
Around: 1305 Hebrew *sbb* ‘to turn self around, go around, surround’ > Ca *suvuvey* ‘to whirl around’
Around, go: 333 Egyptian *qd* ‘go round’ > **koti* / **kuri* ‘turn, go around’
Arrive: 863 Arabic *qbḍ* (i) ‘seize, grasp, collect’ > UACV-57 **ha’si* / **hapsi* 'arrive, reach, catch up to'
Arrow: 78 Hebrew *ḫeṣ* / *ḫeṣi* ‘arrow’ > UACV-63 **huc(a)* > **huC* ‘arrow’
Arrow: 752 Arabic *sahm-*, pl: suhuum ‘arrow, dart’ > UACV-64 **suhuma* 'arrow'
Ask: 270 Egyptian *dbḫ* ‘ask for, beg’ > UACV-70 **tïpiwa* / **tïpiN* 'ask'
Ask: 758 Hebrew *š’l* ‘ask’ > UACV-74 **sï’wï* ‘ask for’
Ask: 1036 Hebrew *ntn* / *naatan* ‘give’; impfv: *-tten*, *yi-tten* ‘he gives’, *ti-tten* ‘she gives’ > UACV-71 **tani* 'ask for’
At: 1113 Syriac *ṣiid* ‘to, with, at’ > UACV-84 *-ci / *-cï 'at'
Attentive: 1068 Hebrew *qaššɛbɛt* ‘attentive’ */ *hi-**qšebu*** ‘they heard’ > UACV-1164 ***kïpu*** ‘hear’
Baby: 25 Hebrew *bky* / *bakaa* ‘cry’ > UACV-147 **kwakiC* ‘baby’
Back: 7 Semitic **bahamat* ‘back, hill, mountain ridge, high place’ > UACV-99 **kwahama* ‘back’
Back: 511 Egyptian *ḫ’* ‘back of the head’ (Allen 2010, 87) > Mayo *hoo’o* ‘back’
Back: 910 Hebrew *gab* ‘back’ > *Ls ŋavá-ŋva-š* ‘stooped, as an old man’
Back: XX; Arabic *nwd* ‘swing back and forth’ > UACV-455a **ŋola* ‘circular, bend, go/turn back’
Back: 1053 Hebrew *šwb* / *šuub* ‘turn back, return’ > Tb *šiiub* ‘back again’
Back: 1075 Hebrew *gab* < **gabb* ‘back’ > UACV-803 **kakwa* / **kapp* / **kapkwa* ‘egg’
Back: 1356 Hebrew *maatn-aim* ‘loins, dual’; Arabic *matnat-aani* ‘loins, dual’ > Ls *mááča-t* ‘back’
Back: 1372 Arabic *dbr* ‘turn one’s back’ > Ktn *tïhpi-c* ‘loin, back’
Bad: 94 Hebrew *ršʕ* ‘act wickedly, be guilty’ > UACV-101 **tasawa* ‘be/do bad’
Bad: 1217 Semitic *qalal* ‘be small, contemptible, despise’ > UACV-104 * *’alal* ‘bad, wrong’
Badger: 675 Semitic *ḫnp* ‘have turned in feet, limp’ > UACV-107 NUA **hunap-* ‘badger’
Bald: 276 Egyptian *f’k* ‘shorn man’ > UACV-2056a **piCka* / **piNka* ‘smooth, bald’
Ball: 984 Hebrew *gullaa* ‘bowl’ (< Hebrew *gll* ‘roll’ niqtal: ‘be rolled together’) > UACV-431 **ola* ‘ball’
Ball: 1374 Sem-p Syriac *buundəq-aa* ‘ball, globule, sphere-the’ > SP *potto* ‘round, spherical’
Ball: 1375 Sem-kw Syriac *buundəq-aa* ‘ball, globule, sphere-the’ > UA **kwinu’* ‘ball’

Blanket: 1129 Arabic *l'm* / *la'ama* 'bandage, fit (clothes)' > UACV-255 **taluma'* / **talumaC* 'blanket, garment'
Banner: 70 Hebrew *dɛgɛl* 'standard, banner' > Wr *tekela* 'stripe, hat band, pole at the bottom edge of the roof'
Bark: 841 Hebrew *piṣṣel*, 'skin, peel away (bark from sticks), decorticate' > UACV-2020 **cala/i* 'bark, shell'
Bark: 1272 Arb *qšr* 'to peel, shell, derind, debark, skin, husk' > UACV-2019a **asi'a* 'bark, n' (SNum)
Bark: 1248 MHebrew qaśiiṭaa 'a standard value, coin, jewel'; Syriac **qesṭ-aa** 'measure'
> UACV-2016 **koCti* / **koCta* 'bark, shell, money'
Basket: 161 Egyptian *ʕrq* 'basket' > UACV-1520 **wari* 'basket'
Basket: 404 Egyptian *ḫ'dt* 'basket' > UACV-118 **hoCca* / **huCta* 'basket, jar'
Basket: 864 Hebrew *quuppaa* 'basket, tub, ball' > UACV-119 **koppo* 'basket'
Basket: 1005 Hebrew *qaśwaa* 'jar' > TO *gihot* 'carrying basket'
Bat: 249 Egyptian *s'xmw* 'species of bat' > the *so'o- in UACV-125 **so'o-paCti* 'bat'
Bat: 784 Hebrew *ʕ^{a}ṭallep* 'bat'; Aramaic *ʕ^{a}ṭallep-aa* 'bat-the' > UACV-126 **ho'napi* 'bat'
Bathe: 671 Arabic *ḥmm* 'to heat, bathe, wash' > Hp *paa-homa* 'to wash, bathe, v.t.'
Beautiful: 13 Arabic *snw* 'gleam, shine'; Ethiopic *snw* 'be beautiful' > Hopi *soniwa* 'be beautiful, pleasing, bright'
Beautiful: 571 Aramaic *yaa'yaa'* 'beautiful' > UACV-154 **yawa* / **yï'a* 'beautiful'
Beautiful: 714 Hebrew *pl'* 'to be extraordinary, wonderful' > Ca *pálaw* 'be pretty'
Be: 502 Egyptian *yw* 'is/are' > Kw *-yu* 'same-subject contemporaneous'
Be: 1011 Semitic *kwn* / *knn* 'be, exist, make' > UACV-681a **hanni* 'do, make'
Be: 1345 Aramaic *hwy* / *hawaa* 'exist, be, become' > Ls *'ááw-* 'be (in a place), live, dwell (sg animate being)'
Bead: 1376 Hebrew *ṣor* 'flint'; Akkadian *ṣurru* 'obsidian, flint' > SP *čoiC* 'bead'
Bean: 847 Hebrew *pol* 'bean(s)' > UACV-132 **(tï-)pol* 'bean'
Bear (n): 613 Hebrew **dobboot* 'bears, f pl'; **dobbootee^{y}* 'bears, construct pl' > UA **posi* 'bear'
Bear (v): 719 Hebrew *towlid* 'bear a child, fem impfv' > Ls *tóvli* 'to bear a child, lay an egg'
Bear (v): 718 Hebrew *npl* 'fall, be born' > UACV-138 **puli* 'to fall, give birth, daughter'
Bear (v): 1028 Hebrew *yooliid* (< **yo(w)liid*) 'cause to be born, hatch, vt' > UACV-13 **yoli* 'live, alive, bear, be born'
Beat: 629 Arabic *xbṭ* 'beat, strike, knock, rap' > UACV-1196 **kappica* 'clap, slap'
Beauty: 1392 Syriac *paayuut* (< **pa'yuut*) 'beauty, comeliness, elegance' > Tr *ba'ó* 'beauty'
Bee: 141 Egyptian *bit* 'bee, feminine noun' > UACV-161 **pita* / **piti* > **pica*/*pici*/*picu* 'bee, wasp'
Bee: 1231 Assyrian *mtq* 'be sweet' > UACV-918 **mumuh/kV* 'bee'
Bee: 1349 Hebrew *dəbaš* 'honey' > Wc *táášaviikari* 'small black bee'
Beetle: 853 Aramaic(S) *ḫippušit-aa* 'beetle-the, n.f.' > UACV-317 **wippusi* > **pippusi* 'stink beetle'
Beget: 624 Hebrew *zrʕ* / *-zriiʕ* 'bear a child' > CN *ciiwa* 'beget, gender'
Begin: 545 Arabic *bd'* 'begin, start' > UACV-170 **pïwa(t)* 'first, begin'
Behind: 643 Semitic/Hebrew **'xr* > *'ḫr* 'be behind, after, to the back' > UACV-1237 **oya* 'follow'
Behind: 954 Arabic *baqiya* 'stay, be left behind' > Hp *kwayŋya-* 'behind'
Behind: 1394 Hebrew *báʕad* 'behind, through, round about, for' > Tr *bo'ó* / *ko'ó* 'from/at/on the other side of'
Believe: 567 Hebrew *ya'amiin-o* 'he believes him/it' > UACV-172 **yawamin-(o)* 'believe (him/it)'
Belly: 1003 Arabic *kirš* / *kariš* 'stomach, paunch, belly' > UACV-2195 **kïca* 'belly, waist'
Belt: 592 Hebrew *'abneṭ*, pl: *'abneṭ-iim* 'sash (KB), girdle (BDB)' > UACV-178 **natti* 'belt'
Belt: 1045 Hebrew **moškat* / *moškoot* (sg or pl?) 'bracelet, fetter, belt' > UACV-181 **mo* 'belt'
Belt: 1046 Hebrew *ḫgr* 'to gird, gird (self)'; Aramaic *ḫagor-taa 'girdle, what's girded' > UACV-177 **wikosa* 'belt'
Belt: 1048 Aramaic *zwsṭ-* 'belt' > UACV-182 **ṣutka* 'belt'
Belt: 1446 Aramaic / Syriac *bar kəbaan-(aa)* 'belt' (CAL), *kbn* 'gird' > UACV-180 **pakkaC* 'belt'
Bend: 694 Hebrew *ṣʕy* 'stoop, bend, incline' > Wr *cucuwi* 'be hunched over, on all fours, face down, hanging'
Berry: 1049 Aramaic *qnwqn(h/t')* 'grape vine creeper' > UACV-184 **kunuki* 'elderberry'
Between: 1270 Hebrew (**bayin* >) *been* 'between' > UACV-2565 **kwan* 'with'
Bewitch: 18 Assyrian *zabaabu* 'be in a frenzy, act crazily'; *zabbu* 'type of ecstatic' >
UACV-203 **sakwo* > **sikwo*/*sikwi* 'witch, bewitch'
Big: 221 Egyptian *wr* 'much, many, big' > UACV-204a **wïru* > **wï'ïwïru* 'big'
Big: 979 Hebrew *gbr* 'be superior, increase' > UACV-206 **'apa'* 'much, big'
Big: 1492 Hebrew *mugdal* 'big' > Ls *muká-t* 'big, large'
Big: 1414 Syriac *sgy* 'be many, great' > Hopi *hoskaya* 'large, huge, enormous'
Bind: 658 Hebrew *ḫbl* 'bind, pledge' > SP *wïkkwinta* 'to wrap around, coil'
Bird: 30 Hebrew *ṣippoor* 'bird, small bird' > UA **cipuri* 'bird'
Bird: 725 Hebrew *toor* 'turtle-dove' > UACV-216 **tori* 'domestic bird'
Bird: 878 Hebrew *ʕayṭ* / *ʕeeṭ* 'bird of prey' > UACV-209a **wiCtiki* 'bird'
Bird: 953 Arabic *ʕuqaab* 'eagle' > UACV-344 **yuŋapi* 'buzzard'
Bird: 960 Arabic *qarqara* 'rumble, grumble, gurgle, coo (pigeon)' > UACV-1749a **kakkara* 'quail'

Bird: 981 Aramaic *gaz* / *gas*, *gaz-aa* ‘bird of prey, falcon-the’ > UACV-741 **’asa-wïr* ‘eagle’
Bird: 1357 Semitic *qr’* ‘call’ to be a ‘caller, crier’ > UACV-2421 **kuyuŋV* / **kuyuNCV* 'turkey'
Birth: see bear
Bite: 1447 Hebrew *qrṣ* ‘bite’ > UACV-230 **kï’* / **kï’ca* 'bite, v.'
Bitter: 513 Egyptian *ḏḫʕwt* ‘bitterness’ > UACV-237b **sïhïw(kV)* ‘sour’
Bitter: 1461 Hebrew *śə’or* ‘sour (leavened) dough’ > UACV-231 **cipuC* 'bitter'
Black: 125 Egyptian *km* ‘black’ > UACV-1070 **kuma* > **koma* ‘dark, gray, brown, black’
Black: 197 Egyptian *ḏʕb* ‘coal-black’ > UACV-243 **so’opa* ‘black, dark’
Black: 1296 Hebrew *ṣll* ‘to become dark or black’; Arabic *ẓll* ‘be black’ > Tr *čona* ‘to be or become dark or black’
Black: 710 Hebrew *toolaaʕ* ‘crimson (color, dye, or material)’ > UACV-241 **tul* 'charcoal, embers, black'
Blemish: 1434 Hebrew *dopi* ‘blemish, fault’ > TO *čïčpa(i)mag(ï)* ‘be dotted, have dots’
Blanket: 402 Egyptian *psšt* ‘mat (made of the psš plant), n.f.’ > UACV-244a **ha-pït* 'blanket'
Blanket: 937 Hebrew *gml* / *gaamal* ‘complete’ (KB) > UACV-246 **kïmal* / **kamal* 'blanket, wrap (in blanket)'
Blanket: 1391 Hebrew *pšṭ* ‘spread out, take off clothes, stretch oneself, remove skin’ > UACV-244a **ha-pït* 'blanket'
Blanket: 1402 Egyptian mx’ ‘make fast, tie, bind, fetter, v’ > UA *maĝo’i- ‘bag, bind, wrap, blanket’
Blanket: 148 Egyptian *t’yt* ‘shroud’ > UACV-256 **tawayi* ‘wrap around’
Bless: 1260 Hebrew *brk* ‘kneel down, bless, praise, adore’ > UACV-2202 **po’o-ta* / **poro-* ‘bend over, stoop over’
Block: 956 Arabic *ḫgz* ‘hold back, hinder, block, detain’ > Hopi *oŋo-(k-)* ‘bump into, collide with’
Blood: 1449 Aramaic *plpl* ‘sprinkle with blood’ > UACV-260 **païC* / **pauC* / **paC* / **pap* 'blood, bleed'
Blood: 1522 Hebrew **hammadwe* ‘mentrual blood’ > *hiNtwa > UACV-258c *iNtwa ‘menstrual period’
Blood: 1523 Hebrew **ʕiddaa* / *ʕiddiim* ‘menstrual period’ > UACV-258a **ïta*/*ïra* 'blood'
Blood: 882 Hebrew šə’er ‘flesh, meat’ > UA *sure’e ‘blood’
Bloom: 1500 Egyptian *prx* ‘burst into flower’ > UACV-908 **hVpiNka* ‘bloom’
Blossom: 818 Hebrew *ṣuuṣ* ‘bud, blossom, bloom’ > UACV-865 **coya* ‘feather headdress’
Blossom: 1020 Syriac *blṣ* ‘to bud, blossom’ > Ca *če-kwála’an* ‘open (eyes or mouth)’
Blossom: 1340 Arabic *pqḫ* ‘to open the eyes, to blossom’ > Ls *páqa-* ‘to sprout through the ground, of plants, v.i.’
Blow: 840 Hebrew *pwṣ* ‘spread, disperse, overflow’ > UACV-261a **puca* 'blow'
Blow: 1218 Hebrew *npḫ* ‘blow, breathe’ > UACV-2560 **nïka* ‘be windy, blow’
Blow: 1453 MHebrew and Aramaic *pwḫ* ‘blow, breathe’ > UACV-261b **puh-ki* / **pukki* > **pukkwi* ‘pant, blow, v’
Blue: 307 Egyptian *irtyw* ‘blue’: > UACV-263 **tayawi* > **tïyawi* / **tïyowi* ‘blue/green’
Bobcat: 803 Hebrew *kəfiir* (< **kapiir*) ‘young lion’ > UACV-1353 **kap* ‘bobcat’
Body: 411 Egyptian *ḫʕ* / *ḫʕw* ‘body’ > UACV-265 **hoŋa* 'body'
Boil: 879 Arabic *šwy* / *šawaa* ‘broil, grill, roast’ > UACV-266a **sawa* ‘boil, apply heat, cause to melt'
Boil: 1488 Hebrew maʕ^{a}le > UACV-268a *mula / *muta 'boil'
Boil: 37 Hebrew *bʕy* / *baʕaa*^{2} ‘bring to a boil, bulge out’ > Hopi *kwala*-(k-) ‘boil, come to a boil’
Boil: 4 Hebrew *baašel* ‘cooked, boiled, ripe’ > UACV-521 **kwasïC* ‘cook, ripe(n)’
Boil: 319 Egyptian *psi* ‘cook’ > UACV-270 **poso* 'boil'
Bone: 950 Hebrew *gerem* ‘bone’ > UACV-1738 **ŋya(m)* ‘clan, relative’
Bone: 1476 Hebrew *ʕεṣεm* ‘bone’ > UACV-273 **cuhmi* 'bone'
Bone: 1477 Hebrew *ʕeṣem* ‘bone’ > UACV-272b **omi* / **ohomï* ‘bone’
Bottom: 344 Egyptian *ḳf’* ‘hinder parts of bird, base, bottom (of jar)’: Cp *kəpawe* ‘hip’
Bow (n): 264 Egyptian *šmrt* ‘large bow, bow (of gods/kings) > UACV-1768 **ko(C)-samalo* ‘rainbow’
Bow (n): 967 Aramaic *qušṭ-aa* ‘bow-the’ > UACV-278 **kuCta-pi* ‘bow’
Bow (n): 968 Egyptian-Hebrew *p’y-qušt* ‘his-bow’ > UACV-277 **pikoti* ‘bow, bowstring’
Bow (n): 969 Hebrew *qešet*, *qašt-* ‘bow, weapon’ > UACV-275 **aCta* ’atlatl, bow’
Bow (v): 176 Egyptian *x’m* ‘to bow’ > UACV-438 **kom*/**ko’om* ‘bend’
Bow (v): 1255 Hebrew *sgd*, impfv: *-sgod* ‘bow down’ > UACV-943 **coko* ‘knee, kneel’
Bowl: 931 Hebrew *gulla(t)* ‘basin, bowl’ > Hopi *ŋöla* ‘hoop, ring, wheel’
Boy: 90 Hebrew *naʕar* ‘boy’ > UACV-1426 **nowa* ‘son’
Boy: 413 Egyptian *ḫʕ’* ‘child, boy’ > Ls *hiŋé’-ma-l* / *hiŋéé-ma-l* ‘boy’
Boy: 978 Semitic **gabbaar* ‘man, strong/mighty man’ > UACV-1427 **appaC-ti* ‘boy’
Braid: 257 Egyptian *sṯ’* ‘weave, spin (yarn)’ > UA **sitoko*: ‘braid’
Braid: 748 Hebrew *šibbeṣ*, *šibbaṣ-* ‘to weave patterns’ > SP *sikwa’a* ‘to braid’
Braid: 924 Arabic *ğadiila* ‘a braid, plait’ > UACV-2517 **ŋara* / **ŋatCi* / **ŋataC* ‘weave, fasten, tie’
Braid: 1445 Syriac *bkt* ‘to weave’ > UACV-2507 **kwiCta* ‘braid, wind around’
Brain: 1078 Arabic *muxx-* ‘brain’ > UACV-1153 **mo’o* ‘head’
Branch: 963 Hebrew *qaaṣiir* ‘branch(es)’ > UACV-2412 **kusi* ‘wood’
Bread: 488 Egyptian *šʕt* ‘kind of bread/cake’ > UACV-266c **sawa* ‘make tortillas or bread’

Break: 10 Hebrew *šibber*, impfv -*šabber* 'break, break in > UA **sakway/*sikwa* 'break, ruin'
Break: 399 Egyptian *s'w* 'break (to pieces), demolish' > UACV-298 **si'u* 'break to pieces'
Break: 985 Arabic *kasara* 'break, shatter, fracture' > UACV-286 **kasi* 'break'
Breast: 139 Egyptian *bnty* 'pair of breasts' > UACV-300 **piCti(C)* 'breast'
Breast: 140 Egyptian *šnbt* 'breast' > UA **sanaC*- 'breast'
Breast: 1056 Syriac *ħady-aa* 'breast-the, n.f.' pl: ħ^{ə}**daawaat** > UACV-425 **tawi(C)* 'chest'
Breathe: 838 Hebrew *npš* 'to breathe' *hinpiiš > UACV-302 **hikwis* 'breathe, spirit, heart'
Breathe: 1174 Hebrew *yinnapeš* 'breathe freely, recover' infinitive: **hinnapeš* > My *híabite* 'breathe, rest'
Brick: see adobe
Bright: 745 Hebrew *ṣhr* 'be bright, clear' > UACV-2235a **ci'ali* / **ci'ari* 'sunrise, east, morning'
Bring: 512 Egyptian *ini* 'bring, fetch, carry off, reach, buy' > Hp *ini* 'contents of an open shallow container'
Bring: 806 kw-Hebrew pfv: *hebii'* / *hebaa'* 'bring' > UACV-1324b **hakwa* / **hakwi* 'lift'
Bring: 805 p-Hebrew *hebii'/hebaa'* 'bring' > UACV-1324a **hï'ïpi* / **hapa/i* 'get up, vi; lift/pick up, vt'
Brother: 130 Egyptian *sn* 'brother' > UACV-659 **sïnu* 'another, different'
Brother: 880 Hebrew *'aħ* (< **'ax*) 'brother' > UACV-307 **wan(k)a'a* 'younger brother'
Brother, younger: 1050 Hebrew *bɛn* 'son', pl: *bənee(y)* 'sons, children' > UACV-310a **poni* 'younger brother'
Brother, younger: 1051 Hebrew *ṭap* 'little children' > UACV-311 **cipi* / **cippiyi* / **cippili* 'younger brother'
Brown: 77 Hebrew *'dm* 'be red' > UACV-312 **oNtam* / **oNta(N/C)* 'brown'
Buffalo: 735 Hebrew **muuṣaad* 'game, what's hunted' (< **muṣa(y)ad*) > UA **musayït* / *musayïd* 'buffalo'
Bundle: 1338 MHebrew *kbl* 'to fetter' > UACV-115c **muka* 'carry a bundle, carry on the back'
Bundle: 1402 Egyptian mx' 'make fast, tie, bind, fetter, v' > UA *maĝo'i- 'bag, bind, wrap, blanket'
Burn: 172 Egyptian *nwx* 'burnt, singed' > UACV-523 **noko* 'to roast (often meat), v'
Burn: 450 Egyptian *rkħ* 'fan into flames, burn, vi, be on fire' > UACV-879a **taha* / **taka* 'burn'
Burn: 730 Hebrew *śrp* 'to burn completely' > UACV-890 **saypa* 'to burn'
Bury: 865 Aramaic *ṭmr* 'hide, bury' > UACV-527 **tï'ma* / **tï'ama'a* 'roast, bake (under ashes, under ground), bury'
Bury: 867 Syriac *ṭmr* / *ṭəmar* 'hide or bury under the earth, cover with earth' > UACV-324 **ma'a* / **mahi* 'bury'
Bury: 895 Hebrew **hi'asep* 'be gathered (to one's people), buried, die' > UACV-323 **hi'acapa* 'bury, cover, grave'
Bury: 1016 Hebrew *qbr* / *qaabar* / *qəbar*- 'bury' > UACV-666a **kopa* 'dig'
Butterfly: 854 Hebrew *saas* 'clothes moth' (< *sws) > UACV-328 **soso-kimara* 'butterfly'
Butterfly: 1054 Aramaic *raqbubit-aa* 'moth-eaten, moth-the' > UACV-330 **…kupïpika* / **(C)Vkupïpika* 'butterfly'
Butterfly: 1057 Akkadian gursiptu 'butterfly' > UACV-333 *asiNpu(tonki) 'butterfly'
Buttocks: 295 Egyptian *xpd* 'buttock' > UA **kupta* 'buttocks'
Buttocks: 606 Arabic *dubr*/*dubur* 'back(side), buttocks, rear, hindpart' > UACV-339b **tupur* 'hip, buttocks'
Buttocks: 1383 Arabic *qaʕada* 'sit down'; Arabic *qaʕda(t)* 'sitting, backside, buttocks' > Hp *kïri* 'buttocks'
Buy: 265 Egyptian *šms* 'follow, accompany, bring, present' > UA **samsa* 'buy'
Buy: 1200 Hebrew *g'l* 'redeem, buy back' > UACV-2398 **kowa* 'buy'
Buy: 1201 Hebrew *təmuuraa* 'exchange, n.f.' > UACV-2399a **tïmïrï* 'buy'
Buy: 1308 Hebrew *nħl* / *nħl*, *-nħal* 'to maintain as a possession, take possession' > TO *nolawt* 'buy, buy from'
Call: 580 Hebrew/Arabic/Aramaic *qr'* / *qara'* 'call, cry out' > UACV-570 **koyowa* 'yell, shout'
Call: see search
Call: 990 Semitic *qr'* / **qara'* 'call, name, cry out, shout, announce' > UACV-1492 **aya* 'call'
Call: 991 From Semitic *qr'* / **qara'* 'call, name, cry out, shout, announce' > UACV-1490 **nihya* 'call, name'
Call: 992 Semitic *qr'* / **qara'* 'call, name, cry out, shout, announce' > UACV-613 **otoNkowa* 'groan'
Call: 1067 Hebrew *bʕy* / *baʕaa*[1] 'enquire, search' > UACV-1491 **paya* 'call'
Call: 1425 Arabic ndw / nadaa 'invite, call together' > UACV-609 *nata / *nara 'cry'
Calm: 134 Egyptian *qbb* 'cool; calm, quiet, cool breeze' > UA **koppa* 'quiet, calm'
Camp: 1407 Hebrew *maħ^{a}ne* < **maħne* 'camp, people of the camp' > UACV-2085 **moCna* 'son-in-law, male in-law'
Canyon: 387 Egyptian *ħwi* 'flow, flood' > UACV-367 **huwiC* 'canyon, water way'
Canyon: 401 Egyptian *ħnt*/*ħnw* 'watercourse, swampy lowland' > UACV-372 **hunuC* 'canyon'
Canyon: 974 Hebrew *kikkar* 'vicinity, district, valley > UACV-362 **haki* 'waterway, canyon, valley'
Carry: 40 Hebrew *sbl* 'carry' > Hp *iikwil-ta* 'put on the back to carry'
Carry: 275 Egyptian *f'i* 'raise, lift up, carry, support' > UA **po'i* / **po'iy* 'take s.th. away, dispossess'
Carry: 314 Egyptian *'ṯp* 'load (cargo on animal or ship) > UACV-388 **hitapa* 'carry'
Carry: 438 Egyptian *iw'* 'carry away, take forth' > UACV-382 **pa-'iwï* / **pa-hiwï* 'fetch water'
Carry: 1040 Arabic *ħml* / *ħamala* 'carry, lift, pick up, load up and take along' > UA **homa* 'take, carry'
Carry: 1352 Hebrew *he-qiim* 'lift' > Hp *ki-ma* 'bring, take, carry pl objs'
Carry on shoulders: 753 Aramaic *ktp* 'carry on the shoulders' > UACV-407 **kucupu* 'carry on the back/neck'
Catch: 1009 Syriac qmṭ 'lay fast hold of, take, shrink, shrivel, wrinkle' > Hp *hòm-ta* 'try to grab / catch things thrown'

Catch: 1508 Syriac *qmṭ* ‘lay fast hold of, take’ > Tb *kamiič|ït*, pfv: *akkamiič* ‘to catch’
Caterpillar: 1179 Hebrew *’kl* ‘eat’ > UACV-2594 **pi’akïC* ‘caterpillar, worm’
Cattle: 535 Hebrew baaqaar ‘cattle, livestock’; Aramaic bəqar / bəquur ‘domesticated animals > UA *pukuN ‘domestic animal’
Cave: 368 Egyptian *qrrt* ‘cavern’ > Hp *koro* ‘small cavity, cave, or hollow in a cliff or wall’
Ceder: 582 Hebrew *’ɛrɛz* (< **’arz*) ‘cedar tree’ > UACV-422 **wa’aC* / **wa’aN* 'juniper or cedar tree’
Centipede: 297 Egyptian *sp’/zp’* ‘centipede’ > UACV-2598 **masiwa* ‘centipede’
Change: 539 MHebrew *badal* ‘divide’; Arabic badda ‘substitute, exchange’ > UACV-664 **pata* ‘(ex)change
Charcoal: 710 Hebrew *toolaaʕ* ‘crimson (color, dye, or material)’ > UACV-241 **tul* 'charcoal, embers, black'
Chase: 920 Hebrew *grš* ‘drive out’ > Hp *ŋöönöya* ‘pursue, chase after’
Check: 1024 Hebrew *tkn* ‘examine, check’ > UACV-690 **tïkïha* ‘measure, imitate’
Cheek: 851 Hebrew **paanɛ* ‘front, face, surface’ > UACV-829 **pana* ‘cheek’
Chew: 299 Egyptian *ḫpʕ* ‘chew’ > UA **hiwa* ‘taste’
Chew: 1448 Semitic *qrḍ* > Sr *qaac* ‘chew’
Chew: 302 Egyptian *xnm* ‘eat (food), enjoy’ > UACV-777 *kuCma/i / *kunmi (Kaufman)/ *ku’mV 'chew, nibble'
Chief: 505 Egyptian *ḥm* / *ḥmt* ‘majesty (kingly, godly)’ > Ktn *wot* ‘chief, male or female, or chief’s wife’
Child: 153 Egyptian *s’* ‘son’; Egyptian(F) *s’t* ‘daughter’ > UACV-143 **piso’o*- ‘child, boy, children’
Child: 625 Hebrew *zeraʕ* ‘seed, offspring, descendants’; Arabic *zarʕ*- ‘seed’ > Hopi *cayo* ‘child’
Child: 792 Hebrew *ṭap* ‘little children’ > UACV-1361 **cupi* ‘small’
Child: 860 Hebrew *qaaṭaan* ‘small, young’; Hebrew *qaaṭoon* ‘small, young’ > UACV-145 **kuci* 'child, girl'
Child: 1042 Arabic *al-mar’*- ‘the-man/person’; *al-mar’a(tu)* ‘the-woman, wife’ > UACV-140 **mara* ‘child, offspring’
Child: see brother, younger
Children: 26 Hebrew *bənee*^{y} ‘children (of)’ > Semitic-kw UA **kwVnïï* ‘child(ren)’
Chile, **rattle**: 31 Hebrew *ṣll* ‘to tingle, quiver’ > UACV-1929c **cili* ‘jingle, make rattling sound’; CN čiil-li ‘chile’
Chin: 628 Hebrew *zaaqaan* ‘beard, chin’; zaqn-o ‘chin-his’ > UACV-1472; SUA **ca’lo* ‘chin, jaw’
Chin: 1431 Hebrew *lḥy* / *ləḥiy* ‘chin, jawbone’; Arabic *laḥy*- ‘jawbone’ > Hopi *öyi* ‘chin’
Choose: 20 Hebrew *brr* ‘to select, choose’ > Ls *čikwáyi*- ‘to choose, select’
Circle: 64 Semitic *krr* / *krkr* ‘go in circles’ > SP *kiya* ‘have a round dance’
Circle: 929 Hebrew *gyl* / *giil* ‘circle, age’ > Cp *ŋáyl*^{y}*a* ‘spin, twirl, vi’
Circle: 930 Hebrew *gll* / *galal* ‘roll, roll away’ > UACV-455b **ŋalila* ‘circle around, curve, head off, catch up to’
Circle: 1464 MHebrew/Aramaic *ʕgl* ‘make a circle, be round’ > UACV-433a **takola* / **takula* ‘round, (en)circle’
Clan: see bone
Clay: 520 Egyptian *sin* ‘clay’ > Ca *tésnat* ‘clay for pottery or painting, pot, olla’
Clay: 723 Hebrew *ṭaari* ‘fresh’ > Wr *weh-cori* ‘mud, clay’
Clean: 286 Egyptian *px’* ‘purge, clean’ > UACV-2495a **pi’wa* ‘clean’
Clear: 621 Aramaic *zky* / *zakaa* ‘be pure, clear’ > Ca *cexi* ‘to clear up (of sky or water)’
Climb: 99 Hebrew *rakb-uu* ‘they mounted, climbed’ > UACV-461a **tï’pu* ‘climb up’
Climb: 346 Egyptian *ḫfd* ‘climb’ > UA **hu(w)at* ‘climb, rise’
Climb: 440 Egyptian *ṯsi* ‘raise, lift up’ > UACV-463 **tïcayi* 'raise, elevate, climb'
Cloth: 441 Egyptian *nms* ‘to clothe with the head-cloth’ > UACV-471a **noma* 'cover’
Clothing: 199 Egyptian *ḏb’* ‘to clothe, change (cothes) vt’ > UACV-491a **si’pu* ‘skirt, shirt, clothing’
Clothing: 222 Egyptian *wnx* ‘be clothed, put on clothing’ > UA **wanaC* ‘cloth, clothing’
Clothing: 503 Egyptian *ḫ’ti* ‘cloak’ > Yq *tahi’ori* ‘clothing’
Clothing: 521 Egyptian *k’pt* ‘linen cover’ > Eu *kapát* ‘ropa [clothing]’
Clothing: 529 Hebrew *béged* / *baaged* ‘garment, covering, clothing’ > UACV-490 **paki* < **pakati* 'shirt'
Clothing: 1047 Hebrew *ḫgr* ‘to gird, gird oneself’ > UACV-481 **ko’ali* ‘skirt, enaguas’
Clothing: 148 Egyptian *t’yt* ‘shroud’ > UACV-256 **tawayi* ‘wrap around’
Cocoon: 1058 Arabic *šarnaqat* ‘cocoon’ > UACV-507 **ca’ïku* / **caCCïku* ‘cocoon attached to plant'
Cold: 1073 Hebrew *suupaa*, *suupat*- ‘storm, gale’ > UACV-508a **sïpï* / **sïpïta* / **sïppï* ‘cold, cold wind, winter’
Cold: 1393 Hebrew *ṣnn* ‘to be cold’ > Tb *ciina-l* ‘hail’
Collect: 44 Hebrew *qbṣ* ‘collect’ > UA **kwisV* ‘take, carry, grasp’
Collect: 923 Hebrew/Aramaic *gbb* ‘pick up, collect’ > Hp *ŋaava* ‘pick material from its natural source”
Collide: see block
Color: 393 Egyptian *qm’y* ‘color’ > UACV-517 **ma’ai* / **mayï* ‘color, be the color of, paint’
Comb: 62 Hebrew *śrq* / *srq* / *śaaraq* ‘to comb, v’ > UACV-518a **siyuk* / **ciyuk* ‘to comb, v’
Come: 531 Hebrew *bw’* ‘come, v’ > UA **powV/*po’V* ‘road, way, path’
Come: 576 Hebrew *’aataa*^{y} / *’atii*- ‘come’ > UACV-61 **wic* ‘come’
Come: 862 Hebrew qittel 3rd impfv: *yəqabbeṣ* ‘gather together’ > UACV-58 **yïpisa* (> **yïpsa* / **yipisa*) ‘come’

Come: 1018 Hebrew *nagaš* ‘approach’ > Ca *néq-* ‘come’
Come: 1324 Hebrew *henaa* ‘hither, toward here’ > Wr *ena* ‘come’
Command: 220 Egyptian *ṯsw* ‘commander, protector’ > UACV-1277 **tusu’* ‘learn, know’
Command: 731 Hebrew *ṣwy* / *ṣawa* ‘give charge to, command, order’ > UACV-1858 **sawi* ‘command’
Command: 350 Egyptian(F) *ṯsw* ‘commander’ > UACV-1853 **tïsa* ‘order, v’
Companion: 81 Hebrew *ħaaber* ‘companion’ > UACV-2572a **hupi* 'woman, wife'
Compassion: 1041 Semitic *ħml*, impfv: **-ħmul* ‘have compassion, gather in, take up/along’
> UACV-115b: Ca *húmulku* 'wrap around, vt'
Complete: see able
Consume: 195 Egyptian *ḏ’i* ‘devour’ > UACV-781 **suwa* / **su(C)wi(C)* ‘eat up, consume(d), die’
Container: 312 Egyptian *kmt* ‘a jar, n.f.’ > CN *koma-tl* ‘vessel, container’
Cook: 4 Hebrew *baašel* ‘cooked, boiled, ripe’ > UACV-521 **kwasïC* ‘cook, ripe(n)’
Cook: 319 Egyptian *psi* ‘cook’ > UACV-270 **poso* 'boil'
Copulate: 192 Egyptian *nhp* ‘copulate’ > UACV-532 **na’pa* / **naCpa* ‘join/be together, copulate’
Copulate: 394 Egyptian *d’* ‘copulate’ > UACV-530 **toC* 'copulate'
Copulate: 409 Egyptian *nk* ‘copulate’ > UACV-533 **naka* ‘copulate, cover, close’
Copulate: 696 Hebrew *lqħ* / *laaqaħ* ‘to take (in hand), take as wife’ > UACV-529 **yïkoC* > **yokoC* ‘to copulate’
Copulate: 855 Hebrew *yħm* ‘be in heat’ > UACV-528 **yuma* > **yoma* ‘copulate’
Copulate: 695 Hebrew lqħ / laaqaħ ‘take, grasp, take as wife’; Arabic lqħ / laqaħa ‘to impregnate’
> Hopi lööqö(-k-) ‘(for a bride) to go to the groom’s house to begin the wedding ceremony’
Corn: 443 Egyptian *ʕnxt* ‘grain’ > UACV-540 **(w)o’na* ‘corn cob, olote’
Corn: 761 Hebrew *šlħ* / *šaalaħ* ‘stretch out, send, despatch’ > UACV-539 **silo*/**soli* 'ear of corn'
Corn: 795 Hebrew *’abiib* ‘ears (of corn/grain) already ripe, but still soft’ > UACV-547 **apari* 'new/fresh ear of corn'
Corn: 828 Hebrew *šibbólet* ‘ear of grain’; Arabic *sunbul* ‘ear, spike (of grain) > UACV-535 **suŋu* 'corn'
Corpse, skin, hide: 1130 Hebrew *pɛgɛr* ‘corpse’ > Hp *pïïkya* ‘skin, animal hide, flesh’
Cotton: 1503 Hebrew *ṣnp* ‘to wrap up, wind around’ > UACV-479 **cini* ‘cotton, cloth/clothing made of cotton’
Cough: 661 Arabic *’ħħ* ‘cough, v’ > UACV-560a **oho* / *ohoho* ‘cough, v’
Count: 522 Egyptian *ip* ‘count, reckon’ > Cora *-hihibe* ‘read’
Count: 1467 Hebrew *poʕal* ‘daily labor, deed, wage’ > UACV-566 **puwa(l)* 'count'
Cover: 398 Egyptian *k’p* ‘cover, hide self, droop (eyebrows) > UACV-469 **ku’pa* / **kuCpa* 'close (eyes)
Cover: 829 Hebrew *kns* ‘gather, wrap’ > UACV-473 **kïna* 'cover'
Cover: 934 Hebrew *glm* ‘wrap up, fold, fold together’ > UACV-472 **kolom* 'cover'
Cover: 1154 Hebrew *ksy* ‘cover’ > UACV-1923 **kis* / **kiCsi* ‘shade’
Cover: XX Hebrew *ʕṭp*, impfv: *ya-ʕṭop* ‘cover oneself, cover (s.o.)’ > UACV-475 **tupuka* ‘cover’
Cover: 1396 Arabic *kfr* (< **kpr*) ‘cover, hide’; Hebrew impfv **-kpor* > Tr *pora-* ‘cover with a top’
Coyote: 391 Egyptian *ishb* ‘jackal, fox’ > UACV-567 **isa’a(N)pa* ‘coyote’
Coyote: 756 Hebrew *śn’* ‘to hate’ > UACV-569 **sïna’a-* / **sinawa* 'coyote':
Cram, tighten: 911 Hebrew *gadiiš* ‘heap of sheaves’ > UACV-601**ŋattas* ‘tight(en)’
Cram, crowded: 622 Arabic *zğğ* ‘throw, squeeze, force, cram > UACV-1443 **cukka/i* ‘crowded, mixed’
Crane: 1000 Aramaic *qa’t-aa* (< **qa’a-taa’*) ‘pelican’ > UACV-580a **koto* (< **ko’ota*) ‘crane’
Crane: 1360 Hebrew *gaaroon* ‘throat, neck’ > UACV-580b **karu* ‘sandhill crane’
Crawl: 627 Hebrew *zħl* ‘creep, crawl’ > Ca *cawa-y* ‘to crawl, climb, ascend’
Create: 283 Egyptian *qm’* ‘create, beget > UACV-689 **kumma* ‘create, make’
Cricket: 28 Arabic *ṣurṣur* ‘cricket’ > UACV-588 **corcor* ‘cricket’
Crocodile: 115 Egyptian *sbk* ‘crocodile, the crocodile-god Sobek’ > Classical Nahuatl *sipak-tli* ‘crocodile’
Crouch: 1254 Syriac *səqaʕ*, impfv *-sqaʕ* ‘to crouch, squat’ > UACV-2197 **cuku* 'stoop, bend over'
Cross: 196 Egyptian *ḏ’i* ‘cross (water, sky)’ > Wr *suení* ‘cross the river’
Crowded: 622 Arabic *zğğ* ‘throw, squeeze, force, cram > UACV-1443 **cukka/i* ‘crowded, mixed’
Crush: 1223 Hebrew *dkk*/*dky* ‘crush’ > UACV-1092 **takki* ‘mano for metate’
Crush: 1297 Hebrew *prk* ‘to crush’ > SP *puruqqwi* ‘to break to pieces’
Crush: XX Hebrew *grm* ‘gnaw or break (bones), crush (bones)’ > Hp *ŋaro-* ‘crunch down on’
Cry: 86 Hebrew **ṣaʕaq* ‘scream, n’ > UACV-605 **coaka* (< **cuwaka*) ‘cry’
Cry: 560 Semitic **ya-bkaʸ* ‘he/it weeps, cries’ > UACV-610 **yaCkaC* 'to cry, sg’
Cry: 943 Syriac *qanqen* (< **qanqin*) ‘to chant, sing’ > UACV-591 **ŋaŋi* 'cry'
Cry: 24 Hebrew *bky* / *baakaaʸ* ‘cry, weep’ > UACV-604 **kwïkï* / **o’kï* ‘(shed) tears’ (Sem-kw)
Cry: 559 Hebrew *bky* / *baakaa* ‘cry, weep’ (perf stem) > UACV-612 **paka’* ‘cry, v’ (Sem-p)
Cry, mourn: 510 Egyptian *h’i* ‘mourn, wail’ > Wr(MM) ho’kéwa ‘lágrimas [tears]’
Cry, mourn: 898 Hebrew *spd* ‘mourn for, sing the lament for the dead, bewail’ > UACV-586a **osp*/*ops*... 'tear, n’

Cure: 1235 Hebrew *rp'* / *raapaa'* 'to heal', *yurpa' 'be healed' > UACV-1158a **yowa* / **yopa* 'cure'
Cure: 1237 Hebrew *rp'* / *raapaa'* 'to heal', *roop'aa 'healer' > UACV-1161 **toŋa* 'cure, administer to'
Cure, influence: 1302 Arabic *fʕl* < **pʕl* 'to do, act, have an effect / influence on' > Hp *powa-ta* 'to cure, tame'
Cut: 434 Egyptian *g'p* 'to cut' > UACV-289 **kappi* 'break'
Cut: 608 Hebrew gdʕ 'hew down, hew off' > UACV-620 *katu' 'cut, wound'
Cut: 659 Hebrew *ḫqq* 'cut in, inscribe' > UACV-625a **wïk* 'cut'
Cut: 827 Hebrew *dqr* / *daqar* 'pierce' > UACV-2587a **tïkir-panawa* 'work, cut'
Cut: 444 Egyptian *'sx* 'sickle (off), harvest, mow (off), cut' > UACV-614a **sika* / **siki* 'cut hair, clip, mow'
Dance: 165 Egyptian *rwi* 'dance, v' > UACV-634 **tawiya* / **tuwiya* > **tuya* 'dance'
Dance: 296 Egyptian *ib'* 'dance, run': **yapwV* > UA **yawa*/*yawi* 'dance, v'
Dance: 396 Egyptian *t̲nf* 'drink, dance, v' > UA **tani* 'dance, v'
Dance: 826 Hebrew *maaḫool* 'dance in a ring, n' > UACV-638 **mulawa* / **mulawi* 'dance, v'
Dangle: 715 Hebrew dll 'hang'; Arabic *tadaldala* 'to be in motion, dangle' > Hopi *tilili-ta* 'quiver, shiver, shake'
Dark: 871 Hebrew *'pl* 'be dark', *tu'pal > UACV-891 **cuppa* 'fire go out'
Dark: 872 Hebrew **yu'pal* 'become dark, be gone down' > **yuppa* 'go out (of fire), (get) dark, black'
Dark: 1283 Aramaic *ramš-aa'* / *ruumš-aa'* 'evening-the, n.m.' > Sr *ruma'q* 'become dark'
Daughter: 534 Hebrew *batt* 'daughter'; Arabic **bint* 'daughter' > UACV-2576 **paNtï'* > **pattï* > *paci* 'daughter'
Day: 163 Egyptian *rʕ* / *rʕw* 'sun' > UA **tawa* / **tawi* 'sun, day'
Deceive: 1198 Hebrew *ʕqb* 'seize by the heel, betray, deceive' > Hp *lölöqaŋw* 'bullsnake, gopher snake'
Dedicate: 673 Hebrew *ḫnk* 'train up, dedicate' > Ca *huneke* 'to take an Indian bath'
Deep: 236 Egyptian *mḫr* 'low-lying land' > UACV-706 **muira* 'be deep, of water'
Deer: 638 Hebrew *raaḫeel* (< **raxel*) 'ewe' > UACV-643a **tïkïya* (> *tïhïya*) 'deer'
Defeat: 955 Arabic *ḫgg* / *ḫagga* 'overcome, defeat' > Hp *hoŋvi* 'strong, sturdy, durable'
Defecate: 740 Hebrew *ṣe'aa* 'dung, excrement' > UACV-645 **ṣa'a* 'defecate, v'
Depart: 166 Egyptian *rwi* 'go away, depart' > UA **tawa* > **towa* 'leave, remain, wait'
Desert: 208 Egyptian *tḫn* 'be shiny, glitter, gleam, desert area' > UACV-774 **tohono* 'desert, plain'
Difficult: 861 Hebrew *qšy* / *qaašay* 'be heavy, hard, difficult' > UACV-239 **kïsa* 'sour'
Dig: 664 Hebrew *ḫtr* 'to dig' > UACV-665 **hotaC* 'dig'
Digging stick: 1060 Aramaic & Syriac *paddaan* 'plow, yoke of oxen' > UACV-673 **poto* 'digging stick'
Digging stick: 1331 Arabic *'kr* / *'akara* 'to plow, till, cultivate (land)' > UACV-672 **wika* 'digging stick':
Dip: 1319 Hebrew *ṭbl* 'to dip s.th. into, immerse, dive, plunge' > CN *cakwaa* 'to soak (e.g., clothes)'
Disappear: 1427 Arabic *rawaaḫ* 'departure, going, leaving, return trip' > Sr *rïwïrïwïh-q* 'disappear'
Dish: 334 Egyptian qd 'pot' > UACV-1710 *tïkori 'dish'
Dish: 670 Hebrew *ḫɛrɛṣ* 'earthenware, vessel, potsherd' > Ca *wayisma-l* 'plate, dish'
Dish: 1125 Aramaic *tiigaar-aa* 'a vessel' < UACV-1710 **tïko-(ri)* 'dish'
Disorder: 42 Syriac *bdr* 'scatter, put in disorder' > Hp *kwïrï*(*k*-) 'get in a heap, collapse to a disordered pile'
Divide: 519 Egyptian *wpi* 'open, part, separate, divide (goods)' > Tb(H) *woopaanat* 'divide in two, cut in half'
Do: 214 Egyptian *ir* 'do, make'; infinitive *irt* > UACV-687 **yara* 'do, make'
Do: 825 Hebrew *paʕal* 'make, perform' > UACV-680 **pu'ay*/*pu'al* 'do'
Do: see be
Dog: 261 Egyptian *sd* 'tail' > UACV-2272 **sati* 'tail' > 'dog'
Dog: 447 Egyptian *wtw* 'pup (fox, dog)' > UACV-694 **woci* 'dog'
Dog: 1025 Aramaic *guuryə-taa* 'cub (female), young of animal (usually lion or dog) > UACV-693 **koCti* 'dog'
Dome: 1098 Hebrew *qubbaa* 'vault, dome, arched room' > Hp *kòopa* 'top of head, crown'
Door: 155 Egyptian *sb'* 'door' > UACV-476 **pu'u* 'door'
Dot: see blemish
Double: 1287 Hebrew **na*- 'the two, each other' > UACV-2621 **na*- 'twice, double'
Dove: 824 Hebrew *hayyownaa* / *hayyoonat* 'dove' > UACV-696 **hayowi* 'dove'
Down: 927 Aramaic *ʕgm* 'be bent, weighed down, grieve' > UACV-705 **wakam* / **waŋam* 'down, deep'
Down: 1126 Hebrew yṣb or yṣg (hiqtiil means 'to set, place') > UACV-1742 *yaca 'put, set down'
Drag: 258 Egyptian *st̲'* 'drag, pull, pull out, draw' > UACV-1728 **(piC)-sutu'a* '(behind)-pull, drag'
Drag: 726 Hebrew *paraq* 'drag away, tear away' > UA **piyok* 'pull, drag'
Drag: 914 Hebrew *grr* 'to ruminate, to saw, to drag' > UACV-1936 **ŋaya* 'to move side to side'
Drag: 1122 Hebrew *pny* 'turn to one side', *panniy 'cause to turn' > UACV-1729 **pani* 'pull, drag'
Dream: 1306 Hebrew *nś'* / *nasaa* 'to lift, carry, take'; passive niqtal 'be lifted up in vision' > SP *nonosi* 'to dream'
Dress: 50 Hebrew *-lbaš*- 'put on (garment), clothe (oneself)': UACV-484 **kwasu* 'dress, shirt'
Drink: 1061 Hebrew *rwy / hirwiy* 'drink one's fill' > UACV-719 **hiCpV* / **hi'pa* / **hiypi* (> **hippi* / **hi'a*) 'drink'
Drizzle: 1373 Arabic *đrr* 'strew, spray' > Ktn *tïyïyï'y* 'drizzle (weather)'

Drown, sink: 233 Egyptian *mḫi* ‘drown, be drowned, overflow > UACV-1997 **muCta* ‘sink, be in water/liquid’
Drum: 145 Egyptian *bnt* ‘harp, f’(> Coptic boine) > UAVC-1986 **pona* ‘to play music, play drum’
Drunk: 58 Hebrew *šikkoor*, pl: *šikkoor-iim* ‘drunken’: UACV-11 **sikuri* ‘peyote, intoxicat-ed/ing’
Drunk: 170 Egyptian *txi* ‘be drunk, drink deep’, txw ‘drunk one’ > UACV-10 **tïku* 'drunk’
Drunk: 601 Syriac *rawwaay-aa* ‘drunken one-the’ > UACV-8a **tawana* 'drunk'
Drunk: 720 Hebrew *nebɛl* ‘skin-bottle’; Syriac *nbl* / *n’bl* ‘be senseless, foolish’ > PUA **napai* ‘acoholic drink, drunk’
Dry: 360 Egyptian *šw* ‘dry, dried’ > Tb(V) *šuu’* ‘dry, vt’; Tb(M) *suu’at* ‘hang up to dry’
Dry: 1004 Hebrew *qšš* ‘be old, dried up’ (BDB) > CN(S) *košon-ki* ‘dry, crushed, ground’
Dry: 1062 Hebrew *yaabeš* ‘dry’ > UACV-721 **-pasa* ‘dry’
Dye: 1438 Hebrew *ṣbʕ* ‘to dye’ > UACV-736 **pu* ‘dye’
Dust: 665 Aramaic *ḫirgaa’* ‘saw-dust’; Aramaic(CAL) *ḫirgaa’* ‘dust’ > UACV-764 **huCkuN* ‘dust’
Eagle: 15 Arabic *baaz* ‘falcon’ > UACV-737a **kwasa* 'eagle'
Ear: 1070 Hebrew *qaššɛbɛt* ‘attentive’ *naqsab > UA **naqap* ‘ear’
Ear: 1071 Related to **naqšab* ‘ear’ > UACV-1297 **naCkapï* ‘leaf’
Early: 1232 Arabic *bakara* ‘set out early’ (Sem-p) > UACV-1021 **pakay(N)* / **pakiN* ‘walk (away), sg’
Earth: 150 Egyptian *t’* ‘earth, land, ground, country’ > UACV-760 **tïwa* ‘sand, dust’
Earth: 591 Hebrew *’adaamaa* / *ʿᵃdaamaa* ‘earth’ > UACV-759 **tïma* ‘earth’
Earth: 1275 Syriac *ḫaql-aa* ‘field-the, open country-the’ > UACV-1830 **oka* / **(’/h)oka* ‘sand, earth, rock’
East: 1166 Hebrew *qɛdɛm* / *qedɛm* ‘in front, east’ > UACV-2102 **kitam* 'south'
Eat: 449 Egyptian *qq* / *q’q’* ‘eat’ > UACV-779 **koki* 'graze, v’
Eat: 707 Hebrew *le’ekol* ‘to eat’ (the infinitive form): Cp *lyéke* ‘to eat’
Eat: 796 Hebrew *’akal* ‘(he) ate (perfect), **to’kal* ‘she/it eats’ > UACV-782 **tïkkaC* 'eat' (Sem-p)
Eat: 797 Hebrew impfv: **yo’kal* ‘he/it eats’ > UACV-783a **yï’ïki* 'swallow' (Sem-kw)
Eat: 798 Hebrew *’akal* ‘(he) ate (pfv)’ > UACV-784 **’aki* ‘open mouth, eat, take/put into one’s mouth’
Eat: 1177 Arabic *’kl* / *’akala* ‘eat, eat away, corrode’ > UACV-2472 **ukol* 'want'
Edge: 557 Syriac *ḫarb-aa* ‘sword, blade, dagger’ > UA **hayp* 'edge, shore, end'
Edge: 1462 Hebrew *śaapaa(t)* ‘lip, speech, edge, shore (of sea), bank (of river)’ > UACV-788 **capa-* 'ridge, edge'
Egg: 556 Hebrew *bayṣa(t)* / *beeṣa(t)* ‘egg’ > UACV-809 **pïyso* ‘testicle’
Egg: 1525 Egyptian *isnwi* ‘testicles’ > UACV-804 **no(y/h)o/a* ‘egg’
Egg: see back
Elderberry: 324 Egyptian *k’w* ‘sycamore’ > UACV-183 **ku’u* / **kuhu* 'elderberry'
Elderberry: 325 Egyptian *k’nw* ‘vineyard’ > UA **kunuki* 'elderberry'
Empty: 38 Semitic bahiya; Hebrew *bohuu* ‘emptiness, wasteness’; > Hp *kwahi* / *kwàyya* ‘suffer loss of s.th. of value’
Empty: 1039 Hebrew *yry* ‘throw, shoot’ > UACV-2319a **yu’ri* ‘(be) empty’
Enclose: 915 Hebrew *gnn* ‘enclose, surround, protect’ > Hp *ŋön-ta* ‘wear s.th. around the neck’
Enemy: 446 Egyptian *qm’tyw* ‘enemies’ > UACV-658 **kïmmaN* / **kïma’a* ‘different, enemy’
Enemy: 486 Egyptian *xfty(w)* ‘enemy(ies), opponent(s)’ > UA **kaytu* ‘enemy, opponent’
Enemy: 593 Akkadian qardammu ‘enemy, opponent’ (Sem-kw) > UACV-818 *tïmmu ‘opponent’
Enemy: 1478 Hebrew *ṣar* ‘enemy’ > UACV-817 **say-* ‘enemy, opponent’
Enemy: see coyote
Enjoy: 302 Egyptian xnm ‘eat (food), enjoy’ > UACV-777 *kuCma/i / *kunmi (Kaufman)/ *ku’mV 'chew, nibble'
Entangle: 935 Hebrew *glm* ‘wrap up, fold, fold together’ > UACV-2333 **ŋalam* / **ŋalim* / **ŋaliC* ‘entangle(d)’
Enter: 464 Egyptian *ʕq* ‘to enter’; Egyptian *ʕq-w* ‘pl’ > UACV-1247 **waki/uC* ‘enter, pl’
Enter: 1085 Hebrew *hlk*, impfv sg: *yelek*, pl: *yelku* > UACV-1022 **yïNka* ‘enter (sg/pl?)’
Ephod: 584 Hebrew *’epod* ’ephod, priestly garment, shoulder cape or mantle’ > UACV-480 *ipura ‘skirt’
Ephod: 583 Hebrew *’epod* ’ephod, priestly garment, shoulder cape or mantle’ > UACV-176 **wipura*/**wipula* 'belt'
Escape: 793 Semitic *plṭ* ‘escape’ > UA **puCti* ‘escape’
Evening: 1442 Hebrew *ʕrb* (< **ġrb*) ‘become evening’ > Tr *ariwa-ma* ‘to become evening’
Evening: see dark
Exchange: 539 Hebrew *baadal* ‘divide’; Arabic badda ‘substitute, exchange’ > UACV-664 **pata* ‘(ex)change
Extinguish: 876 Hebrew *dʕk* ‘be extinguished’ > UA **tuka* / **tuku* / **tuki* 'fire go out, dark, black, night’
Eye: 532 Arabic *bṣr* ‘look, see’; Hebrew **booṣer(et)* ‘eye’ > UACV-824 **pusi* 'eye'
Eyes, close: 831 Syriac *ʕmṣ* / **-ʕmuṣ; ʕammeṣ* (<**ʕammiṣ*) ‘close, shut (eyes)’ > UACV-470b **mucu(C)-ka* ‘close eyes’
Eyes, close: 897 Hebrew *’sp* ‘to gather (harvest), collect’ > UACV-992 **cupa* / **cuppa* ‘gather, close eyes’
Eyes, close: 830 Hebrew *ʕṣm* / **-ʕṣum* ‘to shut one’s eyes’; Semitic impfv: ya-ḍummu ‘draw together, close’
> UACV-470a **cu’ma/i* / **cumma/i* ‘close eyes’
Eyes, close, gather: 897 Hebrew *’sp* ‘to gather (harvest), collect’ > UACV-992 **cupa* / **cuppa* ‘gather, close eyes’
Eyes, open: 533 Arabic *baṣṣara* ‘open one’s own eyes’ > UACV-2459 **pusaC* (AMR) 'wake up, open eyes'

Face: XX Egyptian *ḫr* ‘face’ > UA **holya* ‘cheek’
Face: 245 Egyptian *xnt* ‘face, n; in front of, prep’ > Tbr *kota* ‘face’
Fade: 857 Hebrew *ḫlp* ‘pass on, pass over, fade away’ > Wr *yuipa* ‘be worn out’
Fail: see weak
Fair complexion: 1405 Arabic *šuqra(t)* ‘fair complexion, blondness, redness’ > Hopi *sikya-* ‘yellow, yellow(ish) thing’
Falcon: see eagle, hawk
Fall: 247 Egyptian *xr* ‘fall’ > UACV-837a **kuri* ‘fall’
Fall: 581 Hebrew *’arṣ-aa* ‘earth-ward, to the earth’ > UACV-833a **wïcï* > Num **wï’i* ‘fall, be born, v’
Fall: 703 Arabic *lmm* IV causative: befall, overcome’ > UA **lïmm* / *lïmïmV* ‘burn, fall in (structure)’
Fall: 1410 Syriac *ṭlʕ* / *et-tallaʕ* ‘fall in a stupor, become unconscious’ > UACV-834 **culiwa* ‘fall, pl’
Far: 821 Hebrew *me-rəḫoq* / *me-rḫoq* ‘far, from afar’ > UACV-842a **mïCka* / **mïhka* ‘far’
Fast: 1102 Hebrew *ṣwm* ‘to fast’ (i.e., not eat) > UACV-1231 **suma* ‘hungry’
Fat: 652 Hebrew *ḫelɛb* ‘fat’ > UACV-844 **wip* / **wiCp* / **wi’p* (>**wi’i*) ‘fat’
Father: 237 Egyptian *msi* ‘bear, give birth, be born, create’ > UACV-852 **masi* ‘father’
Father: 588 Hebrew *’aab* ‘father’ > UACV-846 *apu / **(h)apu(ti)* ‘father, parent, mother’
Father: 1505 Hebrew *yo(w)liid* ‘begetter, father’ > UACV-1418a **yori* ‘non-Indian, white person’
Fear: 251 Egyptian *sʕ’y* ‘tremble, v’ > UACV-856a **sawi(ya)* ‘fear, v’
Fear: 728 Hebrew *yr’* / *yiiraa’* ‘(he/it) fears’ > UACV-857 **iya-paka* ‘fear, v’
Fear: 749 Hebrew *tmh / -tmah* ‘be astounded, amazed, freeze with fear, v’ > UACV-855 **maha(-ri)wa* ‘fear’
Fear: 881 Arabic *xašiya* ‘to fear, dread, be afraid’; Semitic **ma-xašiy* > UACV-854 **makasi* ‘fear’
Fear: 1479 Syriac *diḫl-aa* ‘fear, dread, awe’ > UA **toya* ‘fear, v’
Feed: 47 Hebrew (*hi-/ya-/ta-*)-*brii*(*’/y*) ‘provide food, i.e., feed’ > UACV-780 **kwi* 'food, feed, give food'
Feel: 1194 Hebrew *mšš* ‘feel, grope’ > UACV-2377 **masu* 'touch, feel'
Female: 757 Hebrew *šipḫaa* ‘maid, maid-servant’ > UACV-2575a **siwa* < **si(ŋ)wa* / **siwNa* 'female, sister, daughter'
Fence: 33 Hebrew *bṣr* ‘cut off, make inaccessible, enclose’: > UACV-452 **kwi’ay* / **kwi’aC* 'surround, fence'
Fence: 133 Egyptian *sbty* ‘enclosure’ > Yq *sápti* ‘fence of branches’
Ferment: 1278 Syriac *ḫmʕ* ‘to ferment, leaven, mix’ > Hopi *homo’-ta* ‘be mounded, bulged, convex’
Festive: 180 Egyptian *ḫby* ‘be festive, make festival’ > UACV-1985 **hupiya* ‘sing, song’
Festival: 372 Egyptian *dnit* ‘a festival’ > UA **tuniti*: Wc *tunuici-tïa* ‘do ceremonial singing’
Fetter: see bundle
Fig: 817 Hebrew *tə’unaa* / *tə’unat* ‘fig’ > UACV-868 **cuna* ‘fig/higo’
Fig: see also elderberry, grape
Fight: 178 Egyptian *x’yt* ‘suffering’ > UACV-1190a **koy* / **ko’ya* / **ko’iya* ‘fight’
Finger: 262 Egyptian *ʕnt* ‘nail, claw’ > UACV-459 **wati* 'claw, finger'
Finger: 747 Hebrew *’ɛṣbaʕ* ‘finger, toe’ > UACV-1122 **sipwa* / **cap(i)wa* ‘finger’
Fill: 238 Egyptian *mwyt* ‘liquid, liquidity’ > UACV-981 **muya* ‘fill up, flow out, overflow’
Finish: 203 Egyptian *tm* Egyptian *tm* ‘be complete’ > UACV-464 **tïmaC* / **tïmam* 'to close’
Finish: 356 Egyptian *grḫ* ‘complete, finish off’ > Tr *gare*/*kare* ‘be able, finish’
Finish: 819 Hebrew *tmm* ‘be completed, finished, come to an end’ > UACV-876 **tama/i* ‘finish’
Finish: 1314 Hebrew *kly* / *kalaa* ‘come to an end, be completed, finished’ > Hp *kïïkïyva* ‘ceremony concludes’
Fire: 243 Egyptian *nbi* ‘flame, n; burn, vi’ > UA **napi* ‘fire’
Fire: 452 Egyptian *xt* ‘fire, flame, heat (climate), > UACV-881 **kut* ‘fire’ (AMR)
Fire: 883 Hebrew *lappiid* ‘torch, lightning’ < UACV-889 **pita* ‘fire > be a fire’
Fire: 885 Arabic *naar* ‘fire, f’ > UACV-878 **na’ay* ‘fire’
Firewood: 666 Arabic *ḥaṭab* ‘firewood’ > UACV-1631 **hucakwa* / **husapa* ‘pitch’
First: 837 Hebrew *pɛṭɛr* / paṭr- ‘firstborn’ > UACV-305 **pa’ti* / **paCti’i* / **pa-ci* (AMR) ‘older sibling’
First: 1301 Aramaic *mlk* ‘to lead in council’ > UACV-1547c **mul* / **muluka* ‘first’
Fish: 168 Egyptian *rm* ‘fish’ > Tr *ŕamú* ‘small fish’
Fish: 234 Egyptian *mḫyt* ‘fish (collective), lit. swimmers’ > UA **muti* ‘fish’
Fish: 365 Egyptian *xḏw* / *xḏḏw* ‘fish(es), coll. pl’ > UACV-892 **kïcu(C)* ‘fish’
Fish: 455 Egyptian *swr* ‘fish, sp.’ > CN *šowil-in* 'catfish’
Fish: 456 Egyptian *sḫty* ‘fish, sp.’ > UACV-897 **so’* ‘kind of fish’
Five: 746 Hebrew *’ɛṣbaʕ* ‘finger, toe’ > UACV-2629 **cipo* ‘five’
Flat: 635 Hebrew *xabitt-iim ‘flat cakes or wafers’ > UACV-903 *kapal ‘flat’
Flat: 1103 Arabic *dakka* ‘make flat, level or even, to smooth, stamp, tamp’ > UACV-901a **takka* ‘flat’
Flat: 1227 Arabic *farṭaḥa* ‘flatten, broaden’ > UACV-904 **patta* ‘flat, level, smooth, slippery, bare, naked’
Flatten: 293 Egyptian *pds* ‘stamp flat, flatten’ > Eu *pitása* ‘smash, flatten, vt’
Flea: 620 Hebrew *zəbuub* ‘fly’; Arabic *ḏubaab* ‘fly’ > UACV-914 **tapputi* / **tïpputi* / **tïCpu-ti* ‘flea’

Flesh, **corpse**: 1130 Hebrew *pɛgɛr* ‘corpse’ > Hp *pīīkya* ‘skin, animal hide, flesh’
Flesh: 5 Hebrew *baaśaar* ‘flesh, penis’ > UACV-2271 **kwasiC* ‘tail, penis, flesh’ (Semitic-kw)
Flesh: 550 Biblical Aramaic bəśár ‘flesh’; Hebrew bááśaar ‘flesh, penis’ > UACV-1618 *pisa ‘penis’ (Semitic-p)
Flint: 426 Egyptian *ʕnr(t)* ‘flint’ > UACV-65 **wi’naC* ‘flint, arrowhead’
Flint: 1376 Hebrew *ṣor* ‘flint’; Akkadian *ṣurru* ‘obsidian, flint’ > SP *čoiC* ‘bead’
Float: 1163 Syriac *qəpa’* ‘collect, gather in heaps, swim on the surface’ > Ca *qípi* / *qíipi* ‘be marked, float’
Flow: 1450 Arabic *ṣabiib* ‘poured out, blood, sweat’ > CN(RJC) *espipika* ‘blood flow out’
Flow: see canyon
Flower: 326 Egyptian *x’w* ‘plants, flowers’ > Tb *kuu-l* ‘yellow flower’
Flower: 457 Egyptian *ḫrrt* ‘flower’ > UACV-909 **huya* ‘bud, branch’
Flower: 1230 Hebrew *šoošaan* / *šuušaan* / *šoošanaa(t)* ‘lily’ > UACV-907d Azt **soci* ‘flower’
Flower: 818 Hebrew *ṣuuṣ* ‘bud, blossom, bloom’ > UACV-865 **coya* ‘feather headdress’
Flower: 1020 Syriac *blṣ* ‘to bud, blossom’ > Ca *če-kwála’an* ‘open (eyes or mouth)’
Flute: 648 Semitic **xll*: Hebrew *ḫaaliil* ‘flute, pipe’ > Tb ’uuluulu’ 'play a flute'
Flute, reed: 347 Egyptian *wr* / *wl* / *w’r* / *wnr* ‘reed flute’ > UACV-912 **wiru* ‘play a reed flute’
Fly (v): 215 Egyptian *itt* ‘fly up’ > UACV-929 **yïtti* (sg) / **yoti* / **yotti* (pl) ‘fly, jump’
Fly (v): 1027 Arabic *wθb*, impfv: *yaθibu* ‘jump, hop, jump up, start’ > UACV-928 **yasa* ‘fly’
Fly (v): 1167 Aramaic *pəraḫ* ‘to fly, depart, flutter’ > UACV-864 **pïyaw* ‘feather, to fly’
Fly (n) 17 Semitic **ḏVbb* (Hebrew *zbb*) ‘fly, flies’; *zabbot > UA **sikwoti* / **sikwoli* ‘fly’
Fly (n): see also bee
Follow: 1104 Hebrew ṣayyaad ‘hunter’ > UACV-1238 *caya ‘follow’
Foot: 403 Egyptian *rd* ‘foot, leg’ > UACV-937 **tara* ‘foot’
Foot: 418,419 Egyptian *rd* ‘foot, leg’, dual: ***rdwy*** ‘feet’ > UACV-1768 **taru* 'roadrunner'
Footprint: 685 Hebrew *ʕaaqeb* ‘heel, footprint’ > Hp *kïk-laqvï* ‘tracks all over’
Footprint: 1197 Hebrew *ʕaaqeeb* ‘heel, hoof, footprint’ > UACV-2392 **woki* / **woku’i* ‘track, footprint’
Footwear: 209 Egyptian *tbt* / *twt* ‘sole (of foot), sandal, foot’ > UACV-1959 **tapat-ta* ‘footwear’
Forehead: 1099 Arabic *ǧabha(t)* ‘forehead’ > UACV-958 **kopa* is ‘forehead’
Forest: 1072 Hebrew *yáʕar* ‘wood, forest, thicket > UACV-756 **yawa* > **yuwa* ‘open country, flat land, outside’
Forbid: 1333 Hebrew *m’n* ‘refuse’ > Hp *meewan-* ‘forbid, warn’
Forge: 908 Hebrew *gabal* (II) ‘to forge’ > UACV-800 **ŋapaC* 'sharp(en)'
Forget: 318 Egyptian *smx* ‘forget, ignore’ > UACV-962 **suma* ‘forget’
Fork: 789 Hebrew *ṭhr* / *ṭaahar* ‘be clean (dietarily, of animals/food)’ > UACV-964 **cahar* ‘fork(ed)’
Forward: 45 Semitic qbl ‘go forward’, -qbiil ‘confront aggressively’ > Hopi kwila-(k-) ‘take a step, to step forward’
Four: 345 Egyptian *ifdw* ‘four’ > UACV-2627 **wattiwi* ‘four’
Fox: 129 Egyptian *wnš* ‘wolf-jackal’ > UA **wancio* / *wancia* ‘fox’
Fox: 711 Hebrew *kɛlɛb*, *kalb-* ‘dog’ > UACV-575 **kalop* ‘fox’
Freeze: 1336 Arabic *taqrasu* / II *taqarrasa* ‘freeze’ > UACV-514a **ta’asïC* 'freeze'
Freeze: 1493 Hebrew *qeraḫ* ‘ice, frost, crystal’ > Tr *koro-čé* ‘freeze (water)’
Fright: 637 **pxd* > Hebrew *pḫd* ‘shiver, tremble, be startled (with horror)’ > Ktn *pokat-ïk* ‘get frightened’
Frog: 298 Egyptian *ʕbxn* ‘frog’ > **wapkan* > UA **wakaC(-ta)* 'frog'
Frog: 1377 Hebrew *ṣ^{ə}pardeaʕ* ‘frog’ > UACV-973 **sikwo* / **sibo’o* ‘tadpole’
Frog: 1378 Hebrew **ṣ^{ə}parde^{a}ʕ* ‘frog’ > UACV-972 **kwa’ro* ‘frog’
Fruit: 269 Egyptian *dqr* ‘fruit’ > UACV-979a **taka(C)* ‘fruit’
Fruit: 1454 From Hebrew *bšl* ‘grow ripe’ > UACV-351 **ikwasi* 'fruit, prickly pear’
Full: 1520 Hebrew *pwṣ* ‘to spread, disperse, overflow’ > Wr *poci* ‘to be full’
Fungus: 676 Arabic **paqʕ-* ‘intense whiteness, species of fungus’ > UACV-1480 **pakuwa* ‘mushroom, fungus’
Gamble: 1080 Hebrew *tqp* ‘overpower’ > UACV-1691 **takopi* ‘gamble’
Garment: 316 Egyptian *ḫbs* ‘garment, covering’ > UA **upa* ‘wedding robe’
Gather: 896 Hebrew *’sp*, impfv: **ya-’sop* > *ye-’esop* ‘to gather’ > SP *sooppaaġai* ‘to be assembled’
Gather: 897 Hebrew *’sp* ‘to gather (harvest), collect’ > UACV-992 **cupa* / **cuppa* ‘gather, close eyes’
Get: 160 Egyptian *t’w* ‘take up, seize, snatch’ > UACV-395 **to’* / **tu’* ‘fetch, go get, go to do’
Get up: 1257 Hebrew *ʕalaa* ‘he stood up, arose’ > Tb(H) *oolït* ‘get up’
Girl: 91 Hebrew *naʕ^{a}raa / naʕ^{a}rat* (< **naʕrat*) ‘girl’ > UACV-2586a **nawiC* 'girl'
Girl: 1480 Hebrew *naʕ^{a}raa* ‘girl’ > UACV-2586b **na’a-* ‘girl, boy’
Give: 501 Egyptian *imi* ‘give! place! cause!’ (imperative)’ > UACV-969 **himi* 'give (perhaps pl. obj's)'
Give: 678 Arabic *ʕṭw* ‘give, present to’ > UACV-1005 **uttu* ‘give’
Give: 697 Hebrew **hiqqaḫ* ‘cause to take, that is, give’ > Wr *ihko-* ‘to give as a present’
Go (see also walk, run, leave): 131 Egyptian *šm* ‘go, walk, set out, leave’ > UACV-1011 **sima* ‘go’

Go: 1086 Aramaic šaqal ‘take, take (self away), depart’ > UACV-1029 **saka* ‘go, leave’
Go: 1459 Hebrew *haabaa* > *haavaa* ‘come on, let’s (do s.th.), go to, grant that …’ > SP *ïvï* ‘go ahead!’
Go out: 1515 Syriac *ʕrq* ‘flee, escape, shun, avoid’ > UACV-1020 **wayak* ‘go out (fast)’
God: 800 Hebrew *Yahwe* ‘Yehovah, God of the Israelites’ > UACV-1803 **ya’u* / **ya’wV* ‘leader, deity’
Good: 785 Hebrew *ha-ṭṭob* ‘the good (thing/one), good (abstract)’ > UACV-522a **ayu* 'good'
Good: 786 Hebrew *ṭoob* ‘good’ > UACV-522b UA **topi* ‘good’
Good: 900 Hebrew *nʕm* ‘be lovely, pleasant, delightful’ > UACV-157 **numa* > **noma* ‘good, good-looking’
Good: 1368 Syriac *’aṭib* / *’aṭ(’)ib* ‘do good, treat well’ > UACV-1038a**attip-na* ‘good’
Goose: 395 Egyptian *ngg* ‘cackler, gander/male goose’ > UACV-732 **nakï* 'goose'
Goose: 704 Arabic *laqlaq* ‘stork, n’ > Ca *la’la’* ‘goose, greyish with a long white beak’
Gourd: 198 Egyptian *ḏ’rt* ‘bitter gourd’ > UACV-2140 **sawara* 'gourd'
Gourd: 987 Arabic *qarʕ-* ‘gourd, pumpkin’ (Sem-p) > UACV-2135 **kuyawi* 'gourd'
Gourd: 988 Arabic *qarʕ-* ‘gourd, pumpkin’ > UACV-2141 **ayaw* < **arawV* ? ‘squash, gourd’
Gourd: 989 Arabic *qarʕ-* ‘gourd, pumpkin’ UACV-2422 **ayaC* / **ayoC* 'turtle'
Gourd, vessel: 919 Hebrew *gm’* ‘swallow’; Ethiopic *gemʕe* ‘vessel’ > Hp *ŋamo’-hoya* ‘pumpkin / melon- little’
Grain: 287 Egyptian px’ ‘kind of grain’: Wr pa’wa ‘spike or point or unopened leaves in the center of a plant’
Grain, ear of: 392 Egyptian *k’mwtt* ‘ear (of grain)’ > UACV-536 **mura* ‘ear of grain’
Grandfather: 590 Hebrew ’[a]bootee[y] ‘fathers (of)’ > UACV-1049a *poci / *kwoci ‘paternal grandfather’
Grape: 537 Hebrew *bls* ‘gather figs’; Arabic *balas* ‘kind of fig’ > UACV-193 **palasi* '(wild) grapes'
Grasp: 8 Arabic *ḍabba* ‘grasp, lock, Hebrew **ṣbb* > UACV-400a **cakwa* 'catch, grasp’ (see also ‘collect’)
Grasp: 1465 Hebrew *lqḥ*, *-qqaḥ* > UA **ŋïha* / **ŋïhi* ‘grasp, catch’
Grasp, collect: 44 Hebrew *qbṣ* ‘collect’ > UA **kwisV* ‘take, carry, grasp’
Grass: Hebrew *dεšε’* ‘grass, vegetation’ > Hp *tïïsï* ‘weeds in a cultivated field’
Grass: 266 Egyptian *šnw* ‘hair, grass’ > UACV-1061 **soni* / **soŋo* ‘grass, straw, blanket’
Grass: 644 Hebrew *ḥaṣiir* ‘grass’ > UACV-1058 **(h)usa* ‘grass’
Grass: 1090 Hebrew *ṣmḥ* ‘sprout, grow (of plants, hair)’ > UACV-1057a **(pa)-samaC* / **-samuC* ‘grass’
Grass: 1091 Hebrew *ṣmḥ* (< **ṣmx*) ‘sprout, grow (of plants, hair)’ > UACV-1057b **(pa)-soho* ‘grass’
Grasshopper: 68 For Hebrew *gebiim* ‘locust’ > note SP *qïïvi* ‘grasshopper’
Grasshopper: 816 Hebrew *saalʕaam* ‘locust’ > UACV-1066 **coho* / **co’o* ‘grasshopper’
Grasshopper: 1321 Hebrew *ḥargol* ‘type of locust’ > Tr *urugi-pari* ‘type of grasshopper’
Grease: 1120 Hebrew *yiṣhar* ‘oil’ > UACV-845 **yuhu* ‘grease’
Great: 97 Hebrew *rab, rabbaa* (f.) ‘great, large, many’ > UACV-1386 **tïpï* / **tapu* ‘long, tall’
Green: 430 Egyptian *š’w* ‘vegetation, field plants, flowers’ > UACV-262 **sakwa* ‘blue, green’
Green: 870 Syriac *bwḥšyn(’)* ‘green herbs’ > UACV-1075 **puhiC* ‘green’
Green: 1093 Semitic *yrq* ‘green’ > UACV-1078 **yora* ‘green’
Green: 1412 Arabic *xḍr* ‘be green’ > Tb(H) *hul’hulat* ‘be/become green’
Griddle: 959 Syriac *qml* ‘suffer from leanness’ (that is, be thin) > UACV-902 **komal* ‘griddle, thin’
Grind: 615 Hebrew *ktš* ‘pound, pound fine, bray, v’ > Yq *kitte* / *kittasu* ‘grind, mash’
Grind: 773 Syriac *ṭḥn* ‘grind, pound’ > UACV-621 **to’na(C)* ‘hit, pierce, stab’
Grind: 815 Hebrew *ptt* ‘smash, make crumble’ > UACV-1079 **pot* ‘pound, grind’
Grind: 1094 Hebrew *ktš* ‘pound (in a mortar), pound fine, bray, v’ > UACV-1081 **tusu* ‘grind’
Grind: 1304 Arabic **pgr* ‘to cleave, break up’ > UACV-1080 **piŋa* ‘grind’
Grind: 1395 Hebrew *paḥ* ‘thin plate(s) of metal’ > Tr *piwe-* / *piu-* / *piwi-* ‘grind well, pulverize’
Grinding Stone: 614 Hebrew **makteš* ‘mortar, grinding stone’ > UACV-1082 **ma’ta*/ **maCta* ‘grinding stone, mortar’
Grinding Stone: 889 Hebrew *rikbaa* ‘riding, verbal noun’ > UACV-1083 **tïppa* ‘mortar (and/or) pestle’
Groan: 1299 Syriac *ṣrḥ* ‘groan, cry out, crackle (of fire, lightning)’ > UACV-2072 **osoroN(i)* ‘snore’
Groom: 417 Egyptian *h’y* ‘groom, husband’ > Yq *hú’i* ‘male member, penis’
Groundhog: 1088 Arabic *xuld* ‘mole’ > UACV-1043 **kita* ‘groundhog’
Grow: 586 Arabic *’abala* ‘grow green/tall/abundantly’ > UACV-547 **apali* 'elote, new/fresh ear of corn'
Grow: 681 Hebrew *ʕlw* / *ʕly* / *ʕalaa* ‘ascend, go up, grow’ > UACV-1100a **wïla/i* ‘grow’
Grow: 814 Hebrew *ṣmḥ* / *ṣaamaḥ* ‘sprout, grow’ > CN *camawa* ‘to grow, become big’
Grow: 1096 Semitic *śyḥ* and *śyx* ‘grow (plants, vegetation)’ > UACV-1077 **siwi(C)* ‘green growth’
Grow: 1229 MHebrew **śiiḥ* ‘growth’ > UACV-907a **sï’aC* ‘grow’
Gum: 892 Arabic *ṣanawbar* ‘stone pine’ (type of pine) > UACV-1634 **sanawaC* ‘pitch, gum’
Hail: 1496 Hebrew *brd* ‘to hail’ > Tr *bara-* ‘be the time of rains’
Hair: 89 Hebrew *śeeʕaar* ‘hair’ > UACV-1106a **suwi* ‘body hair’
Hair: 389 Egyptian *i’rt* ‘hair (of hide), side-locks (of hair)’ > UACV-1112 **yulV* ‘hair, head’
Hair: 742 Hebrew *ṣεmεr* ‘wool’ > UACV-1107a **comi* / **comya* ‘hair’

Hair: 993 Hebrew *qəwuṣoot* ‘locks’ > UACV-1111 **woC* ‘hair’
Hair: 1132 Hebrew *pɛraʕ* ‘loosely hanging unplaited hair on the head’ > UACV-1110 *pï’wa ‘hair, fur, body hair’
Hair: 1133 Syriac *baʕw-aa* ‘camel hair-the’ > UACV-1109 **po’wa* / **poCwa* ‘hair, fur, hide, skin’
Hand: 523 Egyptian *mni’* ‘arm and hand’ > UACV-1119 **man* > **ma* ‘hand’
Hang: 1247 Hebrew *tly* ‘hang’ > UACV-1128 **yula* ‘hang’
Happen: 1435 Arabic *ḥdθ* / *ḥadaθa* ‘to happen, come to pass’ > WMU *ura’a-y* / *ara’a-y* ‘be’; CU *urá-’ay* ‘be, exist’
Happy: 549 Arabic blg / baliga ‘be happy, glad’; Hebrew *hi-bliig* ‘cause to flash, become cheerful, brighten up’ > Yq *balí-ria* ‘joy, gladness’ AYq *vélohko* ‘bright, shining’; AYq *valepo* ‘desire, will’
Happy: 712 Hebrew impfv: *-hallel* ‘admire, praise, exclaim halleluia’ > UACV-1136 **hala* / **halala* ‘happy’
Happy: 807 Hebrew *śaameḥ* ‘happy, filled with joy’ > UACV-1284 **sïm* 'laugh'
Harp: see drum
Harvest: 226 Egyptian *wnm* ‘eat’: ‘of harvest’ > UACV-636 **wïnima* ‘to dance, v'
Harvest: 656 Hebrew *ḥórep* ‘harvest-time, autumn’ > TO *’oḍ* ‘to harvest’
Harvest: 787 Hebrew *qtp* ‘break off, pluck’ > UACV-1001 **kïtta* ‘harvest, v’
Harvest: 1006 Hebrew *qṣr* ‘to reap, harvest’ > Wr *kacuri* ‘a kind of sweet corn’
Haste: 1323 Hebrew *ḥpz* ‘make haste’ > UACV-2540 **wïpaC* / **wïppaC* 'whip'
Have: 473 Egyptian *p’y* ‘that of, possessive article’ > UACV-1702b **pa’i* ‘have’
Have: 1026 Hebrew *lo* ‘to it/him, has’ > the *-lo* of Tbr *kowa-ló* ‘egg-has’
Hawk: 142 Egyptian *bik* ‘falcon’ > UACV-749 **pik* ‘hawk, sp’
He: 107 Hebrew/Semitic *hu/huwa* ‘he’ > UACV-2668 **hu* ‘that’
Head: 93 Hebrew *rooš* ‘head’ (< *ra’š) > UACV-1157 SNum **toCci* ‘head’
Head: see brain
Head, crown of: see dome
Headdress: see blossom
Heal: 909 Hebrew *ghh* ‘depart, be cured, healed’ > Hp *ŋahï* ‘medicine, remedy’
Heal: 1235 Hebrew *rp’* / *raapaa’* ‘to heal’ > UACV-1158a **yowa* / **yopa* ‘cure’
Heal: 1302 Arabic *fʕl* < **pʕl* ‘to do, act, have an effect on, have an influence on’ > Hp *powa-ta* ‘to cure, tame’
Heap: 911 Hebrew *gadiiš* ‘heap of sheaves’ > UACV-601**ŋattas* ‘tight(en)’
Hear: see attentive
Heart: 217 Egyptian *ib* ‘heart, midpoint, center’ > UACV-1167 **pihwïC* / **pihyïC* ‘heart’
Heart: 947 Arabic *qalb* ‘heart, middle, center, core’ > Cp *ŋílveŋílva’a-š* ‘nook, corner’
Heart: 1312 Hebrew **hal-lebb* ‘the heart’ > Hp *ïnaŋwa* ‘heart, life, battery’
Heart, suffer: 218 Egyptian *swn* ‘suffer’ > UACV-1165 **suna* > SUA **sura* ‘suffer, heart, inner part, seed’
Heat: 260 Egyptian *st’* ‘to warm, heat up, make hot’ > UACV-2247 **taku-sito’i* 'sweat'
Heavy: 812 Aramaic *pty / pt’* ‘be wide’ > UACV-1168 **pïttiya* / **pït(t)ï’a* ‘(be) heavy’
Hedgehog: 1089 Hebrew *qippod* ‘hedgehog, short-eared owl’ > UACV-1044 **kïNpa* ‘prairie dog’
Heel: 1100 Arabic *kaʕb-* ‘knot, knob, joint, ankle, anklebone, heel’ > UACV-1171e **tïkapo* ‘heel’
Herd: 1358 Hebrew *rʕy* ‘to pasture, tend, graze’ > Hp *laa-layi* ‘to herd, drive (animals)
Here: 495 Egyptian *ʕ’* ‘here, there’ > Wr *i’wá* ‘here’
Here: see come
Hew: 186 Egyptian *wḫ’* ‘hew (stone)’ > Hopi *waho(-k-)* ‘for particulate matter to spill’
Hidden: 1429 Arabic *kmn* ‘be hidden, concealed, latent’ > UACV-2036 **kum(an)* ‘sleep’
Hide: 158 Egyptian i<u>t</u>i ‘take, rob’ > UACV-1133 *ï’ïci-to ‘hide’
Hill: 7 Semitic **bahamat* ‘back, hill, mountain ridge, high place’ > UACV-99 **kwahama* ‘back’
Hiss: 1222 Arabic *ṣpr* ‘to whistle, hiss, chirp’ > UACV-2559 **ciporika* 'whirlwind'
Hit: 362 Egyptian *sxi* / *zxi* ‘hit, smite, v’ > UACV-2318 **sïk* ? or **sok* ‘beat, throw (with power, furry)’
Hit: 952 Hebrew *pgʕ* ‘meet, attack, confront, assault’ > UACV-1200 **poŋa* / **poŋo* ‘hit, pound’
Hip: 634 Hebrew *ḥalaaṣ-ayim* ‘loins’ > UACV-1183 **kaca-pawï* ‘hip’
Hole: 207 Egyptian *t<u>p</u>ḫt* ‘hole, den, hole of a snake’ > UA **tapu* ‘hole’
Hollow: see pit
Hoop: see bowl
Horizon: 912 Hbr *ḫwg* / *ḫuug* ‘circle, horizon’ > Ls *huŋ-la* ‘the wind’
Horizontal: 687 Arabic *ʕarḍiy* ‘cross- (in compounds), horizontal’ > Hopi *lèesi-* ‘horizontal’
Horn: 964 Hebrew *qɛrɛn* / *qarn-* ‘horn’ > CN *koyooniaa* ‘perforate, pierce s.th.’
Horn: 998 Hebrew *qeren* / *qarn-* ‘horn’ > SP *yïnnï* ‘crown of the head’
Horned toad: 1055 Syriac *’aamaqqət-aa* ‘lizard-the, n.f.’ > UACV-1374 **makkaCta(Nka)-ci* ‘horned toad’
Hornet: 737 Hebrew *ṣirʕaa* ‘hornets’ > UACV-163 **saŋa* ‘yellowjacket, stinging one’
Hot: 285 Egyptian *t’w* ‘heat, n’ > UACV-1211 **kuttutu* ‘hot’

Hot: 1322 Hebrew *ḥrr* / *ḥaaraa* ‘burn’ > UACV-1208b **uru* ‘hot’
Hot: 1481 Syriac *rtḥ* ‘seethe, bubble up, grow hot’ > UACV-1211 **kuttutu* ‘hot’
Hot: 1482 Syriac *rtḥ* ‘seethe, bubble up, grow hot’ > UACV-1212a **tu’i*; **ta-tu’i* (> **taru’i*) ‘hot’
House: 190 from Egyptian *nḫbt* ‘neck’ > UACV-1216 **nopiC* < **no’piC* / **no’opiC* ‘house’
House: 528 Aramaic *bwt* ‘spend the night’ > UACV-1322a **pïCtï* / **pïtu* ‘spend the night, v pl; house, n’
House: 890 Arabic *kann* ‘shelter, house, nest’ > UACV-1213 **kanni* (NUA) > **kali* (SUA) ‘house’
House: 986 Hebrew *qiir* ‘wall, town’; Hebrew *qiryaa* ‘village, town’ > UACV-1214a **kiC* ‘house’
How: 1212 Hebrew *kəmoo* ‘like, as’ > UACV-2529 **kïm* ‘how’
Humble: 1313 Hebrew *yi-kkaneʕ* ‘be humbled, humble oneself’ > CN *iknoa* ‘to be humane, compassionate, tender’
Humming bird: 1101 Arabic *ṭanna* / *ṭannana* ‘to sound, ring, hum, buzz’ > UACV-1220 **muttanaC* ‘hummingbird’
Hungry: 1066 Arabic *ḍrʕ* / *ḍariʕa* ‘be lowly, humble > UACV-1228 **corowa* / **corwa* (< *cVrVwa) ‘be hungry’
Hungry: 1369 Aramaic *kpn* ‘be hungry’ > Gb *kovii-* / *koviiya* ‘be hungry’
Hungry, Fast: 1102 Hebrew *ṣwm* ‘to fast’ (i.e., not eat) > UACV-1231 **suma* ‘hungry’
Hunt: 348 Egyptian *t̲hm* ‘hunt’ > UACV-1901b **tïm* ‘look for’
Hunt: 732 Hebrew *ṣwd* / *ṣyd* ‘to hunt’ > TO *šaad* ‘to chase’
Hunter: see follow
Hurricane: 1219 Arabic *hauğaa’* ‘hurricane, tornado, cyclone’ > UACV-2558 **hïka* / **hïkawa* / **hïkwa* 'wind, blow'
Hurry: 1087 Arabic *srʕ* ‘be quick, fast, hurry’ > UACV-1033 **i’siwi* ‘walk, hurry’
Hurry: 1433 Hebrew *ḫwš* / *ḫyš* ‘hurry’ > TSh *yawï(sï)* ‘quickly, fast, in a hurry; hurry up!’
Hurry: see alarmed
Hurt: 230 Egyptian *mn* ‘be sick, hurt’ > UACV-1598 **mana(ya)* ‘hurt’
Hurt: 1388 Arabic impfv *ya-’ðaa* ‘to suffer damage, be harmed’ > UACV-2089 * *’ïca(C)* '(have) wound/sore'
I: 102 Aramaic *(’a)naa’* ‘I’ > UACV-2658 **nï’* ‘I, me, my’
I: 1423 Syriac *-ai* / *-ay* ‘me, my’ > Serrano *-ai* ‘I’m’
Ice: 1161 Hebrew *qippaa’oon* ‘sharp frost’ > UACV-2074 **kïpa* 'snow, ice'
If: 1416 Arabic *iðaa* / *iðan* ‘then, therefore, if, when, whenever’ > Tb(H) *tan* / *tanni* ‘if’
In: 848 Hebrew/Aramaic *ba* ‘in/at it (fem sg obj)’ > UACV-78 **-pa* ‘at, in’
In: 1238 Hebrew *bayt-aa* ‘house-toward, inside-to’ > UACV-1241 **paca* ‘put in’
Influence: 1302 Arabic *fʕl* < **pʕl* ‘to do, act, have an effect on, have an influence on’ > Hp *powa-ta* ‘to cure, tame’
Injure: 663 Hebrew *ḫrp* ‘reproach, annoy, taunt’ > Hp *ööpï-ta* ‘injure, cripple, disable physically or emotionally’
Injure: 1469 Hebrew *tqʕ* ‘1. stick in, drive (weapon into) > UACV-2091 **takawa* ‘injure(d), damage(d), ruin’
In-law: see camp
In-law: 633 Hebrew *ḫoten* ‘father-in-law’ > UACV-1791 **kusana* ‘sibling-in-law’
Insect: 437 Egyptian *mht* ‘an insect’ > UACV-316 **matta* / **maCti* ‘tick’
Inside: 975 Hebrew *qrb* ‘approach, draw near’ > UACV-1243 * *’ïrapa* ‘inside’
Invite: 36 Hebrew *bʕy* / *baʕaa*[1] ‘enquire, search’ > UACV-1493 **kwawa/i* ‘invite, call’
Jackal: see fox
Jackrabbit: 1245 Arabic *šaʕr* / *šaʕar* ‘hair, fur, pelt’ > UACV-1759 **su’i* / **suwi* ‘jackrabbit’
Jar: 259 Egyptian *st̲’* ‘jar, jug’ > UACV-1715 **soto’i* ‘jar’
Jealous: 1031 Hebrew *qn’* ‘be jealous’, impfv: *-qna’* > UACV-29 **nawa* ‘jealous’
Jealous: 1033 Hebrew *qn’* ‘jealous’ > Kw *kïnii-ga-dï* ‘one who is greedy or covetous’
Jealous: 1034 Hebrew *nqm* ‘avenge oneself’ > UACV-34a **nakuma* / ***na-kuma*** 'upset, jealous'
Joy: 412 Egyptian *ḫʕwt* ‘joy, rejoicing’ > Ls *heŋča-wu-t* ‘cheerful, contented’
Jump: 279 Egyptian *ftft* ‘leap’ > UACV-1249 **puCca/i* / **puCta/i* ‘jump’
Jump: 724 Semitic *parʕoš* ‘flea (jumper)’ > UACV-1758 **par’osi* / **paro’osi* ‘jackrabbit’
Jump: 1506 Hebrew *dlg* ‘leap, spring over’ > TO *celko(n)* ‘skip’ > UACV-1252 **coŋa* ‘jump’
Jump: 1518 Hebrew *qpz* / *qpṣ* ‘leap, jump’, *wa-yyi-qpoz* ‘he jumped’ > UACV-1250 *wïppuki* ‘jump’
Jump: see fly (v)
Juniper: 689 Hebrew *ʕaroʕer* / *ʕarʕaar* ‘juniper tree’ > UACV-423: Tr *aorí* / *aborí* / *waorí* / *awarí* ‘juniper’
Keep: 1181 Hebrew *šmr* ‘keep, watch over, have charge of, restrain’ > UACV-2287 **summay* ‘think about’
Kick: 1507 Arabic *rkl* / *rakala* ‘kick (s.o., s.th.) > UACV-1254 **cïŋï* ‘kick’
Kidney: 171 Egyptian *sxn* / *zxn* ‘kidney fat, kidney tallow, pancreas’ > UACV-1257 **sikun* ‘kidney’
Kidney: 357 Egyptian *ggt* ‘kidney, n.f.’ > UACV-1256 *takkiC- ‘kidney’
Kidney: 1105 Akkadian *kaliitu* ‘kidney’ > UACV-1259 **kali* ‘kidney’
Kill: 768 Hebrew **makke* ‘smite’ or Syriac makyaan / mekaa > UA **mïk* / **mï’a* ‘kill’
Kind: 1456 Hebrew *miin* ‘type, kind’ > UACV-2530b **min* ‘what kind, how’
King: 1300 Hebrew *mɛlɛk* / *malk-* / *moolek* ‘king’ > Hopi moŋwi ‘chief’
Kiss: 771 Hebrew *ṭʕm* ‘taste, eat’ > UACV-2222a **cu’mi* > **cuŋV* 'suck, sip, kiss'

Knee: 1468 Arabic *rukbat* knee' > UACV-941 **toŋa* 'knee'
Kneel: 1259 Hebrew *brk* 'kneel down, bless, praise, adore' > Ca *kwéy'eqi* 'stoop down, vi'
Kneel: 1255 Hebrew *sgd*, impfv: *-sgod* 'bow down' > UACV-943 **coko* 'knee, kneel'
Kneel: 176 Egyptian *x'm* 'to bow' > UACV-438 **kom*/**ko'om* 'bend'
Knife: 433 Egyptian p'q 'leaf/sheet (of precious metal, metal foil) > UACV-1266 *pikkaC / *pikkat (AMR) 'knife'
Knife: 466 Egyptian *p'-nm* 'the knife' > UACV-1270 **panomi* 'knife, iron, tool'
Know: 543 Hebrew *baaṭuuḫ* 'trusting'; 'trustful, confident' > UACV-1276 **puttuwa* (> **puttucukwa*) 'know'
Know: see command
Know: 810 Hebrew *hikkiir* 'recognize, know, know how to' > Tr *iki-* 'know, be aware of'
Know: 1106 Aramaic *sbr* 'be bright, intelligent, conclude, understand' > UACV-1274 **suNpa* 'know'
Know: 1107 Syriac *hwn* / *huun* 'be rational, intellectual, be wise' > UACV-1281 **huna* 'know'
Lame: 388 Egyptian *gnn* 'weak, loose, limp, sluggish, inert' > Eu *kanánki* 'lame, limp, maimed'
Lame: 1108 Hebrew *ṣlʕ* / *-ṣlVʕ* 'limp, be lame' > UACV-1340 **lo'i* 'lame, limp'
Lament: 1021 Hebrew *nhy* / *nahaa*^{y} 'to lament' > UACV-1944 **nï'ï* 'sing'
Land: 19 Arabic *barr-* 'land (as opposed to sea)' > UACV-753 **kwiya* / **kwira* 'earth'
Land: 75 Hebrew *tebel* 'firm (dry) land' > UACV-757a **tïpaC* / **tïpal* 'earth'
Large: 1414 Syriac *sgy* 'be many, great' > Hopi *hoskaya* 'large, huge, enormous'
Laugh: 1386 Syriac *qatqet* 'burst out laughing, laugh loudly' > UACV-1287 **kasi* 'smile'
Laugh: see happy
Lay: 917 Arabic *gʕl* 'make, put, place, lay' > Ls *ŋáw'la-š* 'mattress, mat, bed'
Lazy: 27 Arabic *brm* 'be weary, tired of, fed up, bored with' > UA **kwiyam* / **kwiam* 'be lazy, do lackadaisically'
Lead: 1121 Aramaic *dabbar* 'lead, drive' > UACV-1727 **tappi* 'pull, drag'
Lead, first: 1301 Aramaic *mlk* 'to lead in council' > UACV-1547c **mul* / **muluka* 'first'
Leaf: 467 Egyptian *db'-w* 'blades/leaves (of a tree), foliage' > UACV-1294 **sawa* 'leaf'
Leaf: see ear
Lean: see griddle
Learn: 699 Hebrew *lmd* / *laamad* 'learn, exercise in, be trained, accustomed to' > UA **lomi* 'know'
Learn: 701 Hebrew *lmd* / *laamad* 'learn, exercise in, trained' > UACV-1272a **mata* / *mati* 'know'
Learn: 811 Hebrew *-biin* 'understand' > UACV-1273 **pïnï* 'learn, become familiar with'
Learn: 1150 Hebrew *(yo/to/no)-diiʕ* 'inform, tell' > UACV-1275 **tïwi* 'learn'
Leave: 688 Hebrew *ʕaazab* 'leave, abandon, let go' > Sr *wiđap-kin* 'leave, let go, release, abandon, quit'
Leave: 932 Hebrew *gwr* 'to dwell as alien and dependent' > UACV-456 **ŋoya* 'leave, go away, go home'
Leave: 1244 Arabic **prq* III 'separate oneself, depart, leave, quit' > UACV-1300 **piya* / **pï'a* 'leave, save'
Leaven: 1278 Aramaic/Syriac *ḫmʕ* 'to ferment, leaven, mix' > Hopi *homo'-ta* 'be mounded, bulged, convex'
Leech: 88 Hebrew *ʕaluqaa* 'leech' > UA **walaka* 'snail'
Left: 300 Egyptian *i'bty* 'east, left' > UA **opoti* 'left'
Left: 1246 Semitic hassim'al 'the-left' > UA *aasiŋan 'left'; Hebrew *śəmool* 'left' > UACV-1307 **si*… 'left'
Left: 996 Arabic *yasaariy* 'at/on the left' > PYp *suurid* 'left, from the left'
Leg: 132 Egyptian *sbq* 'calf of leg' > UACV-952a **sipika* 'lower leg'
Leg: 997 Hebrew *kəraaʕ* 'lower leg' (Sem-kw) > UACV-949 **yï'u* < **kVyu'u* 'leg'
Lend: 1202 Arabic IV *aʕaara* 'lend, loan' > UACV-2400 **wara* 'sell'
Lend: 1439 Hebrew *nš'* 'lend out' > Hopi *nasi-moki* 'borrowed thing, loan, n'
Leprosy: 67 Hebrew *ṣaaráʕat* 'leprosy' > CN *siyo-tl* 'rash, scab, leprosy'
Lick: 708 Syriac *lkḫ* 'to lick, lick up' > Hopi *lekwi-ta* 'lap up (food, as cat or dog)'
Lie: 544 Syriac *bd'* 'to invent, make up'; Mehri Soq *bd'* 'to lie' > UACV-105 **paru* 'bad, say bad about'
Lie: 983 Hebrew *škb*, impfv *-škab* 'lie down, lie' > UACV-1318 **hapi* 'lie down'
Lie: 1023 Hebrew *tqn* 'make straight' > UACV-1744 **tïka/i* or **tïkaC* 'put lying down, stretched/spread flat'
Lie: 1242 Hebrew *rbṣ* 'lie down (often of animals)' > UACV-1518a **tosa* 'nest'
Lie: XX Hebrew *rbṣ* 'lie down (often of animals)' > UACV-1517 **koca* / **kocca* 'nest'
Lie down: 1277 Hebrew *rbṣ*, impfv: *-rbaṣ* 'lie down, rest' > UACV-1319 **po'o* / **po'i* 'be lying down'
Lift: 1342 Syriac *guuzl-aa* 'left-handed, ambidexter' > My *míko'ori* 'left'
Light: 716 Hebrew *dlq* / *daalaq* 'to burn, set on fire' > Hopi *taala* 'be light, be illuminated, be daylight'
Light: 1420 Arabic *nwr* II 'blossom, fill with light, illuminate' > UACV-2238 **nur* / **nar* 'to dawn, become daylight'
Lightning: 14 Hebrew *baazaaq* 'flash of lightning' > UACV-1328 **aNkaC-kwissaka* / **aNkaC-kwicci'i* 'lightning'
Lightning: 527 Hebrew *baaraaq* 'lightning'; Arabic *baraq* 'lightning' > UACV-1327 **pïrok* 'lightning'
Like: 228 *mity* 'equal to, similar to' > Sr *mitkin* 'seem'
Like: 751 Hebrew *dmy* / *damaa* 'to be like, resemble' > TO *-dma* 'to be like or look like'
Like (v): 901 Syriac *ṣb'* 'be willing, wish, prefer, have pleasure in' > UACV-2478 **supiC* 'like, want'

Limp: 639 Hebrew *psẖ* (< **psx*), impfv -psax ‘be lame, limp’ > CU *sakï-* ‘to limp
Limp: 1404 Syriac *ẖgr* ‘halt, limp, be lame’ > Hp *hokya* ‘leg, stalk’; Hp *hokyalmi* ‘to trip’
Limp: see badger
Lion: 147 Egyptian *m’i* ‘lion’; Coptic *mui* > UACV-1350 **mawiya* ‘mountain lion’
Lion: 566 Hebrew *’ariy* / *’arii* ‘lion’ > UACV-1352 **wari* ‘mountain lion, predatory animal’
Lion: 1290 Arabic *šibl-* ‘lion cub’ > Wr *tehsebori* ‘baby mountain lion’
Lion, young: see bobcat
Lip: 563 Egyptian *spt* ‘lip’, pl: *spwt* ‘lip’; Hebrew sapat ‘lip’ > UACV-1355 **sapala* (< **sapata*) ‘lip’
Liquid: see fill
Liquor: 1316 Hebrew *yayin* / *yain* / *yen* ‘wine’ > Wr *yena* ‘strong (of liquor)’
Little: 982 Hebrew *qll* ‘be small, insignificant, light, fast’ > UACV-1356 **ali* ‘little’
Live: 427 Egyptian *ʕnx* ‘to live, v, (living) person, n’ > UACV-141 **onka* / **oŋa* ‘baby’
Live: 1437 Hebrew *ẖyy* / *ẖayaa*, impfv: *yi-ẖye* ‘to live’ > Wr *ohee* / *ohoe* ‘to live’
Lizard: 9 Arabic *ḍabb* ‘lizard’ > UACV **cakwa* 'catch, grasp, lizard’
Lizard: 185 Egyptian(F) *ẖnt’sw* ‘lizard’ > UACV-1380 **-hoto-* ‘lizard’
Lizard: see horned toad
Lizard: 1239 Aramaic *yall-aa’* ‘lizard’ > UACV-1370a **yul* ‘lizard, sp.’
Load: 516 Egyptian *wdn* ‘consecrate, bring, offer’ > Hopi *warani* ‘s.th. reserved, saved for future use’
Load: 780 Hebrew *ṭʕn* ‘to load (as beasts of burden)’ > Wr *cuhce* ‘to place a load on a burro, horse, etc’
Locust: 68 For Hebrew *gebiim* ‘locust’ > note SP *qïïvi* ‘grasshopper’
Locust: 816 Hebrew *saalʕaam* ‘locust’ > UACV-1066 **coho* / **co’o* ‘grasshopper’
Locust: 1321 Hebrew *ẖargol* ‘type of locust’ > Tr *urugi-pari* ‘type of grasshopper’
Loincloth: 338 Egyptian *swẖ* ‘loincloth’ > Wr *sa’wela* ‘loin cloth, breech cloth’
Loins: see back
Long: 886 Hebrew *y-’rk* ‘be long’ > UACV-1390 **yïŋï* ‘be/pass a long time’
Long: 1486 Hebrew *’rk* ‘be long (time and space/length) > SP *wïïC* ‘be long ago’
Long: 1516 Hebrew *’rk* ‘be/make long’ > UA **wiyyek* > UA *wiik ‘stretch, make string/length of s.th’
Look: 480 Egyptian *m’’* / *m’* ‘see, look on’ > UACV-1914a **mï’* ‘look!’
Look: 562 Hebrew *ya-bbiiṭ* ‘he looks’ > UACV-1907 **pica* (< **pita*) ‘see’
Look: 667 Syriac *ẖwr* / *ẖuur* ‘look, behold, gaze’ > UACV-1910 **hura* ‘come up, look in/over’
Look: 754 Hebrew *pny* / *panaa*^{y} ‘turn, turn and look, look’ > UACV-449b *puni ‘turn, look, see’
Look: 1152 Aramaic *šgẖ* ‘to look, to care for, mind’ > UACV-1911 **(i)soko* ‘look’
Look: 1325 Hebrew *hinné* ‘behold!’ > Tr *ne* ‘an adverb of emphasis or admiration meaning “Look!”
Look: 1504 Hebrew *špy* ‘keep watch, be on the look-out for’ > TO *savant* ‘to look for s.th.’
Look for: 945 Semitic *qanniy ‘buy, pay, trade’ > UACV-1903 *ŋani / kani ‘look for’
Loom: 1347 Syriac *qəwaayaa* ‘a loom’; Syriac *beyt qəwaaye* ‘web’ > Ca *qaawi* ‘get tied, hooked, vi’
Loose: 277 Egyptian *fx* ‘loose(n), release, cast off, obliterate, leave’ > UACV-2437 **pu’ta/i* ‘loose(n), untie(d)’
Loosen: 1010 Syriac *qlp* ‘to peel, shell, scrape off, strip off’ > Hp *hàapo(k-)* ‘get loosened, chipped’
Lord: 242 Egyptian *nb* ‘lord, master, owner’ > UACV-1802 **napi* 'magic, extraordinary power'
Lord: 1472 Hebrew *tqʕ* ‘lord, palm of the hand’ > UACV-1423a **tïku* / **tïkuwa* ‘lord, master, father’
Lose: 649 Hebrew *ẖṭ’* / *ẖaaṭaa’* ‘miss (a mark), do wrong’ > UACV-1393 **wa(C)tiN* / **waCtiC* ‘lose, lost, misled’
Lose: 469 Egyptian *whi* ‘escape, miss, fail’ > UACV-1395 **wï’ka* ‘lose’
Loss: see empty
Louse: 310 Egyptian *s’* ‘maggot’ > UA **sa’a* / **si’a* ‘louse’
Louse: 971 Syriac *qarduun-aa* ‘louse-the, nit-the’ > UACV-1398 * *’aCtïN* > * *’atï(N)* ‘louse’
Louse: 1509 Syriac *ša’p-aa* / *šaap-aa* ‘crawling/unfledged locust’ > Ktn *šïvacïcï-c* ‘body-louse’
Love: 231 Egyptian *mri* ‘want, wish, love’ > UACV-1010a **mïri* / **mïli* /**mïla* ‘run, flow, go, want’
Low: 759 Hebrew *špl* ‘be low, fall’ > TO *šopol* ‘short’
Low: see deep
Lung: 281 Egyptian *sm’* ‘lung’; pl: *sm’w* ‘lungs’ > UA **somwo* > **soŋo* ‘lungs’
Lung: 282 Egyptian *wf’* ‘lungs’ > Tbr *wopa*^{N} ‘lungs’
Lung: 1385 Syriac *qʕuul-aa* / *qʕuul-taa* ‘expansile, expansive as the lungs’ > Cp *qíqil*^{y}*ve* (< **qoqolVpe*) ‘lungs’
Lung: 1421 Arabic *saẖr-* / *suẖr-*, pl: *suẖuur* ‘lungs’; Arabic *masaaẖir* ‘lungs’ > SP *soo-vi* ‘lungs’
Lung: 1428 Syriac *raa’taa* / *raataa* ‘lung(s), n.f.’ > Cora *ta’atime* ‘lungs’
Magic: see lord
Maggot: see louse
Make: see do
Man: 76 Hebrew *’aadaam* ‘man’: > UACV-1419 **otami* (< **wVtam*?) ‘man, person’

Man: 205 Egyptian *t̲'y* 'male, man' > UA **tawi* > **tïwi* 'man, male'
Man: 616 Aramaic *dakar* 'male, man' > UACV-1414 **takaC* / **takaN* 'man, person, body'
Man: see also boy[3]
Man: 1240 Arabic *rağul* 'man' > UACV-1417 **tihoyi* 'man, attractive'
Man: 1432 Akkadian *awiil* 'man' > UACV-1421 **owi* 'male, man'
Man, old/**great**: 1180 gabr-aa, pl: gabr-iim/iin 'great man' > UACV-1422 **kïri* 'man, old man, elder'
Man, young: 169 Egyptian *rmṯ* 'man' > UACV-1428 **rïmatí* / **rï'matí* 'young man'
Many: 425 Egyptian *ʕš'* 'many, numerous, much, plentiful' > UACV-16b **oso* 'more, much, very'
Marry: see copulate
Mat: see blanket
Me: 1497 Hebrew *'ootii* 'me' (object/accusative pronoun) > Tr *ti* 'me'
Measure: 1024 Hebrew *tkn* 'examine, check' > UACV-690 **tïkïha* 'measure, imitate'
Meat: 256 Egyptian *stp* 'cut up (animal)' > UACV-1433a **sa'pa* / **sa'apa* 'meat'
Meat: 1474 Hebrew *tqʕ* '1. stick in, drive (weapon into) > UACV-1432 **takkuwa* 'meat'
Medicine: 1236 Hebrew *rp'* / *raapaa'* 'to heal', *hit-rapp'aa* > UACV-1158b **hitowa* 'medicine'
Meet: see arrive
Menstruate: 1285 Hebrew *daawɛ*, fem: *daawaa* 'faint, sick, or mentstruating' > Ktn *mïyvï'* 'menstruate'
Mescal: 59 Hebrew *šakuur* 'drunk' > UACV-5 **kuru* 'mescal, agave'
Mescal: 60 Arabic *muskir* 'alcoholic beverage' > PUA **maskal* 'mezcal, an alcoholic drink'
Messiah: 1517 Hebrew *mašii*^{a}*ḫ* 'Messiah' > Hopi *Màasaw* 'Lord of the Fourth World, god of life and death'
Middle: 1413 Hebrew *took* 'midst, middle' > SP *toġoi-tïqqai* 'in the middle of eating, about half through eating'
Middle: 1452 Arabic **naṣapa* > *naṣafa* 'to reach mid-day, become noon' > UACV-1115 **nasipa* 'half, middle'
Milk: 193 Egyptian *mhr* / *mhi* 'milk-jar' > UACV-1439 **mu'i* 'milk'
Milk: 306 Egyptian *irṯ̲t* 'milk' > UA **rïti*/**rïci*: Wr *rïci* 'milk'
Milk: 342 Egyptian *sh̲r* 'milk, v' > UA **soyti* 'milk, v': Ca *siyči* 'milk (as cow, gum plant), v'
Miss: 469 Egyptian *whi* 'escape, miss, fail' > UACV-1395 **wï'ka* 'lose'
Miss: 650 *ḫṭ'* / *ḫaaṭaa'* 'miss (a mark) > Ktn *'ačaw* 'miss (the mark)'
Mist: 839 Semitic *napš* 'spirit' prepounded with *paa* 'water' > Hp *panéwsi* 'mist, fog'
Mix: 1495 Hebrew *ʕrb*, *hit-ʕareb* 'be mixed up with, involved with' > UA **na-'rowa* 'stir'
Mock: 808 Hebrew *mwq*, pfv **maaq* 'mock' > UA **mak* 'laugh, tease'
Mock: 809 Hebrew *htl*, qittel impfv stem *-hattel* (< **-hattil*) 'to mock' > UACV-1282 **'atti* / **ata* / **aCti* 'laugh'
Moist: 723 Hebrew *ṭaari* 'fresh' > Wr *weh-cori* 'mud, clay'
Moisten: 22 Hebrew *bll* 'to moisten, mix (flour, etc)' > UACV-2079 **kwal* 'soft', UACV-1448 **kwannu*/**kwiNtu* 'stir'
Molar: 1221 Arabic *ḍirs* 'molar tooth' > UACV-2367 **cara* 'molar'
Mole: see groundhog
Money: 1248 MHebrew qəśiiṭaa 'a standard value, coin, jewel'; Syriac **qesṭ-aa** 'measure'
> UACV-2016 **koCti* / **koCta* 'bark, shell, money'
Moon: 1077 Hebrew *mazzaal* < **manzaal* 'star, constellation(s) > UA **mancaal* > **mïcaC* 'moon'
Morning: 875 Hebrew *boqer* 'morning' > UACV-2361 **pi'ari* 'tomorrow'
Mortar: 614 Hebrew **makteš* 'mortar, grinding stone' > UACV-1082 **ma'ta* / **maCta* 'grinding stone, mortar'
Mortar: 889 Hebrew *rikbaa* 'riding, verbal noun' > UACV-1083 **tïppa* 'mortar (and/or) pestle'
Mortar: 460 Egyptian *'ṯp* 'box, case': UACV-1084 **otapa* 'bedrock mortar'
Mosquito: 390 Egyptian *ḏwt* 'mosquito, gnat, sandfly' > UACV-924 **suti* 'mosquito, gnat'
Mosquito: 729 Aramaic *səriiq* 'gnat, mosquito' > UACV-924 **suri* 'mosquito, gnat'
Moth: 1178 Arabic *'kl* / *'akala* 'eat, eat away'; Syriac *'akl-aa* 'weevil-the' > UACV-334 **akal* 'moth, butterfly'
Moth: see butterfly
Mother: 1079 Aramaic *naanii* 'mother' > UACV-1454 **nana* 'mother'
Mother: 1298 Hebrew *pry* / *paraa* 'to bear young, to bear fruit' > SP *pia* 'mother, female'
Mother: 1346 Hebrew *'em* 'mother', *'imm-aa* 'mother-her'; *'imm-o* 'mother-his' > Tb(H) *ïïmïï-* 'mother'
Mound: see leaven
Mountain: 274 Egyptian *dhnt* 'mountain top, n.f.' > UACV-1456 **ton(n)o* 'hill'
Mountain: 322 Egyptian *q'yt* / *q'iit* 'high ground' > UACV-1455a **kawi* 'mountain, rock'
Mountain: 868 Aramaic *ṭwr-* / *ṭuur-aa* 'rock, hill, mountain-the' > UACV-1459 **toya* 'mountain'
Mountain: 995 Hebrew *gəbuul* 'form a boundary'; *gabal* 'mtn' > TO *gavul-kad* 'separate, divide'; TO *kavul-k* 'hill'
Mountain: 1119 Hebrew *har* 'mountain'; pl: *haree*^{y} 'mountains (of)' > UACV-1457 **huya* / **huri* 'mountain'
Mountain: 1241 Arabic *ğabal* 'mountain(s)' > UACV-1455b **kaipa* / **kaapa* 'mountain'
Mouse: 578 Arabic **pa'r* 'mouse' > UACV-1462 **pa'i* 'mouse'
Mouse: 1424 Syriac *nədaal-aa* 'fieldmouse-the, n.m.' > UACV-1465 **tori* 'rat'

Mouth: 617 Aramaic *diqn-aa* ‘beard-the, chin-the’; Mandaic *ziqnaa* > UACV-1469a **tï’na* > **tï’ni* ‘mouth’
Move: 949 Semitic *gdd* II ‘band together, roam about’ > UACV-1945 **ŋïrïr* ‘move, move over’
Move: 1156 Hebrew *ḫrk* ‘set in motion’ (BDB) > UACV-1926 **huyuC* ‘move’
Much: 850 Hebrew *mə’od* ‘strength, very, very greatly, exceedingly’ > UACV-15 **mu’i* ‘many, much’
Mucus: 772 Hebrew *ṭame’* ‘(be) unclean’ > UACV-1474a **co’ma* ‘mucus, have a cold’
Mucus: 1109 Aramaic *mḫwṭ-aa’* ‘mucus, n.m.’ > UACV-1475 **mït...* ‘snot, mucus’
Mud: 448 Egyptian sq’ḫ ‘to whitewash (building), to mud (s.th.),’ > UACV-761 *sokoC / *coka ‘earth, mud’
Mud: 1226 Aramaic *šʕyn-’* / *šəʕiin-aa* ‘mud-the’ > UACV-765 **pa-sakwinaC* ‘mud’
Mud: 1363 Aramaic *hl(’)* / *hal-aa’* ‘dirt, mud-the’ > UACV-2522 **hala* 'moist/wet soil’
Murmur: 1348 Aramaic *lmlm*/*limlem*/*-lamlem* ‘murmur’ > Ls *lamú-lama-xi-š* ‘suffering from rheumatism’
Mushroom: 1110 Aramaic *’ard-aa’* ‘mushroom-the, m.’ > UACV-1482 **hitto’oC* / **witto’oC* ‘mushroom’
Mushroom, fungus: 676 Arabic **paqʕ*- ‘intense whiteness, fungus sp.’ > UACV-1480 **pakuwa* ‘mushroom, fungus’
Nail: see finger
Name: 1059 Arabic *dʕw* / *daʕaa* ‘to call, name’ > UACV-1489 **tï(N)wa* / **tïnwa* (AMR) ‘name’
Name: Hebrew *ni-qra’* ‘he/it is called/named’ > UACV-1490 **nihya* ‘call, name’
Navel: 777 Hebrew *ṭabbuur* ‘navel’ > UACV-1495a **sikuN* / * *sik*^{w}*ur* ‘navel’
Navel: 1138 Hebrew *šor* ‘navel, navel cord’; Arabic *surr* ‘navel cord’ > Sr *ṣuur* ‘navel’
Near: 386 Egyptian *tkn* ‘be near, draw near’ > TSh *tïkïnaa(cci)* ‘close to, near to, nearby’
Near: 1008 Hebrew *qrb* ‘approach, draw near’ > Hp *hayiŋw*- ‘draw near’
Near: 1489 Semitic *qrb* ‘approach, be near’ > Ls *ŋááya* ‘be close, be near’
Near: 975 Hebrew *qrb* ‘approach, draw near’ > UACV-1243 **’ïrapa* ‘inside’
Neck: 349 Egyptian *ṯs* ‘neck’ > CN *toski-tl* ‘throat, voice’
Neck: 385 Egyptian *bʕnt* ‘neck’ > Eu **poicika* ‘nape of neck’
Neck: 632 Sem-p *ḫnq* (< **xnq*) ‘strangle, put/be around neck’ > UACV-1505 **konaka* ‘necklace, collar, string of beads’
Neck: 962 Aramaic *qooʕ-aa* ‘throat, gullet, windpipe-the’ > UACV-1515 **kuwi* ‘throat’
Neck: 999 Hebrew *gaaroon* ‘throat, neck’ (Sem-kw) > UACV-1516 **iyoN* ‘back of neck, nape of neck’
Neck: 1014 Syriac *qədaal-aa’* ‘neck, nape of neck’ > UACV-1501 **kutaC* ‘neck’
Neck: 1092 Aramaic *qooʕ-aa* ‘throat, gullet, windpipe’ > UACV-1512 **ŋoho* ‘neck’
Negative: 423 Egyptian *ywty* ‘who … not, which … not, one without, a not-haver’ > Kw *yuwa’i* ‘negative’
Nest: 1242 Hebrew *rbṣ* ‘lie down (often of animals)’, *rabṣa* > tawsa > UACV-1518a **tosa* ‘nest’
Nest: XX Hebrew *rbṣ* ‘lie down (often of animals)’, *-rboṣ* > UACV-1517 **koca* / **kocca* ‘nest’
Net: 317 Egyptian *i’dt* ‘net’ > UA **yuta*: Ls *yúúla-pi-š* ‘rabbit net’
Net: 384 Egyptian *inqt* ‘net, n.f.’ > UACV-1519 **ikkaC* / **iCkaC* ‘carrying net’
New: 546 *bidʕ-V* ‘new, original, unprecedented’ > UACV-1523 **pïtïC* / **pïtuC* / **pïtuwa* ‘new’
Night: 355 Egyptian *grḥ* ‘night’ > UACV-2610 **kï(C)aNwi* / **kïyawi* / **kïaw* ‘yesterday’
Night: 873 Hebrew **yu’pal* ‘become dark, be gone down (light)’ > UACV-1532a **yo’wal* ‘night’
No, not: 146 Egyptian *bi* ‘no’ > UACV-1535 **pi* ‘no’
No, not: 1112 Arabic *maa* ‘no, not’ > UACV-1537 **ma* ‘no’
No, not: 202 Egyptian *tm* ‘negative, no, not’ > ST *čam* ‘no, not’; WTr *ta’me* ‘no, negative’
No, not: 690 Arabic *ġayr*- ‘other than, different from, unlike, no, not, non-, un-’ > UACV-1533 **kay* / **kaC* ‘no, not’
Noise: 893 Arabic *daqqa* ‘be thin, crush, knock, rap > Hp *rïkï*- / *rïkïkï-ta* ‘make grating noise, make rasping sounds’
Nook: see heart
Nose: 1279 Aramaic *yəgar* ‘hill, heap of stones’ > UACV-1546a **yakaC* / **yakaR* (AMR) ‘nose, point, ridge’
Not: 202 Egyptian *tm* ‘negative, no, not’ > ST *čam* ‘no, not’; WTr *ta’me* ‘no, negative’
Not: 690 Arabic *ġayr*- ‘other than, different from, unlike, no, not, non-, un-’ > UACV-1533 **kay* / **kaC* ‘no, not’
Now: 1157 Syriac *haakeel* ‘now’ > UACV-2352b **aï-pi* 'now'
Numb, poison: 877 Syriac *sammem* ‘to poison’; Arabic smm ‘to poison’ > UACV-2521 *samïm ‘be wet, numb(ing)’
Nut: 702 Arabic *lawz* ‘almonds (collective) (root *lwz*)’ > Tb *lalwaš-t* ‘pine nut cache’
Nut: 1115 Arabic *ğauza(t)* ‘nut’ > UACV-1562 **kusi* ‘oak’
Oak: 599 Hebrew *’ayil* / *’eel*- ‘mighty tree’ > UACV-1555 **iyal* ‘poison oak’
Oak: 1337 Hebrew *’ayil* ‘mighty tree, oak’ > UACV-1556b **wi’a(N)* / **wiya(N)* ‘acorn, oak’
Oar: 472 Egyptian ḫpt ‘*oar’* > UACV-1596 Tak **ipa* < UA *opa ‘wooden paddle’
Ocean: see water
Oil: 144 Egyptian *b’q* ‘oily’ > Cr *pu’učira’a* ‘fat, adj’
Old: 151 Egyptian *i’w* ‘old man’ > UACV-1566 **yo’o* / **yu’u* ‘old’
Old: 891 Syriac *s’b* ‘to age’; Syriac *saa’ib* (m.) ‘old one, old man’ > Tb(H) *šo’ibit* / *šoobit* / *šoobišt* ‘old woman’
Old: 1019 Hebrew *zaaqen* ‘be an old man, be an old woman, grow old’ > UACV-1569 **cukuC* ‘old’
Old: 1292 Hebrew *śyb* ‘be grey-headed, old’ > Wr *ahseba* ‘reach or be so many years old’

Old (woman): 87 Arabic *ʕgz* / *ʕagaza* ‘to age, grow old (of women)’ > Tr *wegaca-* 'grow old (of women)’
On: 852 Hebrew **paneey* ‘face, surface’ > UACV-77 **pani*/*pana* 'on, on surface of’
On top: 1398 Hebrew *bə-panee* ‘on the surface of’ > Eu *vepán* ‘encima, sobre’; AYq *vepa* ‘on top of, more than’
One: 496 Egyptian *sm’* ‘to unite, put together’ > UACV-2618 **sïma’* / **sïmï’* 'one’
One: 538 Hebrew *baadaad* ‘solitude’ > UACV-2620a **pirï* / **parï* / **pura* 'one, negative'
One: 1288 Semitic *-i* ‘one/someone/something from (an area/place)’ > UACV-2702 **-i* / **-ya* ‘person from’
Open: 1169 Hebrew *ptḥ* / *paataḥ* ‘to open, open up’ > UACV-1578 **pïtïwa* ‘open, uncover’
Open: see blossom
Opponent: 1399 Amorite *bexeru* ‘elite soldier’ > UA **bïhïrï* ‘expensive, opponent’
Order: 350 Egyptian *ṯsw* ‘commander’ > UACV-1853 **tïsa* ‘order, v’
Ore: 465 Egyptian *bi’* ‘ore, metal, iron’ > UACV-1268a **payu* / **papayuC* (redupl) ‘ceremonial staff’
Other: see brother and another
Out: 1243 Nabatean *prq* ‘let out, liberate, redeem’ > UACV-1586 **pa’ku* ‘out’
Outside: 471 Egyptian *rwt* / *rwty* ‘outside’ > UACV-1584 **tïta* (< **tuta*) ‘outside’
Overcome: 674 Hebrew *ye-ḫrab* / *yu-ḫrab* ‘destroy(ed)’ > SP yurava ‘be overcome’
Overpower: see gamble, defeat, prevail, overcome, and strong
Owl: 321 Coptic *mulaj* ‘owl’ > UACV-1590 **muhuN* / **muhum* ‘owl’
Owl: 1117 Aramaic *kwkby* > UACV-1589 **kuku* ‘ground/burrowing owl’
Owl: 1361 Modern Western *ṭuroyo*; Syriac/Aramaic *papuke* ‘owl’ > UACV-1595 **poko* ‘burrowing owl’
Pain: 224 Egyptian *wxd* ‘be painful, suffer, endure’ > UA **okotï* ‘be in pain, suffer, sorrow’
Palm: 804 Arabic **saʕapat* ‘palm leaves’ > UACV-1608 **caupali* ‘palm sp’
Palm tree: 227 Egyptian *m’m’* ‘dom-palm (tree)’: > UACV-1605 **mahawa* / **ma(C)wa* ‘palm tree’
Palm tree: 743 Semitic *taamaar / tumr-aa* ‘date palm tree’ > UACV-1609 **tu’ya* ‘palm tree, sp’
Palm tree: 961 Hebrew *dɛqɛl* ‘date-tree, palm’ > UACV-1606 **taku* ‘palm tree’
Pant: 1052 Hebrew *š’p* ‘pant’ > HN *šošopaaka’* ‘make an inhaling noise’
Pay: 945 Hebrew *qny* / *qanaa* ‘acquire, buy’ > UACV-2405 **ŋani* / **ŋina* ‘pay’
Pea: see acorn
Peace: 182 Egyptian *ḥtp* ‘be at peace, rest, set (of sun), pacify’ > UACV-1616 **huCpi* ‘peaceable’
Peak: 507 Egyptian *tp* ‘head, chief, main, point, tip, peak’ > Mn(L) *topo* ‘peaked, pointed, sticking up or out’
Peel: 717 Aramaic /Syriac *qlp* ‘peel off, shell, rub away’ > UACV-1893 **kïlipi* ‘shell or shuck corn, v’
Peel: 843 Hebrew *piṣṣel*, impfv: *-paṣṣel* ‘skin, peel away (bark from sticks)’ > UA **pacca* ‘to shell’
Peel: 1419 Syriac *šagni* ‘remove from its place, alter, transform > Hopi *siiŋi* ‘peel, shed skin (as of a snake)’
Peel: see loosen
Pelican: see crane
Pelt: see jackrabbit and skin
Penetrate: 536 Arabic *bqr* ‘split open’; Syriac *bqr* ‘penetrate, investigate’ > UACV-617 **pukul* 'pin on'
Penis: 5 Hebrew *baaśaar* ‘flesh, penis’ > UACV-2271 **kwasiC* ‘tail, penis, flesh’ (Sem-kw)
Penis: 550 Aramaic bəśár ‘flesh’, biśr-aa ‘flesh-the’ > UACV-1618 *pisa ‘penis’ (Sem-p)
Penis: 794 MHebrew *’eber* ‘member, penis, part, arm’ > UACV-1619 **wï’aC* ‘penis’
Penis: 415 Egyptian *ḫnn* ‘penis, phallus, male member’ > UACV-1564 **hun* ‘penis’
Penis: 417 Egyptian *h’y* ‘groom, husband’ > Yq *hú’i* ‘male member, penis’
Perfect: 420 Egyptian *twt* ‘perfect, complete’ > UACV-156 **tutuli* ‘beautiful’
Perish: 928 Hebrew *gwʕ* / *gaawaʕ* ‘pass away, perish’ > Ktn *ŋïhw-ïk* ‘get worn out, vi’
Person: 1524 Egyptian *’ṯt* / *ṯt* ‘people’ > UACV-1420 **wïti* ‘person, man’
Person: 573 Hebrew *’iiš* ‘man, person’ > Ca *-iš* ‘person who does (the verb)’ (Sem-kw)
Person: 572 Hebrew *’iiš* ‘man, person’ (with negatives ‘no one’) > UA **wïsi* ‘person’ (Sem-p)
Pick: 788 Hebrew qṭp, impfv: -qṭop ‘break off, pluck’ > UACV-996 *tupu ‘pick, gather’
Pick: XX Hebrew *dbq* ‘cling, cleave to, hold to’ > UA **tupuk* 'pick, gather'
Pierce: 72 Hebrew *dqr* / *daaqar* ‘pierce, v’ > UACV-615 **tïka* / **tïkï* / **tïkiy* ‘cut, stick in’
Pierce: 124 Egyptian *tks* ‘pierce’; Coptic tooks > UACV-616 **tïkso* ‘pierce, poke’
Pierce: 194 Egyptian *ḏ’i* ‘pierce, transfix,’ > UACV-622a **sowa* ‘pierce, prick’
Pierce: 445 Egyptian *tbs* ‘prick, stab, pierce’ > UACV-629a **tapusa* ‘pierce’
Pierce, penetrate: 536 Arabic *bqr* ‘split open’; Syriac *bqr* ‘penetrate, investigate’ > UACV-617 **pukul* 'pin on'
Pierce: see horn
Pile: 1118 Arabic *’akamat* ‘hill, reef, heap, pile’ > UACV-1624 **wïkka* ‘pile’
Pillar: 416 Egyptian *ḫn* ‘pillar’ > Ls *húna* ‘sit up straight, vi, raise, lift, vt’
Pine: 569 Hebrew *’egooz* ‘nut tree’ > UACV-1626a **wokoN* / **wo(N)koC* ‘pine’
Pine, gum: 892 Arabic *ṣanawbar* ‘stone pine’ (type of pine) > UACV-1634 **sanawaC* ‘pitch, gum’

Pit: 41 Hebrew *bə'or* 'pit, cistern, well' < SP *qwi'oqqi* (< **kwi'oC-ki*) 'be hollow and round'
Pitch: 1116 Hebrew *zépɛt* (< **zipt-*) / *zaapet* 'pitch' > UACV-1632 **copï* 'pitch, torch'
Pity: 662 Hebrew *ɦnn* 'to favor, have compassion on' > The *-wen-* of Eu *na-vencem*/*na-wencem* 'pity'
Pity: 1485 Hebrew *rɦm* 'greet with love, take pity on' > UACV-2391 **(sun)-taha* 'pity, have compassion for'
Place: 1191 Syriac *'atr-aa* 'place-the' > Wc *-tïré* 'place of, place where'
Plan: 776 Hebrew *nṭr* 'watch over, guard' > UACV-2289 **natya* / **natay* 'plan':
Plant: 774 Hebrew *nṭʕ* 'to plant', yi-ṭṭaʕ 'he plants' > UACV-1635 **'ïca* 'to plant'
Plaster: 783 Hebrew *ṭpl* 'to smear or plaster over, stick, glue' > Hopi *cakwani* 'plaster':
Pleasant: 551 Aramaic *bśr* 'be sweet, pleasant, be glad' > UACV-2471 **pisa* 'like'
Pleased: 1501 Arabic *sly* / V *tasalla* 'to delight, take pleasure in' > Hp *salayti* 'pleased by/from, joyful over good luck'
Plow: 1060 Aramaic & Syriac *paddaan* 'plow, yoke of oxen' > UACV-673 **poto* 'digging stick'
Plow: 1331 Arabic *'kr* / *'akara* 'to plow, till, cultivate (land)' > UACV-672 **wika* 'digging stick':
Pocket: 327 Egyptian *q'r* 'bundle, pocket' > UACV-112 **kawaC* 'pocket, bag'
Point: 790 Hebrew *mooṭ* 'pole, carrying frame' > UACV-796 **mu(C)ti* 'point (of s.th.)'
Point: 1279 Aramaic *yəgar* 'hill, heap of stones' > UACV-1546a **yakaC* / **yakaR* (AMR) 'nose, point, ridge'
Point: 1502 Aramaic *šuup-taa* 'chip, pin, n.f.' > UACV-798 **cuppa* 'point, prick'
Poison: 877 Syriac sammem 'to poison'; Arabic smm 'to poison' > UACV-2521 *samïm 'be wet, numb(ing), drizzly'
Polish: 1367 Syriac *mrq* 'rub off, scour, polish, cleanse, vt' > Sr *mïyï'-kin* '1. wipe out, 2. cause to shimmer'
Possess: 313 Egyptian *nyw* 'of, belonging to, pl possessions' > Ktn *niw* 'possession, belongings
Possess: 1308 Hebrew *nɦl* / *nɦl*, *-nɦal* 'to maintain as a possession, take possession' > TO *nolawt* 'buy, buy from'
Pot: 335 Egyptian *qd* 'pot' > UACV-1714 **wakori* 'pot'
Pot: 383 Egyptian *ps* / *pss* 'vessel, container' > UACV-1706 **pasa(ta)* 'pot'
Pot: 636 Arabic *xabt-* '(baking) pan and cakes baked in it' > UACV-1705a **kapaC* 'pot'
Potato: 575 Arabic *kam'-* 'truffle(s)' > UACV-1718 **kamo'-ta* 'sweet potato'
Pound: see grind
Pour: 833 Hebrew *ṣbr* 'pour, heap up' > Tepiman *soobidai* 'head off'
Powerful: 493 Egyptian *phr p'y* 'medicine/power is his' > UACV-1797 **pahapi(C)* 'supernaturally powerful being'
Prairie dog: 888 Semitic *rkb* 'mount, climb up on' > Sh *cippih* 'prairie dog'
Prairie dog: 1089 Hebrew *qippod* 'hedgehog, short-eared owl' > UACV-1044 **kïNpa* 'prairie dog'
Pregnant: 143 Egyptian *bk'* 'pregnant' > UACV-2188 **poka* 'stomach, pregnant'
Pregnant: 552 Arabic *baṭuna* 'be paunchy, be pregnant, carry young' > UACV-1722 **pocca* / **putta* 'pregnant'
Pretty: 714 Hebrew *pl'* 'to be extraordinary, wonderful' > Ca *pálaw* 'be pretty'
Prevail: 49 Aramaic *gbr* 'prevail' > UACV-2556 **kwaC*(*-ku*) 'win'
Prevail: 1081 Syriac *tqp* 'wax strong, prevail' > UACV-1690 **kopa/i* 'win/lose in a game'
Prevail : 69 Hebrew *tqp* 'to overpower, v' > UA **takipa* / **takipu* 'push'
Prey: 734 Hebrew *mə-ṣuudat* 'net, prey' > UACV-641a **masat* / **masot* (< **masuta*) 'deer'
Prickly pear: 836 *p'-šikur* 'the drink' > UA **packo'or* 'sp. of prickly pear'
Produce (n): 74 Hebrew *təbuu'aa(t)* 'produce, yield from the land > UACV-1630 **tïpï'at*/ **tïpaC* 'pinion nut, pine sp'
Protect: 517 Egyptian *wi'* 'turn away, ward off, protect' > Hopi *wayoŋ-* 'protection'
Pull: 352 Egyptian *gw'* 'pull tight, be choked' > UACV-1725 **kawa/i* 'drag, pull'
Pull: 922 Arabic *gđb* 'pull, attract, pull out' > Ls *ŋisi-* 'pull hair'
Pull: 1514 Hebrew *'rg* 'to weave, pull taut' > UACV-1731 **(wi)laŋa* 'pull, drag'
Pull out: 1513 Semitic bɦn > UA *pu'na 'pull out'
Pull: see lead
Purple: 1134 Aramaic *tiklaa* 'purple-blue wool' > UACV-1777 **tï'kaC* 'red pigment, clay'
Push: 769 Hebrew *tqp* 'to overpower, v' > UA **takipa* / **takipu* 'push'
Put: 474 Egyptian *rdi* 'give, put, place' > UACV-1743b **tali* / **tari* 'put'
Put: 1127 Hebrew hiqtiil: *hooṣiig*, *yooṣiig*, ptcpl: mooṣiig 'set, place' > UACV-1745 **mociwa* 'place pl obj's seated'
Put in: 1123 Hebrew **-panni* / **pinne* 'have s.o./s.th. turn or head in a direction' > UACV-1747 **pana* 'put in'
Quail: 475 Egyptian *p'ʕt* 'quail' > UACV-1752 **supa'awi* 'quail'
Quail: 1082 Semitic *salwi* 'quail' > UACV-1751 **solwi* 'quail'
Quickly: 602 Hebrew *régaʕ* 'a moment, in a moment, a short while, abruptly' > Tr *teko* 'soon, in a short time, quickly'
Quiet: 353 Egyptian *gr* 'be silent, quiet, still' > Tr *kiri* 'tranquil, quiet'
Quiet: see calm
Quiver: see shake
Rabbit: 463 Egyptian *xnm* 'inhale, smell, eat, enjoy' > UACV-1757 **kaNmu* / **kanmï* (Kaufman) 'jackrabbit'
Rabbit: 597 Semitic *'arnaboot* 'hare, rabbit' > UACV-1754a **tapuC* / **taput* 'cottontail rabbit' (Sem-kw)
Rabbit: 596 Hebrew *'arnébet* 'hare' > UACV-1521 **wa'na* 'rabbit net' (Sem-p)

Rain: 683 Syriac *ʕmṭ* ‘become dark, cloud over, be obscure, concealed’ > UACV-1764a **(w)umaC* / **(w)ïmaC* ‘rain’
Rain: 1037 Hebrew *yoorɛ* ‘to water, send rain’ > UACV-2076 **yuya* (< **yawya*) ‘snow, v/n’
Rain: 1038 Hebrew *yry*, hiqtil impfv: *yooreh* ‘to water, send rain’ > UACV-1765 **horo* ‘rain, fall’
Rain: 1457 Arabic *ṣabba* ‘to pour’ > UACV-1766 **cikwa* ‘rain, v’
Raise, lift: 440 Egyptian *ṯsi* ‘raise, lift up’ > UACV-463 **tïcayi* 'raise, elevate, climb'
Rat: see mouse
Rattle: 31 Hebrew *ṣll* ‘to tingle, quiver’ > UACV-1929c **cili* ‘jingle, make rattling sound
Ravine: 646 Hebrew *náḫal* (< **naxal*) ‘river valley, wadi, stream’ > Ktn *naka-č* ‘gully, ravine, cliff’
Read: see count
Red: 587 Hebrew *’argaamaan* ‘purple, wool dyed with red purple’ > UACV-1774 **aNkaC* ‘red’
Red: 1350 Semitic *ṣd’* / *ṣdi* ‘grow rusty’ > Sr *ṣïrii’k* ‘become red, turn red’ > UACV-1776 **sïta* / **sïti* ‘red’
Red: 77 Hebrew *’dm* ‘be red’ > UACV-312 **oNtam* / **oNta(N/C)* 'brown'
Red: 1134 Aramaic *tiklaa* ‘purple-blue wool’ > UACV-1777 **tï’kaC* ‘red pigment, clay’
Refuse, **forbid**: 1333 Hebrew *m’n* ‘refuse’ > Hp *meewan-* ‘forbid, warn’
Reed: 267 Egyptian *twr* ‘reed’ > UACV-1783 **to’i* < **toli* ‘water plant sp., cattail’
Reed: 1135 Hebrew *qaanɛh* ‘reed, stalk’ > UACV-1778 **pa-kaN* ‘reed, phragmites’
Reed: 1136 Hebrew *’ébɛh* ‘reed, papyrus’ > UACV-1781 **wapi* ‘foxtail’
Reed: 1137 Hebrew *gómɛ(’)* ‘papyrus’ > UACV-1786 **oma* ‘reed’
Reed: 1216 Hebrew *qaane* ‘reed, stalk’ > UACV-2553 **kana* 'willow'
Reject: 191 Egyptian *thi* ‘go astray, transgress, reject’ > UACV-1304 **toha* ‘leave’
Remain: 135 Egyptian *mn* ‘remain, dwell’ > UACV-1317c **mana* ‘put (flat/lying down)’
Remain: 525 Egyptian *isq* ‘linger, wait for, vi; hinder, vt’ > UACV-2177 **ïka* / **ïkï* ‘remain, be in a place, let lie’
Remedy: 290 Egyptian *phrt* ‘remedy, prescription’ > UACV-1160a **puha* ‘supernatural power, medicine, healing’
Remember: 428 Egyptian *ʕnx* ‘be conscious of’ > Ktn *winikaï’* ‘remember, v’
Remove: 458 Egyptian *kfi* ‘denude, reveal, take off, remove’ > UACV-1000 **kappiwa* ‘degrain grain from ear’
Rheumatism: see murmur
Rib: 252 Egyptian *spr* ‘rib’ > Cp *amsisve-l* ‘rib’
Rib: 744 Hebrew *ṣeelaaʕ* / ṣalʕ- (construct/possessed) ‘rib’ > UACV-1809a **cawa* ‘rib’
Rib: 1526 Egyptian *im* ‘rib (no longer used in the Middle Kingdom)’ > UACV-1808 **amattaN* ‘rib’
Ridge: 1279 Aramaic *yəgar* ‘hill, heap of stones’ > UACV-1546a **yakaC* / **yakaR* (AMR) ‘nose, point, ridge’
Ridge: 7 Semitic **bahamat* ‘back, hill, mountain ridge, high place’ > UACV-99 **kwahama* ‘back’
Right: 801 Hebrew *hayyamiin* ‘the-right hand/side’ > UA **(h)ayamin-* ‘right’
Righteous: 1145 Hebrew *ṣadooq* ‘just, righteous’ > UACV-1864 **sitoka* / **siroka* ‘be sad, suffer’
Ripe: 4 Hebrew *baašel* ‘cooked, boiled, ripe’ > UACV-521 **kwasïC* ‘cook, ripe(n)’
Ripen: 1175 Hebrew *gml*, impfv *-gmol* ‘to complete, ripen, wean’ > UACV-1815 **mo(y)* ‘ripen’
Rise: 273 Egyptian *dw’* ‘rise early’ > UACV-2237 **to’ay* ‘rise, come up/out’
Rise: 1210 Hebrew *qwm*, prfv: qaam ‘rise, stand up’ > UACV-2504 **kam* ‘water to rise, make wave’
Rise: 1326 Arabic *dariga* ‘rise, advance step by step’ > TO(M) *čïïčïð(k)* ‘climb, rise, reach the top’
River: 309 Egyptian *itrw* ‘river’ > UACV-1818 **pa-tiwa* / *tawi* ‘river’
River: 799 Hebrew *yə’or* ‘river’ > UACV-364a **yaway* 'river, canyon'
River: 1351 Hebrew *bqʕ* ‘split, cleave, valley’ > UACV-1819 **pakowa* ‘river, current’
Roadrunner: see foot
Roar: 1341 Hebrew *rʕm* ‘to rage, roar’ > SP *tom’mu* ‘to make a big noise, thunder’
Roast: see burn, boil
Rob: 320 Egyptian *xpx* ‘rob’ > UA **kïpïk* ‘take’: Yq *kebék-ta* ‘take, grasp’
Rock: 603 Aramaic *rymh* (= *riimaa*) ‘large stone’ > UACV-1825 **tïmï-ta* > **tïN-(pV)* ‘rock’
Rock: 605 Hebrew *ṣwr* / *ṣuur* ‘rock, rocky ground, rock face, rocky hill, mountain’ > UACV-1829 **soya* ‘rock’
Rock (v): 1155 Arabic *hazza* ‘wave, rock, make tremble’ > UACV-1925 **hïya* ‘rock, shake, swing’
Romp: 506 Egyptian *nhp* ‘romp about, jump on’ > Mn *nohi* ‘(of animals) to scramble with, jump on’
Root: 948 Hebrew *ʕiqqaar* ‘root’ > UACV-1835 **ŋa-kaw* ‘root’
Rope: 167 Egyptian *rwḏ* ‘cord, bow-string, (as a plural) sinews’ > UACV-1844 **tïsa* ‘rope’
Rope: 1111 Hebrew *meetar* ‘bowstring, tent rope’ > CN *maatla-tl* ‘net, sling’
Rope: 1146 Aramaic *tkk* ‘to squeeze, press (between), twist, twine’ > UACV-1845 **tïkapu* ‘rope, thread’
Rot: 1142 Aramaic *yV-balleṭ* ‘shut eyes, be worm-eaten, moth-eaten, rot’ > UACV-1848 **yïpali* ‘rotten’
Rot: 1143 Arabic *ya-psudu* ‘rotten, decayed, putrid, spoiled’ > UACV-1852 **sora* ‘rot, go to waste, throw away’
Rot, difficult: 861 Hebrew *qšy* / *qaašay* ‘be heavy, hard, difficult’ > UACV-239 **kïsa* 'sour'
Round: 677 Hebrew *ʕagol* ‘round’ > UACV-436 **wakol* 'round(ed)'
Round: 1303 Hebrew *plk* ‘to be round’ > Hp *pölà-ŋ-pï* ‘round as a ball’

Round: 1483 Syriac *dwr* ‘to go round’ > UACV-454 **tura* / **tuya* ‘roll, turn, twist’
Round: 1484 Syriac *dwr* ‘to go round’ > UA **tur* ‘whirl, roll, twist’
Rub: 80 Hebrew *ḫpp* ‘to rub off, wash’ > UACV-2494 **up(p)a* 'bathe, wash, rub’
Rub: 779 Hebrew *ṭwḫ* ‘to over-spread, coat, besmear, over-lay’ > Wr *cuhca* ‘1 to rub, 2 to hang up, put on clothes’
Rub: 940 Arabic *maʕaka*, impfv: *-mʕaku* ‘rub s.th.’ > UACV-1096 *ŋaka/i* ‘grind, scrape, rub against’
Rub: 1510 Aramaic *šwp* ‘to smooth, rub, polish, sharpen’; Syriac *šwp* ‘to rub’ > Ktn *šuvi’* ‘to rub clothes’
Ruminate: 914 Hebrew *grr* ‘to ruminate, to saw, to drag’ > UACV-1936 **ŋaya* ‘to move side to side’
Run: 85 Hebrew *ṣlḫ* ‘rush, v’ > UA **coloa* ‘flee, run’
Run: 459 Egyptian *sxti* ‘run! hurry!’ > UACV-1028 **soko-miya* ‘walk’
Run: 741 Hebrew *rwṣ* ‘run’ > UA **tuca* ‘run, hurry s.th. along, vt’
Run: 1233 Arabic *ʕdw* / *ʕadaa* ‘run, dash, race, pass’ > UACV-1024 **wata* ‘run’
Sack: 330 Egyptian *gwn* ‘sack’ > UACV-114a **kuna* ‘bag, sack’
Sack, bag: 1402 Egyptian mx’ ‘make fast, tie, bind, fetter, v’ > UA *maĝo’i- ‘bag, bind, wrap, blanket’
Sad: 903 Hebrew *khh*, (qittel) *kehah* ‘be inexpressive, dim, dull, colorless, disheartened’ > Ktn *’a-kïhahïk* ‘sad’
Sad: 1144 Hebrew *’almaanaa* ‘widow’ > UACV-1863 **o’mana* ‘sad, suffering’
Sad: 1317 Aramaic *ṭrḫ* ‘take the trouble’ > Wr *ceriwe* ‘to be sorry or sad about s.th.’
Sad: 1145 Sem *ṣadooq* ‘just, righteous’ > UACV-1864 **sitoka* / **siroka* ‘be sad, suffer’
Saguaro: 400 Egyptian *sʕr* ‘thorn bush(es), thorny undergrowth, > UACV-355 **sawaro* ‘saguaro cactus'
Saguaro: 439 Egyptian *šnd̲t* ‘thornbush’ > UACV-350 **sacani* 'saguaro cactus'
Salt: 280 Egyptian(F/H) *ḫm’(t)* ‘salt’ > UA **omwa* / **oŋa* ‘salt’
Sandal: 209 Egyptian *t̲bt* / *twt* ‘sole (of foot), sandal, foot’ > UACV-1959 **tapat-ta* ‘footwear’
Sandals: 210 Egyptian *twt* ‘sandals, pl’ (Cerny 1976, 199) and its dual **twty* > UACV-1953 **tuti* ‘sandals’
Sandals: 211 Egyptian *t̲bwt* ‘sandal, sole’ > UACV-1961 **poca* ‘zapatos’
Sand: 162 Egyptian *šʕy* ‘sand’ > UACV-1867 **siwal*
Sand: 1141 Hebrew *ḫool* ‘sand’ > UACV-1868 **(h)ola* (Tep) / **otta* (Num)‘sand’
Saw: 914 Hebrew *grr* ‘to ruminate, to saw, to drag’ > UACV-1936 **ŋaya* ‘to move side to side’
Say: 66 Hebrew *’mr* / *’aamar*, impfv: *yoo-mar* / *yoo-mer* ‘say’ > UACV-1880 **umay* / **may* ‘say’
Say: 1001 Arabic *qiila* (passive) ‘was said, it was said that …’ > CN *kil* ‘it is said that …’
Say: 1002 Hebrew *qool* ‘voice, noise’ (root *qwl*) > Hp *qawï* ‘to say, speak’
Scarlet: see charcoal
Scatter: 626 Arabic *zrʕ* ‘sow, spread, scatter’; Hebrew *zrʕ* ‘sow’ > Hopi *cala-* ‘scatter’
Scorpion: 363 Egyptian *srqt* / *s’qt* / *slqt* ‘Scorpio (constellation)’ > UACV-1887 **saka* ‘scorpion’
Scorpion: 364 Egyptian *t’-srqt* / *t’-s’qt* ‘the scorpion’ > UACV-1891 **taska* ‘scorpion’
Scorpion: 479 Egyptian *d̲’rt* ‘Skorpion’ > UACV-1886 **suyi* 'scorpion, sting'
Scrape: 1475 Hebrew *glb* ‘shear, shave’ > Ca *ŋep* ‘scrub, scrape, vt’
Scratch: 832 Semitic *srṭ* ‘scratch’, *sarṭaan / sarṭoon* ‘crab’ > UACV-458 **saCtun > siCtun* / **suCtun* 'claw, crab'
Scratch: 1487 Syriac *gaššaḫ* ‘to scratch, to wound slightly’ > UACV-2386 **ŋaska* < **ŋacka* ‘be rough, scratch’
Scratch: 1490 Arabic *xdš* ‘scratch’ > UACV-2385a **kïca* 'scratch'
Sea: 1165 Arabic *baḫr-* ‘sea, large river’ > UACV-2497 **pa* / **pa’wi* 'water'
Search: 36 Hebrew *bʕy* / *baʕaa*[1] ‘enquire, search’ > UACV-1493 **kwawa/i* ‘invite, call’
See: 82 Hebrew *ḫzy* / *ḫazaa* ‘see, behold’ > UACV-1915 **husi* / **h*^{w}*asi* ‘look, peek at’
See: 100 Hebrew **ra’oot(-aa)* ‘seeing (it)’ > UACV-1912 **ta’uta* ‘find’
See: 424 Egyptian *nw* ‘see’: Tr *no-* ‘observe, examine, contemplate, look at’; Tr *newa* ‘be visible’
See: 600 Hebrew *r’y* / *raa’aa* ‘see, v’; Hebrew ro’e ‘seer’ > UACV-1904 **tïwa* ‘find, see’
See: 1406 Sem *r’y* / *ra’aa* / **ra’a*^{y} ‘see’ > Wr(MM) *re’é* ‘seem, look’
Seek: 288 Egyptian *wx’* ‘seek’ > UA **wi’wa* / **wa’wa* ‘seek, want’
Seed: 554 Aramaic *bəzar* ‘seed’ > UACV-1916 **paCci* / **pa’ci* ‘seed’
Seed: 1153 Aramaic *’bh(w)l* ‘seed of mtn cypress’ > UACV-1921 **paha(i)* ‘seed’
Seen: 1269 Hebrew **na-r’ey* ‘be seen, appear’ > UACV-1905 **nï(r)* / **nï(r/y)’i* ‘see’
Seer: 1139 Hebrew *ro’ɛh* ‘seer’ > UACV-1798 **tï’a* ‘have a vision or supernatural power’
Seer: 1140 Hebrew *ro’ɛh* ‘seer’ > UACV-1799 **tïwi* ‘deity, spirit, seer of supernatural means’
Seize: 966 Arabic *θqf* II / *θaqqafa* ‘seize, confiscate’; Hebrew *šqp > Hopi *sokop-ti* ‘steal, pilfer’
Self: 1030 Hebrew *nɛpɛš* ‘soul, self’ > UACV-27 **pïsu* / **pasu* ‘self’
Sell: 422 Egyptian *rdi* ‘give, put, grant’ > UACV-2401 **tari* 'sell'
Sell: 565 Hebrew *mkr* / *maakar* ‘sell, give’ > UACV-1003 **makaC* (AMR) ‘give’
Sell: see lend
Send: 477 Egyptian *ḫn* ‘equip, command, charge s.o. with a task’ > UACV-1854 **hula* / **hura* ‘send’
Send: 478 Egyptian *ḫn* ‘order, command’ > UACV-1857 **win* ‘send’

Separate: 519 Egyptian *wpi* ‘open, part, separate, divide (goods)’ > Tb(H) *woopaanat* ‘divide in two, cut in half’
Servant: 762 Hebrew *šlḥ* ‘stretch out, send, despatch’ > CN *šooloo-tl* ‘page, male servant’
Set, sun: 184 Egyptian *ḫtp* ‘to set, of sun’ > UACV-2243a **huru-* ‘set (of sun), v’
Sew: 1264 Hebrew *tpr* / *taapar* ‘stitch together’ > UACV-2332a **tappiCta* ‘tie’
Sew: 1265 Hebrew **-tuppar* ‘sown together’ > UACV-2332b **tuppa* ‘tie(d)’
Sew: 1266 Hebrew qittel impfv: *-tapper* ‘sew together’, verbal noun: tippuur > UACV-2330a **pura/i* 'tie'
Sew: 1411 Arabic *nasaga*, impfv *-nsugu* ‘to weave’ > UACV-2511 **su* ‘sew’
Shade: 183 Egyptian *ḫtp* ‘rest place’ > UACV-1922b **hïppa* > **hapa* ‘shade’
Shade: 1220 Syriac *’etqaraš* ‘to shade, put in the shade’ > UACV-1922 **hïkka* / **hïkya* ‘shade’
Shadow: 263 Egyptian *šwt* ‘shade, shadow’ > CN *seewal-li* ‘shade’
Shake: 250 Egyptian *sʕ’y* ‘tremble, v’ > UACV-1933 **sowa* (< **sawa*) ‘shake’
Shake: 359 Egyptian *ktkt* ‘quiver, v’ > Wc *kace*/*kaci* ‘tremble, shake’
Shake: 481 Egyptian ʕʕ ‘shake’ > UACV-1928a **wiwi-puku* ‘tremble’
Shake: 941 Hebrew *nʕr* ‘shake off/out, shake self’ > UACV-677 **ŋïy* ‘shake, be dizzy’
Shake: 1189 Hebrew *ygʕ* ‘grow weary, labor, struggle’ > UACV-1932a **yowa* ‘shake’
Shake, Tingle: 31 Hebrew *ṣll* ‘to tingle, quiver’ > UACV-1929c **cili* ‘jingle, make rattling sound
Sharp: 253 Egyptian *spd* ‘sharp’ > UACV-799 **sipaC* 'point'
Sharp: 271 Egyptian *dm* ‘be sharp, sharpen’ > Ca *tama* ‘be sharp, v’
Sharpen: 908 Hebrew *gabal* (II) ‘to forge’ > UACV-800 **ŋapaC* 'sharp(en)’
Shave: 341 Egyptian *ḫʕq* ‘shave’ > Hp *hèewi* ‘scrape out, scrape clean’
Shave: 1339 MHebrew *šippaa* ‘to make smooth’ > UACV-1892 both **sipa* and **sippa* ‘scrape, shave’
Shell: 1248 MHebrew qaśiiṭaa ‘a standard value, coin, jewel’; Syriac **qeṣṭ-aa** ‘measure’
> UACV-2016 **koCti* / **koCta* ‘bark, shell, money’
Shine: 13 Arabic *snw* ‘gleam, shine’; Ethiopic *snw* ‘be beautiful’ > Hopi *soniwa* ‘be beautiful, bright’
Shine: 462 Egyptian *ṯḫn* ‘be shining’, sparkle, glitter, shine’ > UACV-1207 **toŋa* ‘hot, heat (of) sun/day, shine’
Shine: 1274 Aramaic *kaukb-aa* / kookb-aa ‘star-the’ > UA **kuppaa’* > Sr *kupaa’* ‘to shine (as of the stars)’
Shiny: see desert
Shirt: 755 Hebrew *kutónet* ‘shirt-like tunic’ > UACV-488 **kutun* ‘shirt’
Shirt: 869 Syriac *ṭaan* / *ṭa’n* ‘body of a shirt’ > UACV-495 **taa’* ‘shirt, clothing’
Shoe: 482 Egyptian *wx’ti* ‘pair of sandals’ > UACV-1955 **wakaC* ‘shoe’
Shoe: 1280 Aramaic *mooq* ‘felt-sock or stocking’ > UACV-1958 **moko* ‘footwear’
Shoe: 1281 Syriac *pant-aa’* ‘upper leather of a shoe, instep of the foot-the’ > UACV-1957 **paNca* ‘shoe’
Shoe: see also sandal
Shoot: 95 Hebrew *rbb* ‘shoot (an arrow)’ > UACV-2310 **tïkwa* ‘hit by striking or throwing, shoot (arrow)’
Shoot: 96 Hebrew *rby* / *rabaa* ‘shoot (bow and arrow) > UACV-2309a **tapa* / **tapi* 'throw, hit'
Shoot: 736 Hebrew *ṣwd* / *ṣyd* ‘to hunt’ > UACV-2327 **sïr* ‘shoot, hunt’
Shoot: 782 Arabic *ṭḫy* / *ṭaḫaa* ‘to hurl, shoot’ > Wr *cewa* ‘to throw or hit with a missile’
Shoot: 1128 Hebrew *rby* / *rabaa* ‘shoot (arrow)’ > UACV-1743a **tap* ‘put’
Shoot: 1183 Syriac *mḥy* / *məḥa’* ‘to strike, smite, wound’ > UACV-2314 **mu’a/i* / **mu(k/h)V* ‘shoot (arrow)’
Shoot: 1184 Syriac *qaššet* ‘shoot an arrow with a bow’ > UACV-2321 **kwaCti* 'shoot'
Shore: 1074 Arabic *saaḥil* ‘coast, seashore’ > UACV-792 **suwil* 'edge, shore, border'
Short: 1382 Aramaic *qəpiiduut-aa* ‘shrinking, shortness’ > Sr *qapöc* ‘short’
Shoulder: 51 Hebrew **kaatep* ‘shoulder’ > UACV-1966 **kotapa* / **kotapo* ‘shoulder’
Shoulder: 56 Hebrew *šɛkɛm* ‘shoulder’ > UACV-1967a **sïka* ‘shoulder, arm, armpit’
Shout: 483 Egyptian *w’g* ‘shout with joy, call, cry’ > UACV-1975a **wa’aN-ki* ‘shout’
Show: 1519 Syriac *ʕayyen* ‘to eye, perceive, point out, show’ > Ktn *’ayn* ‘show s.o. s.th.’
Shrimp: 1249 Arabic *quraidis* ‘shrimp’ > UACV-577 **pa-koCci* ‘shrimp’
Shrink/shrivel: 1009 Syriac qmṭ ‘take hold, shrink, shrivel, wrinkle’ > Hp homi(k-) ‘shrink, draw together, shrivel up’
Shrivel: 1380 from Semitic *ʕqr* ‘uproot, be sterile’ > UACV-720 **waki* ‘dry, shrivel, thin’
Shroud: 148 Egyptian *t’yt* ‘shroud’ > UACV-256 **tawayi* ‘wrap around’
Shy: 1512 Hebrew *ḫrd*, impfv: *yɛḫerad* / *tɛ-ḫ(ɛ)rad* ‘tremble, worry’ > UACV-1949 **tïwa* ‘shy, embarrassed’
Sick: 630 Hebrew *ḫole* (< **xole*) ‘be sick, hurting’ > UA Sem-p **koli* ‘be sick, hurt, vi’
Sick: 1284 Hebrew *dwy / daawɛ* ‘faint, sick, mentstruating’ > UACV-1978 **tïwoya* / **tï’oy* / **tï’mo* ‘sick(ness)’
Side: 21 Arabic **ganb-* ‘side, n’ > UACV-1980 **-ŋakwa* / **-ŋako* / *(*mana*)*-ŋakwa* ‘side’
Side: 1463 Hebrew *śaapaa|t* ‘lip, speech, edge, shore (of sea), bank (of river)’ > UACV-1981 **sap* / **sïp* ‘side’
Silent: 750 Hebrew *tmh* / *taamah* ‘become speechless in the face of terror, v’ > Tb *tehmat* ‘be silent’
Sing: 35 Hebrew *brk* ‘to bless, praise’; birkaa ‘blessing, praise’ > UACV-1982 **kwika* ‘sing, song’
Sing: 408 Egyptian *g’* ‘sing’ > SNum **ka* ‘sing’

Sing: 958 Hebrew *qiynaa* ‘funeral song, dirge’ > Hopi *kïyna* ‘begin singing a song, start a song’
Sing, lament: 1021 Hebrew *nhy* / *nahaa*^{y} ‘to lament’ > UACV-1944 **nï’ï* ‘sing’
Sink, flood: 254 Egyptian *smḥy* ‘flood, drown, sink, vt’ > UACV-1994 **sum* ‘sink’
Sink, drown: 233 Egyptian *mḥi* ‘drown, be drowned, overflow > UACV-1997 **muCta* ‘sink, be in water/liquid’
Sink: 1159 Hebrew *ṭbʕ* sink down (quttal, hoqtal) > UACV-1993 **cuppa* ‘sink, submerge’
Sink: 1320 Hebrew *ṭbʕ* ‘sink down’ > Hp *civohkya* ‘quicksand, quicksand area, swampy sediment’
Sister: 594 Hebrew *’aḥoot* (< **’axoot*) ‘sister’ > UACV-2000 **ko(’)ti* / **ko’ci* (AMR) ‘older sister’
Sister: 595 Aramaic *’axaat-aa* ‘sister-the’ (rather than ’axoot) > UACV-2002 **wakati* ‘younger sister’
Sit: 3 Hebrew *yšb* ‘sit, dwell’ > UACV-2005 **yasa* / **yasiba* ‘sit, dwell’
Sit: 329 Egyptian *qd* ‘go round’ > UACV-2006 **katï* / **kattï* ‘sit’
Sit: 951 Arabic *ǧls* / *ǧalasa* ‘sit down’ > Ca *ñaš* / *naš* ‘sit down, settle down (live or camp)’
Sit: 1158 Hebrew *yoošbim* ‘sit, pl’ > UACV-2009 **yukkwi* ‘sit, pl’
Skin: 973 Hebrew *gɛlɛd* ‘skin’ > UACV-2022 **’ïli*… > Tep **’ïlida* ‘skin’
Skin, hide, corpse: 1130 Syriac *pagr-aa* ‘body-the, flesh, carcase’ > Hp *pïïkya* ‘skin, animal hide, flesh’
Skin: 1131 Syriac *pagr-aa* ‘body-the, flesh-the, a carcase’ > UACV-2027 **tïpïhï* ‘hide, skin’
Sky: 98 Hebrew *rqʕ* ‘beat, stamp, beat out, spread out > UACV-2032a **tukuN-pa* ‘sky, up, above’
Sleep: 1415 Semitic *rdm* ‘sleep’ > Tb(H) *culuumat* ‘sleep, vi’
Sleep: 1430 Arabic *iġpaa’a(t)* ‘slumber, nap’ > UACV-2034a **ïppïwi* / **ïCpïCi* / **pïwi* ‘sleep’
Sleep: see also hidden
Slide: 765 Hebrew *ḫlq* ‘be smooth, slippery’; Semitic/Arabic xaluqa > UACV-2039 **kalu* ‘slide’
Slide: 1250 Aramaic *šrg* / *šrq* ‘slip, slide’ > UACV-2037c **siro* ‘slide, slip’
Slope: 255 Egyptian *sqd* ‘slope (of pyramid)’ > UA **sikiC* ‘slanted (terrain), side’
Small: 692 Arabic *ṣġr* / *ṣaġura* / *ṣaġira* ‘be small, little, scanty, young, dwindle’ > UACV-1365 **cako* ‘small’
Small: 1466 Hebrew *mʕṭ* ‘be few, be too small’ > UACV-1362 **mi’a* ‘small’
Small: see also child
Smear: 79 Hebrew *ḫmr* ‘to cover or smear’ > UACV-2381a **humay* / **humar* ‘smear, spread, rub, paint’
Smitten: 52 Hebrew *mukkɛ* ‘smitten’ > UACV-655a **mukki* ‘die, be sick, smitten’
Smoke: 1491 Hebrew participle *maʕalɛ* ‘cause (smoke) to rise’ > UACV-2050 **mola/i* ‘be smoke, give off smoke’
Snake: 201 Egyptian *ḏnnwtt* ‘snake, front-snake’ > UACV-2062 **sinawi* 'snake'
Snake: 240 Egyptian *nʕw* ‘serpent’ > UACV-583a **nuyu’a* ‘to crawl, as a snake, v’
Snake: 278 Egyptian *fnṯ* ‘snake, intestinal worm > UACV-2064 **siktaput* ‘red?-snake’
Snake: 332 Egyptian *qrḫt* ‘serpent spirit > UA **koNwa* ‘snake’
Snake: 972 Hebrew *qippoz* ‘arrowsnake’ > Tr *aposini* ‘venomous serpent’
Snake, deceiver: 1198 Hebrew *ʕqb* ‘seize by the heel, betray, deceive’ > Hp *lölöqaŋw* ‘bullsnake, gopher snake’
Sneeze: 1162 Hebrew *ʕaṭišaa* ‘sneeze, n.f.’ > UACV-2071a **ha’t(w)isa* (> **ha’(N)kwisa*) 'sneeze, vi'
Snore: 654 Arabic *xrr* / *xarra* ‘to snore’ > Ls *xaráá-ya* ‘to snore’
Snore: 1299 Syriac *ṣrḥ* ‘groan, cry out, crackle (of fire, lightning)’ > UACV-2072 **osoroN(i)* ‘snore’
Snow: 760 Hebrew *šɛlɛg* ‘snow’ > UACV-2078 **sïk* ‘snow’
Snow: 1276 Aramaic *talg-aa* ‘snow-the’; Syriac *talg-aa* ‘snow-the, n’ > UACV-2077 CNum **takka* ‘snow’
Snow: see rain and numb
Soft: 1311 Hebrew *mwg* / *muug* ‘to melt, soften, dissolve, faint’ > TO *moik(a)* ‘to be soft’
Some: 1335 Semitic *’aḥad* ‘one’, Hebrew pl: *’aḥadiim* ‘a few, some’ > Tr *ahare* ‘some, certain ones, others’
Son: 206 Egyptian *ṯ’y* ‘male, man’ > UACV-139a **tuwaC* / **tu'aC* 'to bear, son, child'
Son: see also boy, child, and brother, younger
Soon: 976 Hebrew *qrb* ‘approach, draw near’ > UACV-2356 **ayopi* 'soon [i.e., near in time]'
Sorry: 942 Hebrew *qiinaa* ‘funeral song, dirge, fem n.’ > Ls *ŋináŋna* ‘feel sorry for, feel compassion towards’
Sound: 1064 Ugaritic *lxšt* / **lxušu* ‘whispering’ > UACV-1539a **kusu* ‘make sound (characteristic of the animal)
Sound: 1471 Hebrew *tqʕ* ‘sound/blow (horn)’ UACV-1977 **tokowa* ‘crow, (animals) to make their respective noise’
Sour: see bitter, rot, and difficult
South: 1166 Hebrew *qɛdɛm* / *qedɛm* ‘in front, east’ > UACV-2102 **kitam* 'south'
Sow: 623 Hebrew *zrʕ* / *zaaraʕ* ‘sow (seed)’; Syriac *dəraa* ‘scatter, sprinkle > CN *cayawa* ‘sew, scatter seed’
Sow: 1499 Hebrew *zry* ‘to scatter, sow’ > UACV-1920 **tari* ‘seed’
Speak: 11 Hebrew *dibber* / *-dabber* ‘to speak’ > UACV-1876a **tïkwi* ‘say’
Speak: 611 Hebrew daabar ‘to speak’ > UACV-1881 *tavay ‘speak’
Speak: 684 Hebrew *ʕeṣaa* ‘advice’ > UACV-1870 **na-wïsa* / **na-oca* (> *nooca*) ‘speak’
Speak: 1151 Syriac *etpakken* ‘to jaw, gabble’ > UACV-1879 **aCpaka-* ‘talk’
Speak/groan: 1147 Hebrew *n’q, na’aqat* ‘groan’ > UACV-1869 **ni’oka* ‘speak’
Spear: 1291 Hebrew *sek* ‘thorn’; Hebrew *sukkaa(t)* ‘barb, spear’ > SP *siġi* / *siki* ‘spear’

Spider: 351 Egyptian *ṯs* ‘tie, weave’ > UACV-2106 **tu’rusi* 'spider'
Spider: 1409 Aramaic *kwkyh* / **kuuky-aa* ‘spider’ > UACV-2107 **kuukyaa* / **kukkaC* (AMR) ‘blackwidow spider’
Spill: 763 Hebrew *šille^{a}ħ* ‘let go, dismiss, send away, make water flow’ (qittel) > UACV-2315 **sila/i* 'spill'
Spin: 727 Semitic *swrr* ‘turn, revolve, dance’ > UACV-447 **suyuyu* ‘spin, whirl’
Spin: 770 Hebrew *ṭwy* / *ṭawaa* ‘to spin’ > CN *cawa* ‘to spin’
Spirit: 1170 Hebrew *ha-ruuħ* ‘spirit’ > UACV-2117 **arewa* ‘spirit’
Spit: 382 Egyptian *tš* ‘spit out’ > UACV-2118 **tusaC* / **tusiC* ‘spit, v’
Spit: 1171 Hebrew *roq* ‘spittle’ > UACV-2122a **cukV* ‘spit, v’
Spit: 1252 Arabic *taffa* (< **tappa*) ‘to spit, spew’ > UACV-2122b **cupa* / **top* ‘spit, vi’
Spray: see drizzle
Spread: 526 Egyptian *dr* ‘lay out, spread out, stretch out’ > UACV-2210 **ta’la* (< **ta’ta*) ‘spread, stretch out’
Spread: 764 Hebrew *simlaa* / *simla-t* ‘wrapper, mantle’ > UACV-2211 **sam’aC* ‘spread, v’
Sprinkle: 709 Arabic *ṯll* / *ṭalala* ‘spray, sprinkle, drizzle, bedew’ > UA **cololo* ‘sprinkle, rain lightly, v’
Sprout: 84 Hebrew *yi-ṣmaħ* ‘sprout’ > UA **icmo* ‘sprout’
Sprout: 813 Hebrew *ṣmħ* / **ya-ṣmax* ‘sprout, grow’ > UACV-1101 **yama* / **yami* ‘sprout(ing), grow (thick)’
Squash*:* see gourd
Squeeze: 1228 Arabic *faṣaʕa* (< **pṣʕ*) ‘to squeeze out’ > UACV-904g **pacu* ‘squeeze, smash’
Squeeze in: see cram, crowded, tight
Squirrel: 57 Hebrew **siggoob* ‘squirrel’ > UA **sikkuC* ‘squirrel’
Squirrel: 957 Arabic *qarqađaan* ‘squirrel’ > UACV-2142 **koŋi* 'squirrel'
Squirrel: 1362 Syriac/Aramaic *simmora* ‘squirrel’ > UACV-2146 **ciCmo* / **cimo* ‘squirrel’
Stake: 1470 Hebrew *tqʕ* ‘drive in (peg, stake) > Ktn *tï’ŋ-tï’ŋ-k* ‘drive in a stake or nail’
Stand: 1256 Egyptian *wn* ‘be, exist’ > UACV-2158 **wïnï* ‘stand’
Standard: 1307 Hebrew *nes* ‘flag, standard, ensign’ > Hp *na’ci* / *naci* ‘standard outside kiva when not in use’
Star: 154 Egyptian *sb’* ‘star’ > UA **sipo’* > **si’po* ‘star’
Star: 1408 Syriac *dinħ-aa* ‘sunrise, light, the ascendant or predominant star’ > UACV-2168 **tatinuN-pi* 'star'
Star, particular: 156 Egyptian *gnḥt* ‘a (particular) star’ > SP *kaŋa-* ‘morning star’
Star, shine like: 1274 Aramaic *kaukb-aa* / kookb-aa ‘star-the’ > UA **kuppaa’* > Sr *kupaa’* ‘to shine (as of the stars)’
Statue: 421 Egyptian *twt* ‘statue’ [or standing image] > UACV-2166 **tuC* / **tutu* ‘stand’
Steal: 157 Egyptian *iṯ’* ‘take, carry, steal’ > UA **itu’i* > *i’tu* ‘to steal, take’; and 158 Egyptian iṯi
Steal, seize: 966 Arabic *θqf* II / *θaqqafa* ‘seize, confiscate’; Hebrew *šqp > Hopi *sokop-ti* ‘steal, pilfer’
Step: 1364 Syriac *rgl* ‘come or go on foot, step forward’ > Tb(H) *taŋammin* ‘step on, vt’
Step, stomp: 902 Hebrew pʕm ‘step, pace, foot’ > Kw pumake’e ‘stomp in a regular beat, beat (of the heart)’
Stick: 651 Semitic **xṯr*: Hebrew *ħoṭer* ‘rod’ > UA **(h)uci* ‘tree, stick’
Still: 1328 Hebrew *’ak* ‘surely, entirely, yet, but, only’ > CN *ok* ‘still, yet, for now, first, in addition’
Sting: 485 Egyptian *psħ* ‘bite, sting (gnat, scorpion, fly)’ > UACV-2185 **upcu* ‘stinger’
Stingy: 1035 Hebrew *qammәṣ-aan* / **ya-qmuṣ* ‘miserly, stingy’ > UACV-36 *yamuC 'angry, stingy'
Stink: 187 Egyptian *ħw’* ‘foul, offensive, putrid > UACV-2044 **hu’a* / **hu’i* ‘break wind, stink’
Stink: 672 Arabic *ħabaqa* ‘to pass air, break wind’ > Hopi *hovaqtï* ‘to smell, have an odor’
Straight: 944 Hebrew *tiqqen* ‘make straight, straighten’ > Ktn *tïŋen* ‘straighten arrows’
Straight: 1023 Hebrew *tqn* ‘make straight’ > UACV-1744 **tïka/i* or **tïkaC* ‘put lying down, stretched/spread flat’
Stream: 802 Hebrew *yaabaal* / *yuubal* ‘watercourse, stream’ > UACV-365 **yïppa* ‘valley’
Strength: 1172 Hebrew *gәbuuraa* ‘strength’ > UACV-2215 **wupuka* 'strong, strength'
String: 1251 Hebrew *qaw* / *qaaw* ‘string’ > Ls *qááwina-š* ‘bowstring’
Strip: 343 Egyptian *kf* ‘uncover, unclothe, doff clothes, strip, deprive > Hp *qàapï-k* ‘peel off, scale off’
Stomach: 337 Egyptian r’-ib ‘stomach’ > UACV-2191 *to’i 'bone, belly'
Stop: 1007 Semitic **xdl* (> Hebrew *ħdl* / *ħaadal*) ‘cease, cease doing’ > Hp *hïrïï-ti* ‘come to a stop, harden’
Stop: 1315 Hebrew **tV-kle* ‘stop, come to an end, be completed, finished’ > Ca *-teklu-* ‘1 be quiet, still, 2 stop’
Store: see bundle
Straight: 268 Egyptian *dwn* ‘stretch, straighten > UACV-2208 **tuna* ‘straight’
Strong: 653 Hebrew *ħayil* / *ħail* / *ħeel* ‘strength, ability, efficiency’ > UACV-2216b **wïl* 'strong, able'
Strong: 336 Egyptian *nxt* ‘strong, stiff, hard’ > UA **nokat* ‘upper arm’
Strong: 1261 Arabic *šdd* ‘to be firm, solid, hard, strong’ > UACV-2219 **sïCï* > **siï* ‘strong’
Strong: see defeat and prevail
Suck: 1160 Hebrew *ynq* ‘to suck’ > UACV-2048 **yï’na* ‘smoke tobacco, smoke by sucking’
Suck: 1173 Aramaic *mwṣ* ‘suck’ > UACV-2223 **mos* 'suck'
Suck: 771 Hebrew *ṭʕm* ‘taste, eat’ > UACV-2222a **cu’mi* > **cuŋV* 'suck, sip, kiss'
Suffer: 1188 Hebrew *ygʕ* ‘grow weary, labor, struggle’ > UACV-2342. **-yowa* 'suffer'

Suffer: 218 Egyptian *swn* 'suffer' > UACV-1165 **suna* > SUA **sura* 'suffer, heart, inner part, seed'
Summer: 738 Hebrew *qayiṣ* / *qeyṣ* 'summer' > UACV-2228 **kuwïs* 'summer'
Sun: 361 Egyptian šw 'sun, sunlight' > UA *siw 'hot'
Sun: 1379 Egyptian *rʕ* + *mrr* 'sun-go' > UACV-2230e **ta-miya* 'sun, day, sun-going'
Swallow (n): 6 Hebrew *blʕ* 'swallow, v' > UACV-785 **kwïluC* 'swallow'
Swallow (v): 46 Hebrew bry, impfv: -bre 'consume food' > UACV-775 **kwa'a* 'swallow, eat'
Sweat: 308 Egyptian *išdd* 'sweat'; > UA **pa-sur* 'sweat, v'
Sweep: 515 Egyptian *'xi* / *i'xi* 'sweep together' > UACV-2256a **wak* 'sweep, comb'
Sweep: 1353 Aramaic *kabbed* / **-kbod* 'to honor, to sweep, make look respectable' > UACV-2254 **poci* 'sweep'
Sweep: 1354 Hebrew *hikbad* / *hikbiid* 'to sweep' > UACV-2257 **(hi)paca* 'sweep'
Sweep: 1355 Aramaic *kabbed* 'to sweep' > PYp *kavilteda* 'to clean house, vt'
Sweet: see bee
Swell: 553 Hebrew *bṣq* 'to swell'; Arabic *basqat* 'raised spot' > UACV-2263 **posa* 'swell'
Tadpole: see frog[2]
Tail: 5 Hebrew *baaśaar* 'flesh, penis' > UACV-2271 **kwasiC* 'tail, penis, flesh'
Tail: see dog
Take: 158 Egyptian *iṯi* 'take, carry off, rob' > UA **ïci* 'steal, take'
Take: 159 Egyptian *ṯ'w* 'take up, seize, snatch > UACV-998 **tï'wi* / **tu'wi* 'to gather seeds, harvest'
Take: 369 Egyptian *nḫm* 'take away, carry off, save, rescue' > UA **nuŋ* / **nuk* 'take'
Take: 834 Hebrew *'ḫz* / *'aaḫaz* (< *'xđ*) 'take, grasp' > UACV-392 **u'...* / **uNwa* 'take, carry'
Take: 835 Hebrew impfv *ye'eḫoz* (< **ya'xuđ*) also impfv *yooḫez* > UACV-386 **yawi* / **ya'wi* / **yaŋwi* 'carry, grasp'
Talk: see speak and say
Tall: 387 Egyptian *wti* 'tall, be big, grow' > UACV-1389 **otï* / **utu* / **uta* 'long, tall'
Tall: 1015 Hebrew *kabbiir* / **kabara* 'strong, mighty' > UACV-1391 **kaparaC* 'long, tall'
Tamale: 866 From Semitic *ṭmn* > *ṭmr* 'hide, bury' > UACV-284 **tïmal-* 'tortilla, tamale'
Tame: 1330 Hebrew *'lp* 'to learn, accustom oneself to, to be tame' > TO *oiop* 'to be around, to stay around a place'
Tame: 1302 Arabic *fʕl* < **pʕl* 'to do, act, have an effect on, have an influence on' > Hp *powa-ta* 'to cure, tame'
Taste: see chew, kiss, and eat
Teach: 1344 Hebrew *yoore* (masc) / *toore* (f) 'instruct, teach' (hiqtiil 3 sg impfv) > Tb(H) *tooyla* 'teach, vt'
Tear (v): 965 Hebrew *qrʕ* 'rip/tear to pieces' > Cp *qíwe* 'tear'
Tears (n): see cry
Tell: 1148 Aramaic *tanni'* 'relate, tell' > UACV-1877b **tïni* / **tïNV* 'tell, teach, ask'
Tell: 1149 Hebrew *(yo/to/no)-diiʕ* 'inform, tell' > UACV-1878a **tïwa* / **ta(hV)wa* 'say, advise'
Tell: 1309 Arabic *nb'*, II *nabba'a* 'to tell, inform, let s.o. know about s.th.' > Hp *navo-ta* 'to know, learn by hearing'
Tell: 1310 Hebrew *ngd*, hiqtil: *higgiid* 'propose, announce, inform' > TO *'aagid* 'to tell s.o. s.th.'
Testicle: see egg
The: 1193 Hebrew *haC-* 'the' > UACV-2671 **a-* 'that'
The: 1273 Aramaic **-taa* 'the' > UACV-2678 **-ta* 'non-possessed/absolutive suffix'
There: 461 Egyptian *im* 'there' > UACV-1175 **ama(ni)* 'there'
There is: 913 Aramaic *'yt* / *'iit* '(there) is/are' > Yq *kaita* 'there is not'
They: 109 Hebrew *hum*/*hem* 'they' > UACV-2666a **hïmV* 'they'
Thick: 1387 Arabic *pgl* 'be thick and soft or flaccid' > Hp *pööŋala* 'thick (in size)'
Thigh: 294 Egyptian *xpš* 'foreleg, thigh' > UA **kapsi* 'thigh'
Thigh: 301 Egyptian Egyptian *mnty* 'thighs, dual' > UACV-945 **macci* / **maCti* 'thigh, upper leg'
Thigh: 1282 Aramaic *ʕaṭmaa* 'thigh, n.f.' > UACV-946b **uma* 'thigh, upper leg'
Thin: 894 Arabic *raqqa* 'be thin, fine, delicate': Arabic *rakiik* 'weak, thin' > UACV-2279 **takki* 'thin'
Thin: 959 Syriac *qml* 'suffer from leanness' (that is, be thin) > UACV-902 **komal* 'griddle, thin'
Thing: 610 Hebrew *haddaabaar* 'the thing, the word' > UACV-2281 **(hi)-tapi(ri)* 'thing'
Thing: 612 Hebrew *ze haddabar* 'this [is] the thing, this is it; Is this it? Is this the thing?' > UACV-2282 **ti'ita* 'thing'
Think: 487 Egyptian *ṯm* 'think' > UACV-2288 **tama* 'remember'
Think: 1262 Arabic *đakara* 'remember, think, mention' > UACV-2286 **tïkay* 'think'
Think: see keep
Thirst: 691 Hebrew *rʕb* / *raaʕeb (< *raġiba / *raġuba)* 'be hungry, suffer famine' > UACV-2293a **takuC* 'thirst(y)'
This: 497 An Egyptian *ip-* 'these, those' > UACV-2667a **i-* 'this'
Thread: 657 Hebrew *ḫwṭ* / *ḫuuṭ* 'thread' > UACV-1843 **wit* > 'string, rope, hemp or fiber plant for making rope'
Throat: 137 Egyptian *bbyt* 'region of throat' > UACV-1508 **papi* 'larynx, throat, voice'
Throat: 962 Aramaic *qooʕ-aa* 'throat, gullet, windpipe-the' > UACV-1515 *kowi / CN *kooko'tlan* 'neck, throat'
Throat: see neck

Throw: 136 Egyptian *win* ‘thrust aside, push away’ > UACV-2303 **wina* 'throw down/out, spill, empty'
Throw: 781 Hebrew *ṭwl* ‘to cast, throw’ > UA **culi*: TO *šulig* ‘to put, throw away, pl’
Throw: 1263 Hebrew *šlk* ‘throw, dispose of, throw away’ > UACV-2318 **sïk* ‘beat, throw (with power, furry)’
Throw: 1426 Hebrew *rmy* / *ramaa* ‘throw’ > UACV-989 **rima* / **lima* ‘throw out onto a refuse heap’
Throw, **empty**: 1039 Hebrew *yry* ‘throw, shoot’ > UACV-2319a **yu’ri* ‘(be) empty’
Throw out: 946 Hebrew *qlʕ* ‘to sling, throw out (people from land)’ > UACV-2311 **ŋalaw* ‘throw out’
Tight(en): 911 Hebrew *gadiiš* ‘heap of sheaves’ > UACV-601**ŋattas* ‘tight(en)’
Tie: 498 Egyptian *ṯmi* ‘to unite, to connect, join’ > UACV-2335 **tama* 'tie'
Tie: 1186 Akkadian *ṣamaadu* ‘tie together, yoke’ > UACV-2331a **suma* 'tie'
Tie: 1402 Egyptian mx’ ‘make fast, tie, bind, fetter, v’ > UA *maĝo’i- ‘bag, bind, wrap, blanket’
Tie, Sew: 1264 Hebrew *tpr* / *taapar* ‘stitch together’ > UACV-2332a **tappiCta* ‘tie’
Tie, Sew: 1265 Hebrew **-tuppar* ‘sown together’ > UACV-2332b **tuppa* ‘tie(d)’
Tie, Sew: 1266 Hebrew qittel impfv: *-tapper* ‘sew together’, verbal noun: tippuur > UACV-2330a **pura/i* 'tie'
Tingle: 31 Hebrew *ṣll* ‘to tingle, quiver’ > UACV-1929c **cili* ‘jingle, make rattling sound
Tired: 705 Hebrew *l’y* /*la’aa*^{y} ‘grow weary, become tired of s.th.’ > UACV-2336 **lo* / **loCi* 'tired'
Tired: 722 Syriac *bl’* ‘grow old, wear out’ > Eu *virúe-* ‘get tired’
Tired: 1267 Hebrew **yuʕmal* ‘be tired’ > UACV-2341 **yu’ma* 'tired, worn out'
Tired: 27 Arabic *brm* ‘be weary, tired of, fed up, bored with’ > UA **kwiyam* / **kwiam* ‘be lazy, do lackadaisically’
Tired: 1188 Hebrew *ygʕ* ‘grow weary, labor, struggle’ > UACV-2342 **-yowa* 'suffer'
To: 1187 Aramaic *l-* ‘to/for’ > UACV-2346 **li* 'to, for'
Together: 1526 Egyptian *nʕw* ‘to mate, press through’ > UA **nawi* ‘together with’
Tomorrow: 1022 Hebrew *maaħaar* ‘next day, tomorrow’ > UACV-2360 **muCa* / **mo*… 'tomorrow'
Tomorrow: see morning
Tongue: 698 Arabic **lahgat* ‘tongue’ > UACV-2364 **laŋi* / **laŋu* 'tongue'
Tooth: 508 Egyptian *rmn* ‘oar-row, row of rowers > UACV-2366 **raman* / **taman* (AMR) 'tooth’
Top: 1195 Arabic *qimma(t)* ‘top, summit, peak’ > UACV-2368 **kumisa* 'top, tuft, crest'
Touch: 272 Egyptian *dmi* ‘touch, reach, be joined (to)’ > UACV-2375 **tam* ‘touch’
Touch: 907 Arabic *ğassa* (< **gassa*) ‘touch, feel’ > UACV-2388 **ŋisi* ‘touch, feel cautiously’
Touch: 1196 Hebrew *ngʕ* / *ti-ngaʕ* ‘she/it touches’ > Hp *toŋo(k-)* ‘come into contact with, touch, reach’
Track: 1199 Syriac *ʕaqqeb*, impfv: *yə-ʕaqqeb* ‘to track down’ > UACV-2393 **yïki* ‘make/follow tracks’
Track: 685 Hebrew *ʕaaqeb* ‘heel, footprint’ > Hp *kïk-laqvï* ‘tracks all over’
Track, footprint: 1197 Hebrew *ʕaaqeeb* ‘heel, hoof, footprint’ > UACV-2392 **woki* / **woku’i* ‘track, footprint’
Tranquil: 39 Syriac *bhl* / *bəhel* ‘quiet, tranquil, gentle’ > **kwaha* reduplicated
> Hp *kwakwha* ‘1. tamed, 2. peaceful, tranquil, gentle, easygoing’
Trap: 1203 Aramaic *hwhr’* / *huhara’* ‘net, trap for birds or fish’ > UACV-2406 **hïyaC* / **hïwaC* / * *hï’aC* ‘trap’
Travel: 126 Egyptian *nmi* ‘travel, vi, traverse, vt’ > UACV-1012 **nïmi* ‘walk around, live’
Travel: 239 Egyptian *nʕi* ‘travel, traverse > UACV-1035a **nawa* / **nawi* ‘go, move (to another place)’
Travel: 1294 Arabic *rħl* ‘to set out, emigrate, V to wander, roam’ > Tb *tooiy* ‘to travel about’
Tree: 1012 Hebrew *šiqma(t)* ‘sycamore tree’ > UACV-559 **sïŋŋa(C)* 'cottonwood and/or aspen tree’
Tree: 1013 Hebrew *šiqma(t)* ‘sycamore tree’ > UA **sohopi* 'cottonwood tree'
Tremble: 1511 Syriac *šrd* ‘to quake, be terrified’ > Ktn *šariri’* ‘trembling, adj’
Trip: 822 Hebrew **ta-npiil* > **teppil*: ‘cause to fall’ > UACV-838b **tïppin* ‘trip’
True: 541 Hebrew *baaṭuuħ* ‘trustful, confident’ > UACV-174 **paso* ‘true, consider true, believe, truly, indeed!’
Truffle: see potato
Truly: 1225 Hebrew *’abaal* ‘truly, indeed’ (later it means: but, however) > Tr *abe* ‘yes, an emphatic’
Trunk: 1253 Syriac *šaaq-aa* ‘leg, shank, branch, stem, stock’ > UACV-2156 **cuC-ki* ‘trunk, base, stem, stalk’
Trust: 540 Hebrew *bṭħ* ‘trust, v’(< Sem *bṭħ*) > UACV-173a **pitiwa* 'believe, be true/real, trustable'
Trust: 542 Hebrew bṭħ ‘trust, v’(< Sem bṭħ), impfv: -bṭaħ > UA **cawa* ‘believe’
Turn: 291 Egyptian *phr* ‘turn, turn about, revolve, surround, travel around’ > Sr *puah-* ‘circle’
Turn: 524 Egyptian *msnħ* ‘rotate, turn backwards, turn, turn away’ > UACV-442c **manu* 'turn, change'
Turn: 754 Hebrew(*pny* / *panaa*^{y} ‘turn, turn and look, look’ > UACV-449a **puni* 'turn (around)’
Turtle, **gourd**: 989 Arabic *qarʕ-* ‘gourd, pumpkin’ UACV-2422 **ayaC* / **ayoC* 'turtle'
Twin: 899 Arabic *ṣinw-*, pl *aṣnaa’* ‘twin, one twin’ > UACV-2428 **cono’o* 'twin(s)'
Twist: 289 Egyptian *phr* ‘turn, turn about, revolve > UACV-1839 **pi’ri-na* ‘spin/twist thread, make rope’
Twist: 706 Arabic *lwy* ‘turn, bend, twist’ > Ls *líwa/i* ‘be tightly twisted, vi, twist tightly, vt’
Twist: see rope
Twitter: 1441 Hebrew&Aramaic *ṣpp* / *ṣapṣep* ‘chirp, peep, twitter, squeak’ > Wr *capi* ‘a small bird’
Two: 490 Egyptian *wħm* ‘repeat, do again’ > UACV-2623 **omV* ‘two’

Two: see another
Unclean: see mucus
Uncover: see look for
Under: 1389 Semitic **taxt-e* ‘under him/it’ or **taxta* ‘under’ > Wr(MM) *te’ré* ‘down on the ground’
Under: 1390 Hebrew **bətaxat* ‘in/at under’ > UACV-698e **pïtaha* 'under'
Understand: see learn
Up: 1268 Hebrew *maʕᵃlaa* ‘upward movement, stair, upwards’ > UACV-2444 **-mo-* ‘up(ward)’
Up: see also climb, raise, rise
Urinate: 739 Hebrew *ṣe’aa* ‘dung, excrement’ > UACV-2446a **si’i* / **si’a* 'urinate, v'
Uproot: see shrivel
Useless: 429 Egyptian *nny* ‘be weary, inert’ > UACV-106 **nina* ‘bad, useless’
Vagina: 235 Egyptian *m’yt* ‘sheath, vagina’ > UACV-2447 **muc* 'female genitalia'
Vagina: 686 Hebrew *ʕɛrwaa* ‘nakedness, genital area’ > Hp *löwa* ‘vulva, vagina’
Valley: see stream, river, and canyon
Vapor: 397 Egyptian *ḫti* ‘smoke, vapor > UACV-654 **(pa)-uci* / *uti* 'dew, vapor, frost, n’
Vegetation: 607 Hebrew *dobɛr* ‘pasture, vegetation’ > UACV-1063 **tupi* ‘grass, vegetation’
Very: see much
Vessel: 919 Hebrew *gm’* ‘swallow’; Ethiopic *gemʕe* ‘vessel’ > Hp *ŋamòo-hoya* / *ŋamo’-hoya* ‘little pumpkin or melon’
Vessel: see dish and gourd
Voice: 248 Egyptian *xrw* ‘voice’ > Ls *kára/i* ‘belch, croak, ring’
Voice: 1444 Arabic *rannat* ‘scream, sound, reverberation’ > Hopi *töna* ‘voice, trachea’
Vomit: 138 Egyptian *bšw* ‘spittle, vomit, vomiting, n’ > UA **piso-(ta)* ‘vomit, v’
Vomit: 1205 Hebrew *qy’* ‘to vomit’ > UACV-2454a **yo’a* 'vomit'
Wait: 1332 Arabic *’ğl* (< **’gl*) ‘to hesitate, wait, linger’ > Tb *wiih ~ iiwihï* ‘to wait’
Wake: 212 Egyptian *nhsi* ‘awake, wake up’: UACV-2461 **nïC* ‘wake’
Walk: 65 Arabic *mrr* ‘pass, go, walk’ > UACV-1009 **mïya* ‘go’
Walk: 509 Egyptian *h’i* ‘come, go away, go back’ > Wr(MM) *ho’í* ‘walk’
Walk: 1327 Arabic *tbʕ* ‘follow, trail, observe’ > Tr *tibú-* ‘watch, take care of’
Walk: 1359 Hebrew & Phoenician *’araḫ* ‘wander, journey, go’ > UA *wera* ‘walk’
Walk: 1440 Hebrew *’rḫ* / *’aaraḫ* ‘be on the road, wander’ > Ch *’uruʷa-* ‘travel, go, walk’
Walk, **early**: 1232 Arabic *bakara* ‘set out early’ (Sem-p) > UACV-1021 **pakay(N)* / **pakiN* ‘walk (away), sg’
Wall: 71 Hebrew *daayeq* ‘bulwark, siege-wall’ > Hopi *tïyïqa-* ‘wall’
Wall: 589 Syriac *’isaa* ‘wall, f’ > UACV-2466 **isV* ‘dab, make mud wall’
Wall: 916 Hebrew **ya-gdiir* ‘cause a wall to go up’: > UACV-2465 **yaŋi* ‘fence, enclosure, roofless wall(s)’
Wall: 1206 Aramaic *kootl-aa* ‘wall, n.m.’ > UACV-2462. **-kowli* / **kori* 'wall'
Want: 1207 Syriac *sw’* / *swy* / *səwaa’* ‘to long, desire’ > UACV-2468a **suwaC* 'want'
Want: see eat and love
Warm: 856 Hebrew *yḫm* ‘be in heat’ > UACV-1210 **yu’mi* / **yuwmi* ‘warm’
Wart: 1209 Hebrew *yabbɛlɛt* ‘wart’; Akkadian *ublu* ‘wart’ > UACV-2481 **upuliwa* ‘wart’
Wash: 693 Arabic *ġasala* / *ya-ġsil(u)* ‘to wash’ > UACV-2485b **(na-)pa-kka/i* ‘bathe’
Wash: 766 Semitic *rxḍ* ‘wash’ > UACV-2491 **pa-tïki* 'wash'
Wash: 1443 Syriac *ašiig* ‘wash’ (aqtel pfv of *šwg*) > UACV-2493 **asa/i* ‘bathe, wash’
Wasp: 1044 Aramaic *ʕrʕyt’* / *ʕurʕyt’* ‘wasp’ > UACV-165 **wa’wa* 'wasp'
Waste: 645 Hebrew *ḫbl* ‘act corruptly’; Hebrew *-ḫabbel* ‘ruin’ > Hopi *hovala* ‘waste s.th. of value, squander’
Watch: 1176 Hebrew *nṣr* ‘keep watch, watch over’ > Tarahumara *nesé-* ‘herd, watch over, care for (animals/children)’
Watch: see plan
Water (n): 55 Hebrew *mayim* / *meem-* ‘water’ > UACV-2499 **mïma* / **mïmï-* ‘ocean’
Water (n): 491 Egyptian *pẖrw* ‘water’ > UACV-2095 **parawa* 'juice, soup, stew'
Water (n): see sea
Water (n): 1165 Arabic *baḫr-* ‘sea, large river’ > UACV-2497 **pa* / **pa’wi* 'water'
Water (v): 492 Egyptian *iwy* ‘to water, irrigate, to pour out’ > UACV-2500 **pa’iwi* 'carry/fetch water'
Way: 514 Egyptian *w’t* ‘road, way’ > Hopi *waala* ‘gap, pass, saddle in ridge’
We: 1527 Egyptian *tmmw* ‘mankind’ > UACV-2662 **(i)tammu* ‘we’
Weak: 32 Syriac *bṣr* ‘to lessen, fail, diminish, dwindle UACV-2505 **kwï’lawi* / **kwïCtawi* ‘weak’
Weak: 518 Egyptian *nw* ‘be weak (due to age)’ > Hopi *naawa-ta* ‘groan, moan’
Wear out: see fade
Weasel: 1211 Syriac *šilaaš* ‘weasel’ > UACV-2506 **sïsïka* ‘weasel’
Weave: 442 Egyptian *n’yt* ‘weaving mill, spinning mill, weaving’ > UACV-485 **nawi* ‘apron, skirt’

Weave: see braid and spider
Weed: 994 Hebrew *ʕqr* ‘uproot, weed’ > UACV-2489 **kaya/i* ‘uproot, weed, clean, wash’
West: 470 Egyptian *t’-imnti* ‘the west’ > UACV-1544 **tïmïnïmïn* ‘north, west’
Wet: 229 Egyptian *mw* ‘water’ > UACV-2523 **muwa/i* ‘wet’
What: 315 Egyptian *ptr*/*pty* ‘who? what?’ > UA **piri* ‘what’
What: 767 Hebrew *ma* ‘what? ‘interrogative/relative pronoun’ > UA **ma* ‘subordinating conjunction, relative pronoun’
What: 1192 Syriac *’aynaa* ‘who, what, m’; Syriac *’aydaa* ‘who? what? f’ > UACV-2525 **hain-ta* ‘what?’
Where: 1190 Syriac *’aykaa* ‘where’ > UACV-2538b **haka* (Sapir) Sh *hakka* ‘where? somewhere’
Where: 1371 Aramaic *’ay + be* ‘where-at/in it?’ > Ktn *hayp(ea)* ‘where?’
Where from: 1214 Hebrew *mee-’ayn* ‘from where?’; Arabic *min ’ayn* ‘from where?’ > Tb *maa’ayn* ‘where from’
Whirlwind: 1222 Arabic *ṣpr* ‘to whistle, hiss, chirp’ > UACV-2559 **ciporika* 'whirlwind'
Whistle: 1215 Hebrew *wayyišroq* ‘he whistled, hissed’ > UACV-2542 **wisuko* ‘whistle’
White: 494 Egyptian t’-*ḫdt* ‘whiteness, brightness’ > UACV-2543a **tosaC* 'white'
White: 48 Hebrew *bwṣ* / *buuṣ*, ptv: *baaṣ* ‘be white’ > UACV-2545 **kwaya* 'white' (< **kwaca*?)
White: 558 Semitic *bwṣ* / *byḍ* ‘be white’ > UA **pos* ‘white’
Whitewash: 54 Hebrew *taapel* ‘whitewash’ > UACV-758 **tïpi-c* ‘white clay’
Who: 1213 Hebrew *mii* ‘Who?’ > UACV-2530a **mi* ‘wh-base’
Who: 1370 Semitic *’ay + mi* ‘which who?’ > Ktn *hami(c)* ‘who?’
Wide: 504 Egyptian *wsx* ‘broad, wide’ > Sr *wiiṣa’* ‘be wide’
Wide: 1168 Aramaic *pətaa’aa* ‘width; wide, open place’ > UACV-205 **patawa* 'wide'
Wide: see heavy
Wife: 339 Egyptian t’-ḫimt ‘the-wife’ > UACV-2585 *tïhima 'spouse'
Wife: 660 Arabic *ḫaram* ‘wife, something sacred’ > UACV-1796 **way* / **waym* ‘marry in a religious ceremony, v’
Wife, take: 695 Hebrew *lqḫ* / *laaqaḫ* ‘grasp, take as wife’ > Hopi *lööqö(-k-)* ‘(bride) go to groom’s house for wedding’
Willow: 174 Egyptian *sxt* ‘field, country, pasture, willow, n.f.’ > UACV-1055a **sakat* / **sakaC* ‘willow’
Willow: 577 Aramaic *’aas-aa’* ‘myrtle willow-the’ > UACV-2555 **wasV* ‘willow’
Willow: see reed
Win: see prevail
Wind: see horizon, hurricane
Wind: 912 Hbr *ḫwg* / *ḫuug* ‘circle, horizon’ > Ls *huŋ-la* ‘the wind’
Wing: 925 Aramaic *’agap* ‘wing, pinion, arm, shoulder’ > UACV-861 **aŋapu* ‘wing’ (Semitic-kw)
Wing: 926 Hebrew/Aramaic *’agap* ‘wing, shoulder’ > UACV-866 **wakapu* > **waki* / **wiki* ‘wing, feather’ (Semitic-p)
Wine: 405 Egyptian *sbr* ‘wein [wine]’ > UACV-195 **sïpi* 'berry tree'
Wine: 414 Egyptian *irp* ‘wine’ > Ch *iyaavi* ‘wild grape’
Wine: 631 Aramaic *ḫamar* (< **xamar*) ‘wine’ > UACV-9 **kamaC* 'drunk'
Wise: 1293 Hebrew *hiśkal-* ‘to understand, have insight, to make wise’ > CN *iskalia* ‘be discreet, prudent’
With: 246 Egyptian *xr* / *ixr* ‘by, through, under’ > UA **ikar* ‘with, using (instrumental)’
With: 1397 Hebrew **been* / *beenee-* ‘between, among, with’ > UACV-2563b **pïna* ‘with, unite/go with friend’
Wither: 721 Hebrew *nbl* ‘wither, decay, wear oneself out’ > Hopi *na’pala* ‘contract a disease or undergo change’
Wolf: 619 Hebrew zə’eb ‘wolf’; Arabic đi’b ‘wolf’ > UACV-2569 *cï’ï 'wolf'
Wolf: 618 Hebrew zə’eb ‘wolf’; Aramaic di’b-aa ‘wolf-the’ > UACV-2570 *tï’pa / *tu’apa 'wolf'
Woman: 43 Hebrew *baḫuuraa* (< *baxuuraa / bxr*) ‘young woman’ > Sh *kwïhï* ‘wife’
Woman: 340 Egyptian *ḫmt* ‘woman’, pl: *ḫmwt* > UA(Cahitan) **hamut* ‘woman’
Woman: 574 Hebrew *’išaa* / *’ešɛt* / *’išt-* ‘woman, wife of’ > Hp *wïïti* / *wïhti* ‘woman, wife’
Woman: 1043 Arabic *mar’a(tu)* ‘woman, wife’ > UACV-2583a **mama’u* 'woman'
Woman: 1271 Hebrew *naaš-iim* ‘women, pl’ > UACV-2574 **nos-tu* 'old woman'
Woman: 1436 Hebrew *’išaa*, *’ešet* ‘woman’ > TSh *wa’ippï* (< **wa’iC-pï*) ‘woman, female’
Woman, old: 87 Arabic *ʕgz* / *ʕagaza* ‘to age, grow old (of women)’ > Tr *wegaca-* 'grow old (of women)’
Woman: 1334 Hebrew *naaš-iim* ‘women’ > UACV-87 **nïsa* ‘aunt, mother's older sister’
Wood: 92 Hebrew *yáʕar* ‘wood, forest, thicket > UACV-1627a **yuyiC* ‘evergreen sp.’
Wood: 489 Egyptian xt ‘wood, stick, rod, tree, forest’ > UACV-2408 *kut (AMR) ‘tree, wood, firewood’
Wood: 791 Hebrew *maṭṭɛ* ‘staff, rod, branch’ > Hopi *komaci* ‘kindling, small sticks or chips of wood’
Wood: 1204 Hebrew *ʕaab* ‘item of wood (uncertain term)’ > UACV-2413 **wopiN* (< **wapaC*?) 'wood'
Wood: see branch
Work: 1365 Akkadian *agaaru* ‘hire’ > Tb *waahay’* ‘work’
Worm: 23 Syriac *bilṭii-taa* ‘boring worm-the, teredo xylophagus’; > UACV-2592a **kwici* ‘worm, feces-snake’
Worm: 311 Egyptian *ḏḏfṯ* ‘snake, internal bodily worm’ > UACV-2596a **sipuli* > **sipuyV* ‘worm’
Worm: 1224 Aramaic *’arqə-taa* / *ʕarqə-taa* ‘fluke worm’ > UACV-2593 **wo’a* 'worm'

Whip, hasten: 1323 Hebrew *ḫpz* ‘make haste’ > UACV-2540 **wïpaC* / **wïppaC* 'whip'
Wrap: 16 Aramaic *blm* ‘to muzzle, wrap up, restrain’ > UACV-383 **kwalma* ‘put arm around, carry under the arm’
Wrap: 225 Egyptian *wt* ‘bandage, bind, v’: > UACV-253 **witta* ‘tie, wrap’
Wrap: 407 Egyptian *nbd* ‘plait, wrap up’ > NP *nobia*, *nanobi’a* ‘wrap, roll up blanket’
Wrap: 829 Hebrew *kns* ‘gather, wrap’ > UACV-473 **kïna* 'cover'
Wrap, entangle: 935 Hebrew *glm* ‘wrap up, fold, fold together’ > UACV-2333 **ŋalam* / **ŋalim* / **ŋaliC* ‘entangle(d)’
Wrap, shroud: 148 Egyptian *t’yt* ‘shroud’ > UACV-256 **tawayi* ‘wrap around’
Wrap: see also cover and compassion and cotton
Write: 431 Egyptian *b’k(t)* ‘document’ > UA **po’ok*/**po’oC* ‘write’
Write: 679 Hebrew *ʕśy* ‘make (write) books, create’ > UACV-711 **osa/i* / **oswa* (Tb, Eu) ‘paint, draw, write’
Year: 823 Hebrew *ba-yyamee*^{y} ‘in the year of, lit: days of’ > **payami* > UACV-2603 **pami* 'year'
Year: 1097 Hebrew **ya-śyḫ* or **ya-śiiḫ* / **ya-śiyaḫ* ‘to grow (plant growth)’ > UACV-2604 **yasayawa* 'year'
Yell: 83 Hebrew *ṣrḫ* ‘cry, roar’ > UA **cayaw* ‘yell’
Yellow: 331 Egyptian *qny* ‘be yellow’ > Cp *kenekene’e-š* ‘yellow’
Yellow: 669 Arabic *ḫariḍa* ‘to be yellow’ > Tr *ura-kame* ‘pale yellow’
Yellow: 1164 Arabic *ṣḫr* XI ‘dry up, become yellow’ > UACV-2606a **sa’wa* 'yellow'
Yellow: 1405 Arabic *šuqra(t)* ‘fair complexion, blondness, redness’ > Hopi *sikya-* ‘yellow, yellow(ish) thing’
Yes (emphatic), **truly**: 1225 Hebrew *’abaal* ‘truly, indeed’ (later it means: but, however) > Tr *abe* ‘yes, an emphatic’
Yes: 1225 Hebrew *’abaal* ‘truly, indeed’ (later it means: but, however) > Tr *abe* ‘yes, an emphatic’
Yoke: 189 Egyptian *nḫb* ‘to harness, to yoke animals > UACV-405 **noC* / **noCop* 'carry on back’
You (singular): 104 Semitic *-kV* ‘you sg’ > UACV-2659a **’ï* ‘you sg’
You (pl): 105 Semitic *-kVm* ‘you masc pl’ > UACV-2659a **’ïm(ï)* ‘you pl’
You (pl): 106 Semitic -tum ‘you masc pl, subject’ > UA tumuhe ‘you pl subject’
Young: 164 Egyptian *rn* ‘young one, of animals’ > UACV-146 **tana* ‘offspring’
Young: 244 Egyptian *nxn* ‘to be a child’ > UACV-1098 **nakana* ‘grow’

Grammatical Affixes and Particles
Accusative suffix: 1286 Semitic *-a* ‘accusative suffix’ > UACV-2683 **-a* ‘accusative suffix’
Accusative suffix: 1451 Syriac *-ay* ‘accusative pl ending’ > Ktn *-ay*, *-y*, *-ïy* ‘accusative or object suffix’
Dual suffix: 905 Hebrew *-ayim* / *-aym* ‘dual suffix’ > NU and WMU *-ïm*/*-yïm*/*-əyəm* ‘dual suffix’
Emphatic pronoun: 122 Egyptian *pw* ‘this/it’ later ‘he/they’ > UACV-2664 **pu* ‘he, she, it, 3rd sg’
Future suffix: 232 Egyptian *mr* ‘want, wish, love’ > UACV-2695 **-mï(r)a* ‘future suffix’
Instrumental suffix: 1384 Aramaic *-be* ‘with it, in it, by means of it’ > Hp *-pi* ‘instrumental’
Interrogative affix: 609 Hebrew *ha-* ‘interrogative in yes-no question’ > UACV-2528 **ha-* ‘interrogative particle’
Interrogative: 216 Egyptian *in* ‘yes-no interrogative particle’ > UACV-2532 *ina ‘introduces yes-no questions’
Negative circumfix: 410 Late Egyptian *bn … iwn’* negates verbs > SNum *ka … wa’*
Negative verb: 213 Egyptian *imi* ‘negative verb’ > UACV-1536 **im* ‘no’
Passive suffix: 117 ‘Egyptian passive’ verb-*w*/-*iw* > UA verb-*wa*/ verb-*iwa*
Passive suffix: 118 ‘Egyptian passive’ verb-*tw* > UA verb-*tu* / verb-*tuwa*
Perfective suffix: 116 ‘Egyptian old perfective/stative’ verb-*i* > UA verb-*i* ‘intransitive/ passive/ stative verb’
Plural suffix: 1 Northwest Semitic **-iima* > UACV-2673 **-ima*
Plural suffix: 904 Hebrew feminine plural suffix *-oot* / *-ootee*^{y} > UACV-2674 **-tï* ‘plural suffix’
Plural suffix: 1417 Aramaic -aayaa ‘-the’ definite plural suffix > Hopi -ya ‘a non-singular (plural) suffix’
Plural suffix: 500 Egyptian *-w* ‘plural suffix’ > Cp *-we* ‘present plural suffix on verbs’
Possessive suffix: 906 Hebrew *-w* ‘his/its’ > UACV-1647 **-wa*/**-wV* ‘possessed suffix’
Possessive suffix: 1124 Hebrew *-o* ‘his’ > UACV-1703 **-wa* ‘possessed suffix’
Present suffix: 499 Egyptian *-i* ‘present’ > UACV-2698 **-i* / **-y(V)* ‘present’
Pronouns, see 101-114 and 1528
Reciprocal prefix: 2 Semitic *na-* > UACV-2675 **na-* ‘reciprocal/reflexive/passive prefix’
Relative pronoun: 1343 Hebrew *’ašer* ‘which, relative pronoun’ > Tb(H) *aš* ‘when, to, how to, in order to’
Respectful suffix: 1295 Hebrew *ṣnʕ* ‘to be modest, humble, retiring’ > CN *-cinoa* ‘a verbal suffix of respect or love’
Stative suffix: 119 Egyptian ‘stative suffix’ verb-*ti* > UA verb-*ti*

Appendix C: Index to Semitic Terms in Alphabetical Order of Hebrew Consonants after Pronouns and Grammatical Morphemes (’ b g d h w z *đ ɧ *x ţ y k l m n s ʕ *ġ p ş q r ś š t)

’anaa ‘I’ (Arabic); Aramaic ’anaa(’) ‘I’; Syriac ’inaa’ / naa’ ‘I’ > Uto-Aztecan *nï’ ‘I’ (102)
-i ‘my’ > Hopi i- ‘my’ (101)
-ni ‘me’ (object suffix) > UA -ni ‘me’ (object suffix) (103)
-ai / -ay ‘me, my’ (possessive pronoun suffixed to pl nouns), also as in my-verbing > Sr -ai ‘I’m (verbing)’ (1423)
-ka/-ki ‘you/your, sg’ > ’ï ‘you/your, sg’ (104-kw)
-kem ‘you/your, pl’ > ’ïm ‘you/your, pl’ (105-kw)
Aramaic -tum ‘you, pl subject’ > UA tumu ‘you, pl subject’ (106-p)
hu / huwa ‘he, it, acts as connecting copula verb between nouns’ > UA hu / huwa ‘he, that’ (107)
hu / huwa ‘he, it, acts as connecting copula verb between nouns’ > UA hu ‘be/is’ (108)
-w ‘his/its’ > UA *-wa ‘possessive suffix’ (906)
hum / hem ‘they’ > UA *(h)ïmï / umï ‘they’ (109)
-am ‘them, their’ (object or possessor suffix)’ > UA *-am ‘them, their (object or possessor suffix)’ (110)
plural: -iima ‘early NWSemitic pl suffix’ > UA *-ima (1)
plural: -ootee^{y} ‘Hebrew feminine plural suffix’ > UA -tï ‘plural suffix’ (904)
plural: -aayaa ‘Aramaic definite masc plural suffix’ > -ya ‘plural suffix’ (1417)
dual: -ayim / -aym ‘dual suffix’ > NU and WMU -ïm/-yïm/-əyəm ‘dual suffix’ (905)
na- ‘early NWSemitic passive/reciprocal prefix’ > UA *na- ‘reciprocal/reflexive prefix’ (2)
na- ‘early NWSemitic passive/reciprocal prefix’ > UA *na- ‘twice, double’ (1287)
ha- ‘interrogative particle prefix in a yes-no question’ > UA *ha- ‘interrogative particle’ (609)
-t-aa ‘the’ (Aramaic f., drops when poss’d) > UA *-ta ‘absolutive suffix (drops when poss’d) (1273-p)
-a ‘accusative suffix’ > UA *-a ‘accusative suffix’ (1286)
-i / -iya ‘one from a place or people, m / f’ > UA *-i / *-ya ‘person from’ (1288)

’ (’aleph / glottal stop)

’aab ‘father’, pl: ’aaboot, poss’d: ’^{a}bootee^{y} ‘fathers’ > UA *apu / *(h)apu(ti) ‘father, parent, mother’ (588-kw)
’^{a}bootee^{y} ‘fathers (of)’ > UA *poci ‘paternal grandfather’ (590-p)
’bd ‘be wild, untamed, shy, run away’ > UA/Tep *’ïïbïida-i ‘be afraid’ (1458-kw)
’ébɛh ‘reed, papyrus’; Akkadian abu / apu ‘reed, papyrsu’ > UA *wapi ‘foxtail’ (1136-p)
’abaal ‘truly, indeed’ (later it means: but, however) > Tr abe ‘yes, an emphatic’ (1225-kw)
’abneţ, pl: ’abneţ-iim ‘sash, girdle’ > UA *natti ‘belt’ (592-kw)
’eebaar-aa / ’eebr-aa ‘limb, arm, wing, pinion, male member’ > UA *pïra ‘arm, right arm’ (729-kw)
’eebaar-aa / ’eebr-aa ‘limb, arm, wing, pinion, male member’ > UA *wï’aC ‘penis’ (794-p)
’e(N)gooz ‘nut tree’ > UA *wokoN / *wo(N)koC ‘pine tree’ (569-p)
’gl ‘to hesitate, wait, linger’ > Tb wiihï ~ iiwihï ‘to wait’ (1332-p)
’agap ‘wing, pinion, arm, shoulder’ > UA *wakapu ‘wing, feather’ (926-p)
’agap ‘wing, pinion, arm, shoulder’ > UA *aŋapu ‘wing, arm’ (925-kw)
’gr / ’agar ‘to hire, harvest’ > Tb waahay’ ‘work’ (1365-p)
’aadaam ‘man’ > UA *otami ‘man, person’ (76)
’dm ‘be red’; ’aadom ‘reddish-(brown), tawny’ > UA *oNtam / *o(N)ta(N/C) 'brown' (77)
’adaamaa / ’^{a}daamaa ‘earth’ > UA *tïma ‘earth’ (591-kw)
’zy / ’đy, ’iiđaa’ ‘harm, damage, hurt’ > UA *’ïca(C) '(have) wound/sore' (1388-kw)
’aɧ (< *’ax) ‘brother’; Aramaic ’aɧ-aa’ ‘brother-the’ > UA *waŋa’a ‘younger brother’ (880-p)
’aɧoot (< *’axoot) ‘sister’ > UA *ko(’)ti / *ko’ci ‘older sister’ (594-kw or p?)
’axaat-aa ‘sister-the’ > UA *wakati ‘younger sister’ (595-p)
’aɧad ‘one’, pl: ’aɧadiim / ’aɧadee ‘a few/some (of)’ > Tr ahare / ohare / wahare ‘some, certain ones, others’ (1335-p)
’ɧz / ’aɧaz (< ’xđ) ‘take, grasp’ > UA *uNwa ‘take, carry’ (834-kw)
’ɧz / ’aɧaz (< ’xđ), impfv yooɧez (< *ya’ɧiz) ‘take, grasp’ > UA *yawi / ya’wi / yaŋwi ‘take, carry’ (835-kw or p?)
’ɧɧ ‘cough’ > UA *ohoho ‘cough’ (661)
’axar ‘behind, after’; *’axer ‘other/another’ > UA *wakay/waxay ‘two, after’ (570-p)
’aɧare^{y} / ’aaɧoor ‘back, behind’ > UA *(a)hoyi ‘back, follow, return’ (643-kw)
maaɧaar ‘next day, tomorrow’ (< *ma’xar) > UA mawa, moosta, muu’a, mowahusu ‘tomorrow’ (1022-p)
’aykaa ‘where’ > UA *haka ‘where’ (1190)
’ay + be ‘where-at/in it?’ > Ktn hayp(ea) ‘where?’ (1371)
’ay + mi ‘which who?’ > Ktn hami(c) ‘who?’ (1370)
’ayil / ’eel- ‘mighty tree’; ’eelaa ‘oak, terebinth’ > UA *iyal ‘poison oak’ (599-kw)
’ayil ‘mighty tree, oak’ > UA *wi’a(N) / *wiya(N) ‘acorn, oak’ (1337-p)

’aynaa ‘who, what, m’; Syriac ’aydaa ‘who? what? f’ (< *’ayn-taa) > UA *haynta ‘what’ (1192)
’ak ‘surely, entirely, yet, but, only’ > CN ok ‘still, yet, for now, first, in addition’ (1328)
’aakal, *to’kal ‘she/it eats’ > UA *tïkkaC 'eat’ (796-p)
’aakal, *yo’kal ‘he/it eats’ > UA *yï’ïki 'swallow’ (797-kw)
’aakal ‘eat/he ate’ > UA *aki ‘open mouth, eat, take/put into one’s mouth’ (798-kw)
’aakal ‘eat/he ate’, inf: ’əkol ‘eat’ > UA *ukol ‘want’ (1177-p probably)
’aakal ‘eat/he ate’, Syriac ’akl-aa ‘weevil, eater-the’ > UA *akal ‘moth, butterfly’ (1178)
’aakal ‘eat/he ate’, Syriac ’akl-aa ‘weevil, eater-the’ > UA *pi’akï ‘caterpillar, worm’ (1179-kw)
’akamat ‘hill, reef, heap, pile’ > UA *wïkka ‘pile’ (1118-p)
’kr / ’akara ‘till (the ground)’; ’ikkaar ‘agricultural worker’ > UA *wika 'digging stick' (1331-p)
’alima ‘to experience grief’, ’almaanaa ‘widow’ > UA *o’mana ‘sad, suffering’ (1144)
’lp ‘to learn, be familiar/accustomed, tame’ > TO oiop ‘to be around, to stay around a place (of animals)’ (1330)
’em ‘mother’, ’imm-aa ‘mother-her’; ’imm-o ‘mother-his’ > Tb ïïmïï- ‘mother’ (1346-kw)
’aamaqqət-aa ‘lizard-the’ > UA *makkaCta(Nka)-ci ‘horned toad’ (1055)
’iiš ‘man, person’ (with negatives ‘no one’) > UA *wïsi ‘person’ (572-p)
’iiš ‘man, person’ > Ca -iš ‘person who does (the verb)’ (573-kw)
’išaa / ’išt- ‘woman, wife of’ > Hp wïïti / wïhti ‘woman, wife’ (574-p)
’ešet ‘woman’ > *wa’iC-pï ‘woman’ (1436-p)
’mn / ya’amiin ‘he believes’; ya’amiin-o ‘he believes him/it’ > UA *yawamin-(o) ‘believe (him/it)’ (567-p)
’mn / hɛ’ɛman ‘he believed’ > Ca hée’an ‘believe s.o., agree on s.th.’ (568)
’mr / ’aamar, impfv: yoomar / yoomer ‘say’ > UA *umay / *may ‘say’ (66)
’aas-aa’ ‘myrtle willow-the’ > UA *ʍasV ‘willow’ (577-p)
’sp / hi’asep ‘be gathered (to one’s people), die, be put in family cemetary’ > UA *hi’acapa 'bury, cover, grave’ (895)
’sp / impfv: -’sop ‘gather, collect, gather in (legs)’ > UA *cupa ‘gather, close eyes’ (897)
’ap ‘(denotes addition) also, yea, even’ > TO ep ‘again, also, too, another one, somebody else’ (1329-kw)
’epod-aa ‘ephod-the, priestly garment, shoulder cape or mantle’ > UA *wipura 'belt' (583-p)
’pd ‘to put on an ’epod’ > Tr opata ‘put on a shirt’ (585)
’pl / tu’pal ‘get dark, (sun, planet) go down’ > UA *cuppa ‘fire go out, get dark’ (871)
’pl / yu’pal ‘get dark, (sun, planet) go down’ > UA *yuppa ‘fire go out, get dark, black’ (872)
’pl / yu’pal ‘get dark, (sun, planet) go down’ > UA *yu’wal ‘night, get dark’ (873)
’pl / yu’pal ‘get dark, (sun, planet) go down’ > UA *yu’pala ‘go down, stoop’ (874)
’argaamaan ‘purple, red-purple’; Akkadian argamannu ‘purple’ > UA/Num *aNkaC ‘red’ (587-kw)
’ard-aa’ ‘mushroom-the’ > UA/Num *hitto’oC / *witto’oC ‘mushroom’ (1110-kw?)
’arz-aa’ ‘cedar-the’ > UA *wa’aC ‘juniper / cedar tree’ (582-p)
’rɧ ‘be on the road, wander’; Hebrew ’oraɧ ‘way, path’ (Akkadian urxu) > Ch ’uru^{w}a- ‘travel, go, walk’ (1440-kw)
’ariy / ’arii ‘lion’ > UA *wari ‘mountain lion’ (566-p)
’rk ‘be long (time or space/length)’ > UA wïïyak ‘long’ (1486-p)
’arnébet; Akkadian ’arnabu; Arabic ’arnab ‘hare, rabbit’ > UA *wanna / *wa’na ‘rabbit net’ (596-p)
’arnébet; pl: *’^{a}rnaboot ‘hare, rabbit’ > UA *taput ‘rabbit’ (597-kw)
’arnébet; pl: *’^{a}rnaboot ‘hare, rabbit’ > UA *topi ‘rabbit’ (598-kw)
’arṣ-aa ‘earth-ward, to the earth’ > UA *wïcï, NUA *wïyï, Num *wï’ï (581-p)
’arqə-taa / ʕarqə-taa ‘fluke worm, parasite worm’ > UA/Num *wo’a ‘worm’ (1224)
’ašer ‘which, relative pronoun’ > Tb aš ‘same subject subordinator, when, to, how to, in order to’ (1343)
bə-’ašer = Syriac b-’atar / baatar ‘after, following’ > UA beasi ‘behind, beside, on other side of’ (1400-p)
’istwaawr-aa / ’istawr-aa ‘ankle, a portion of the lower leg’ > UA *wiCtaC ‘calf of leg, lower leg’ (1084-p)
’ootii ‘me’ (object/accusative pronoun) > Tr ti ‘me’ (1497)
’ty / ’aataa^{y} / ’atii- ‘come’ > UA *wiic ‘come’ (576-p)
’atar ‘place’; Aramic ’atar d- ‘place where, wherever, where’ > UA *tïrï / *tiri ‘place where’ (1191)

B

baa ‘in/at it/her (femininte) > UA *pa ‘in/at’ (848-p); Aramaic be ‘in/at him/it (masculine’ > UA *pï ‘in/at’ (849-p)
be ‘with it, in it, by means of it’ > UA *-pa ‘instrumental suffix’ (1384-p)
bə’or ‘pit, cistern, well’ > UA *kwi’oC-ki) ‘be hollow and round’ (41-kw)
bgd ‘deceive, hide’; béged / baaged ‘garment, clothing’ > UA *pakï / paki ‘enter, put on (clothing)’ (530-p)
béged / baaged ‘garment, clothing’ > UA *pakati > *pakï / paki 'shirt' (529-p)
bd’ ‘invent, devise, lie, loose talk’ pl: bad’uu > UA *paru ‘bad, say bad about’ (544-p)
bd’ ‘invent, devise, lie, loose talk’ > UA *beewa ‘non-sense, gibberish’ (548-p)
bad’a ‘start’ > UA *pïwa ‘start’ (545-p)
bd’ ‘begin, start’; bada’a ‘start(ed), began’ > Ktn puycu’ ‘begin’ (547-p)

bad ‘part, alone, except’ > UA *parï / pirï ‘one, no’ (538-p)
bdl ‘divide, substitute, change, exchange’ > UA *pata ‘change, exchange’ (539-p)
bdl ‘divide, separate’; *hibbadel ‘be separated’; batala/battala ‘separate’ > UA *kwatta ‘open’ (34-kw)
bdʕ ‘start, do for the first time’; bidʕ-V ‘new, unprecedented’ > UA *pïtïC / *pïtuC / *pïtuwa ‘new’ (546-p)
bdr ‘scatter, put in disorder, shed’ > kwïrï- ‘get in a heap, collapse to a disordered pile, fall to disarray’ (42-kw)
bahiya ‘empty, vie, compete’ > Hp kwahi / kwàyya ‘suffer loss’; kwaha- ‘deprive of, take at expense of’ (38-kw)
bhl ‘cease, become quiet, tranquil, calm, gentle’ > *kwaha ‘1. tamed, 2. peaceful, tranquil, gentle’ (39-kw)
bahamat ‘back, hill, high place’ > UA *kwahama ‘back’ (7-kw)
bw’ / boo’ ‘coming, way’ > UA *poo’ ‘road, path’ (531-p)
bw’, hiqtil: hebii’/hebaa’ ‘bring’ > UA *hï’ïpï / *hapa ‘get up, vi; lift/pick up, vt’ (805-p)
bw’, hiqtil: hebii’/hebaa’ ‘bring’ > UA *hakwa / *hakwi ‘lift’ (806-kw)
bwṣ / buuṣ, pfv: baaṣ ‘be white’ > UA *kwaca / NUA *kwaya ‘white’ (48-kw)
bwṣ / buuṣ ‘be white’ > UA *pos ‘white’ (558-p)
baaz ‘falcon’, baaz-aa ‘falcon-the’ > UA *kwasa / *kwisa ‘eagle’ (15-kw)
baazaaq ‘flash of lightning’ > UA *kwisaka or *kwici’i ‘lightning’ (14-kw)
Arabic baḏara ‘sow’; Arabic baḏr- ‘seed(s)’ > *paCci / *pa’ci ‘seed’ (554-p)
Arabic baḏr- ‘seed, seeds’, pl: buḏuur ‘seeds, pit, stone (of fruit)’ > UA *puci ‘seed, pit’ (555-p)
bẖn, *-baẖẖen ‘observe, examine, pull out organs to examine’ > UA *po’na ‘pull out, uproot’ (1513-p)
baẖr- ‘sea, large river, water (vs. land)’ > UA *paC (pharyngeal -C) / *pa’wi 'water' (1165-p)
baẖuuraa (< baxuuraa / bxr) ‘young woman’ > Num kwïhï ‘wife’ (43-kw)
bxr (> bẖr) ‘test, choose, be/make choice’; Amorite bexeru ‘elite soldier’ > UA *bïhïrï ‘expensive, opponent’ (1399-p)
bwẖšyn(’) ‘green herbs’ > UA *puhiC ‘green’ (870-p)
bṭẖ / -bṭaẖ ‘trust’ > UA *cawa ‘believe’ (542-p)
biṭẖa(t) ‘trusting’; *baṭiiẖ ‘trusted’ > UA *pitiwa 'believe, be true/real, trustable' (540-p)
baaṭuuẖ ‘trusting, trustful, confident’ > UA/Num *puttuttugwa ‘know’ (543-p)
baaṭuuẖ ‘trusting, trustful, confident’ > UA/Tep *paso ‘true, believe, true’ (541-p)
bṭn ‘be pregnant, paunchy’ / *buṭṭan > UA *putta ‘pregnant, full’ (552-p)
-bbiiṭ ‘look’ (< *-nbiiṭ) > UA *pici / *pica ‘look, see’ (562-p)
byn / -biin ‘understand’ > UA *pïnï ‘learn, become familiar with’ (811-p)
bayin / been ‘between’;Arabic bayna ‘between, among’;Syriac baynay > UA *pïna ‘with, unite/go with friend’ (1397-p)
bayin / been ‘between’; Arabic bayna ‘between, among’; Syriac baynay > UA *kwan ‘with’ (1270-kw)
bayṣa(t) / beeṣa(t) ‘egg’; Arabic bayḍat- ‘egg, testicle’, pl: beeṣoot > UA *pïyso ‘testicle’ (556-p)
byt ‘to lodge, pass/spend the night’ > UA *pïCtï / *pïtu ‘lie down, spend the night, pl’; PYp veetu ‘lie, pl’ (528-p)
bayit / beet ‘house’ > Tr bete ‘house’ (528-p)
bayt-aa ‘house-toward, inside-to’ > UA *paca ‘put in’ (1238-p)
bky / bakaa^{y} ‘cry, weep’ > UA *kwïkï / o’kï ‘(shed) tears’ (24-kw)
bky / bakaa^{y} ‘cry, weep’ > UA *kwaki ‘baby’ (25-kw)
bky / Syriac pfv: bakaa / baka’ > UA *paka’ ‘cry, v’ (559-p)
bky / impfv masc: *ya-bka^{y} ‘he/it weeps, cries’ > UA *yaCkaC / *yakka 'to cry, sg’ (560-p)
bky / impfv fem: *ta-bka^{y} ‘she/it weeps, cries’ > UA *takka (> NP taka) ‘to cry’ (561-p)
bakara ‘set out early’ > UA *pakay(N) / *pakiN ‘walk (away)’ (1232-p)
bkt ‘to weave’ > UA *kwiCta ‘braid, wind around’ (1445-kw)
blg / baliga ‘shine, be happy/glad’ > UA *bale ‘enjoy, rejoice’ (549-p)
blm ‘silence, muzzle, wrap, restrain’; baalm-aa ‘halter’ > UA *kwalma ‘put arm around, carry under arm’ (16-kw)
bll moisten, mix’ > UA *kwallV ‘soft(en), stir’, Num -nn-, SP -n’n- (22-kw)
bilṭii ‘worm sp’ > UA *kwici ‘worm’ (23-kw)
blṭ / balleṭ, impfv yV-balleṭ ‘be worm-eaten, moth-eaten, rot’ > UA *yïpali ‘rotten’ (1142)
balas ‘kind of fig’ > UA *palasi '(wild) grapes' (537-p)
blʕ / baalaʕ / baliʕa / belu ‘swallow’ > UA *kwïluC 'swallow' (6-kw)
blṣ ‘to bud, blossom’ > Ca če-kwála’an ‘open (eyes or mouth)’ (1020-kw)
bənee^{y} ‘sons/children (of)’ > Aztecan *konee ‘child, offspring’ (26-kw)
bɛn ‘son’, pl: bənee(y) ‘sons / children’ > UA *poni 'younger brother' (1050-p)
buundəq-aa ‘ball, globule, sphere-the’ > SP potto ‘round, spherical’ (1374-p)
buundəq-aa ‘ball, globule, sphere-the’ > UA *kwinu ‘round, spherical’ (1375-kw)
báʕad ‘behind, through, round about, for’ > Tr bo’ó / ko’ó ‘from/at/on the other side of’ (1394)
bʕy / baʕaa^{1} ‘enquire, search’; Arabic bġy ‘search’ > UA *kwawa/i ‘invite, call’ (36-kw)
bʕy / baʕaa^{2} ‘bring to a boil, bulge out’; Arabic bġw ‘swell up’ > UA *kwawa ‘boil, come to a boil’ (37-kw)
bṣq ‘to swell’ > UA *posa ‘swell’ (553-p)

bṣr ‘look, see’; Arabic baaṣirat ‘eye’ = unattested *booṣer(et) ‘eye’ > UA *pusi ‘eye’, Num *pu’i (532-p)
bṣr ‘look, see’; baṣṣara ‘open eyes’ > UA *pusaC 'wake up, open eyes' (533-p)
biṣṣar ‘make inaccessible’ > UA *kwi’ay / *kwi’aC 'surround, fence' (33, 32-kw)
baqiya ‘stay, be left behind’ > Hp kwayŋya- ‘behind’ (954-kw)
biqʕaa ‘cut, notch, valley, plain’ > UA *pakowa ‘river, current’ (1351-p)
bqr ‘split, penetrate’ > UA *pukul ‘pin on, poke’ (536-p)
bəquuraa ‘livestock’ > UA *puNku ‘domestic animal’ (535-p)
boqer ‘morning’, bəqar-iim ‘mornings’ > UA *pi’ari ‘tomorrow’ (875-p)
bar kəbaan-(aa) ‘belt’, kbn ‘gird’ > UA *pakkaC 'belt' (1446-p)
br’ / -bra’- ‘eat’ > UA *kwa’a 'swallow, eat' (46-kw)
brii(’/y) ‘provide food, feed’ > UA *kwi 'food, feed, give food' (47-kw)
brd ‘be cold, to hail’, barad/baaraad ‘hail, n’ > UA/Tr * bara- ‘be cool, time of rains’ (1496-p)
brɧ ‘flee, slip away, pass through, glide past’ > My bóroh-te ‘tiene diarrea’ (1401-p)
brk ‘kneel down, bless, praise, adore’ > Ca kwéy’eqi ‘stoop down’ (1259-kw)
birkaa ‘blessing, praise’ (often sung)’ > UA *kwika ‘sing, song’ (35-kw)
brm ‘be consumed, worn out, tired, bored’ > UA *kwiyam ‘be lazy, do lackadaisically’ (27-kw)
baraq ‘lightning’ > UA *pïrok ‘lightning’ / My berok- ‘lightning’ (527-p)
brr ‘select, choose’ > UA *kwiya / kwayi ‘keep, take, choose’ (20-kw)
barr ‘land’ > UA *kwiya / kwira ‘earth’ (19-kw)
bááśaar ‘flesh, penis’ > UA *kwasi ‘tail, penis, flesh’ (5-kw)
Aramaic bəśár ‘flesh’ > UA *pisa ‘penis’ (550-p)
bśr ‘be sweet, glad, delight (in)’ > *pisa ‘to like’ (551-p)
baašel ‘boiled, ripe’ > UA *kwasïC ‘cook, boil, ripe(n) (4-kw)
hibbašel ‘be ripened, that which is ripened’ (niqtal infinitive) > UA *ikwasi 'fruit, prickly pear’ (1454-kw)
batt ‘daughter’ > UA *pattï ‘daughter’ (534-p)

G

g’l ‘redeem, buy back’ > UA *kowa ‘buy’ (1200-p)
gab ‘back, convex, curved, gibbous’ > Ls ŋavá-ŋva-š ‘stooped, as an old man’ (910-kw)
gab ‘back, convex, curved, gibbous’ > SUA *kakwa / *kappa ‘egg’ (1075)
gebiim ‘locust’ > UA kïïpi: SP qïïvi ‘grasshopper’ (68)
goob / gobay ‘locust’ > Eu okoboi ‘grasshopper’; Kw haakapayni- ‘grasshopper’ (69)
gobah ‘height (of man), Arabic gabhat ‘forehead’ > UA *kopa ‘forehead’ (1099)
gabal ‘to forge’; Arabic *gabala ‘to form, shape’ > UA/Tak *ŋapaC 'sharp(en)’ (908-kw)
gbl ‘form a boundary’, gabal / gabuul ‘mountain, boundary’ > TO kavul ‘hill’, TO gavul-k ‘be different, separate’ (995)
gabal ‘mountain(s)’ > UA/Num *kaipa / *kaapa ‘mountain’ (1241)
gbr / -gbar ‘ ‘be strong,prevail’ > UA *kwaC- ‘win’ (49-kw)
gabbaar ‘man, strong/mighty man’ > UA *appaC- ‘boy’ (978-p)
gbr ‘be strong’, gəbuuraa ‘strength’ > UA *gupuka 'strong, strength' (1172)
gabr-aa, pl: gabr-iim/iin ‘great man’ > UA **kïri* ‘man, old man, elder’ (1180)
gdl ‘plait, weave, twist’ > NUA ŋááray-ni ‘s.th. crocheted or woven’; ŋáároyta ‘spider web’ (924-kw)
gdl ‘wax / grow big’; mugdal ‘big’ > UA *mukaC-: Ls muká-t ‘big, large’ (1492-kw)
gdʕ ‘hew down, hew off’ > UA *katu’ 'cut, wound' (608-p)
gadiir ‘walled place’, *ya-gdiir ‘cause a wall to go up’ > UA *yaŋi ‘fence, enclosure, roofless wall(s)’ (916-kw)
gadiiš ‘heap of sheaves’; Syriac gdš ‘heap up’ > UA *ŋattas ‘tight(en)’ (911-kw)
ghh ‘be cured, healed, freed, bend’ > Sr ŋöhääh ‘go around a bend’; Hp ŋaaha ‘untie’, Hp ŋahï ‘remedy’ (909-kw)
gawza / gauza(t) ‘nut’ > UA *kusi ‘oak’ (1115)
gwʕ / gaawaʕ ‘pass away, perish’ > Ktn ŋïhw-ïk ‘get worn out’ (928-kw)
gwr ‘to travel away from home, sojourn’ > UA *ŋoya ‘leave, go away, go home’ (932-kw)
gwr / *yə-gayyar ‘to commit adultery’ > Hopi yoŋyày-ti ‘be adulterous, have an affair (with)’ (933-kw)
guuryə-taa / guur-taa ‘cub (female), young of animal (usually lion or dog) > UA *koCti 'dog’ (1025)
gaz ‘bird of prey’, gaz-aa ‘falcoln-the’ > UA/Tak/Tb *’asa-wïr ‘eagle’ (981)
gy’ / -gii’ ‘come’ > UA *ki ‘come’ (1498-p)
gyl ‘do circles, dance, rejoice’ > Cp ŋáylʸa ‘spin, twirl’ (929-kw)
glb ‘shear, shave’ > Ca ŋep ‘scrub, scrape, vt’; Ca ŋepel ‘scrub, vt’ (1475-kw)
gɛlɛd ‘skin’ > Tep *’ïlida ‘skin’ (973)
gly / -galley ‘uncover (nakedness), sleep with (woman)’ > Sr ŋalyaaŋalyah-kin ‘make loose’ (1521-kw)
gll ‘roll, circulate’, galiilaa ‘what surrounds, circuit’ > ŋïlïïlï / ŋilil ‘circle around, be all around’ (930-kw)
gullaa / gullat- ‘basin, bowl, ball’ > Hopi ŋöla ‘hoop, ring, wheel’ (931-kw)

gullaa / gullat- ‘basin, bowl, ball’ > SUA *ola ‘ball’ (984)
glm ‘wrap up, fold, fold together’ > UA *kolom ‘cover’ (934)
glm ‘wrap up, fold, fold together’ > UA *ŋalam ‘entangle, fasten’ (935-kw)
gómɛ ‘papyrus’ > UA *oma ‘reed’ (1137)
gml ‘complete, beautiful, to fit’ > UA *gamea / ‘quit, look good, be proper, fit’ (936-p)
gml ‘complete, beautiful, adorn, to fit’ > UA *kïma ‘put on, wear, wrap, blanket, garment’ (937-p)
gml ‘complete, do to completeness/fully’ > Hp ŋïman- ‘to grind fine (939-kw)
gml, impfv: -gmol ‘to complete, ripen, wean’ > UA *mo(y) ‘ripen’ (1175)
gnb / ganba ‘side, beside, near’ > UA ŋakwa ‘side, by, near’ (21-kw)
gnn ‘enclose, surround, protect’, pftv: ganno- > Hp ŋön-ta ‘wear s.th. around the neck’ (915-kw)
gʕl ‘make, put, place, lay’ > Ls ŋáw’la-š ‘mattress, mat, bed’ (917-kw)
grm ‘gnaw, break/crush (bones)’, inf: garom > Hp ŋaro- ‘crunch down on’;
SP qayu ‘grind up (like a dog crushing bones) (921-kw)
gəraamaa-w ‘bones-his’ > UA/Hp *ŋya(m) ‘clan, relative’ (950-kw)
gaaroon ‘throat, neck’ > UA/SNum *iyoN ‘back of neck, nape of neck’ (999-kw)
gaaroon ‘throat, neck’ > UA *karu ‘sandhill crane’ (1360-p)
grr ‘to ruminate, to saw, to drag’ > UA/Tak *ŋaya ‘to move side to side, do side to side circular motion’ (914-kw)
gursiptu ‘butterfly’ > UA *asiNpu(tonki) 'butterfly’ (1057)
grš ‘drive out’ > Hp ŋöy-ta ‘pursuing, chasing after’ (920-kw)
gšɦ / gaššaɦ ‘rub / graze the skin, scratch’ > UA *ŋaska ‘be rough, scratch’ (1487-kw)
gšš ‘touch’; Arabic *gassa ‘touch, feel’ > UA *ŋisi ‘touch, feel cautiously’ (907-kw)

D

*dobboot / *dobbootee^{y} ‘bears, f pl’ > UA *posi ‘bear’ (613-p)
dabber (< *-dabbir) ‘speak’ > UA *tïkwi ‘say’ (11-kw)
yə-dabber ‘he speaks’ > UA *yïkwi ‘say’ (12-kw)
dubr / dubur ‘rump, back(side), buttocks’ > UA *tupur ‘hip, buttocks’ (606-p)
dbr ‘turn one’s back’; dubr / dubur ‘rump, back(side), buttocks’ > Ktn tïhpi-c ‘loin, back’ (1372-kw?)
dobɛr ‘pasture, vegetation’ > UA *tupi ‘grass, vegetation’ (607)
daabaar ‘speech, word > thing, matter’; Hebrew haddaabaar ‘the thing, the word’ > UA *(hi)-tapi(ri) ‘thing’ (610)
dbr ‘speak’; daabaar ‘speech, word, discourse, saying, report, tidings’ > UA *tapay(a) / tapiya ‘speak’ (611)
dabbar ‘lead, drive, take, drive away’ > UA *tappi ‘pull, drag’ (1121-p)
dɛgɛl ‘standard, banner’; digl-aa ‘carrying pole’ > Wr tekela ‘stripe, hat band, pole at bottom edge of roof’ (70)
dwy / dawaya / daawɛ / daawaa ‘be miserable, faint, sick’ > UA *tïwoya / *tï’oy / *tï’mo ‘sick(ness)’ (1284)
dwy ‘sick’; madwɛ / madvɛh ‘menstrual blood flow’ > Ktn mïyvï’ ‘menstruate’ (1285)
dwy ‘sick’; madwɛ / madvɛh ‘menstrual blood flow’; *hammadwe > UA *hiNtwe > *ïNkwa ‘blood’ (1522-kw)
dwr ‘to go round, turn, revolve, move in a circle’ > UA/Hp/Yq *ruya ‘roll, turn, twist’ (1483-kw)
dwr ‘to go round, turn, revolve, move in a circle’ > UA/Hp/SNum *turu ‘whirl, roll, twist’ (1484-p)
daayeq ‘bulwark, siege-wall’; Assyrian dayyiqu ‘bulwark’ > Hopi tïyïqa- ‘wall’ (71)
dkk / dakka ‘make flat, level, smooth, stamp, crush’ > UA *takka ‘flat’ (1103)
dkk / dky ‘crush’; Hebrew -dakke ‘crush’ (qittel of dky) > UA *takki ‘mano for metate’ (1223)
dll / dalal ‘to hang, be low, languish, weak, poor’ > Hp tilili ‘tremble’; CN toli-nia ‘suffer, be impoverished’ (715)
dlq / dalaq ‘to blaze, flame, shine like fire’ > UA *tala’ ‘be light, v, light, n’ (716)
dmy / damaa ‘to be like, resemble’ > TO -dma ‘to be like or look like’ (751)
dʕw / daʕaa ‘to call, name’ > UA *tï(N)wa ‘name’ (1059)
dʕk ‘be extinguished (fire)’ > UA *tuku / tuka ‘fire go out, dark, black, night’ (876)
dopi ‘blemish, fault’; Aramaic dopy-aa ‘damage to reputation, reproach’ > UA *tïpa ‘dotted, striped, checkered’ (1434)
daqal ‘kind of palm tree’ > UA *taku ‘palm tree’ (961-p)
daqqa ‘be fine, crush, knock, rap, strum (instrument) > Hp rïkï- ‘make grating noise, rasping sounds of a rïkïnpi’ (893)
dqr ‘pierce, dig’; dɛqɛr ‘sharp tool or weapon, pick, mattock’ > UA *tïka / *tïkï / *tïkiy ‘cut, stick in’ (72)
dqr ‘pierce, dig’, dqr panaa-w ‘till its surface’ > UA *takirpanawa ‘work, cut’ (827)
drg ‘rise, step, tread, advance step by step’ > UA/Tep/Wr *tïy(k) / *tï’kï ‘climb, step, make thump noise’ (1326)
dɛšɛ’ ‘grass, vegetation’ > UA *tïsï ‘grass, weeds, meadow’ (73)

H

haC- ‘the’ > UA *a- ‘that’ (1193)
huharaa / hohar-aa ‘net, trap for birds or fish-the’ (< Akkadian xuxaaru ‘bird trap’) > UA *hïyaC ‘trap’ (1203)
hauğaa’ ‘hurricane, tornado’, pl: huuğ; haugaa’ / huugaa’ > hugaw > UA *hïka / *hïkawa 'wind, blow' (1219-p)
hwy / həwaa / hawaa ‘he/it was, became, reside’ > UA *hawa ‘be, exist, dwell (at a place)’ (1345)
hwy / yehwe ‘he is’ (Aramaic) > UA *yïhwa ‘that, he, she’ (112)

hwy / Yahwe ‘Yehovah, God of the Israelites’ > UA *ya’u / *ya’wV ‘leader, deity’ (800)
hwn / huun ‘be endowed with reason, be rational, intellectual, be wise’ > UA *huna / hu’una ‘know’ (1107)
hazza ‘to shake (s.th.), swing, wave, rock’ (as UA *-c- > -y- in NUA) > UA *hïya ‘rock, shake, swing’ (1155)
haakeel ‘now’ > UA *aï-pi 'now' (haakeel > *aï) (1157)
hal-aa’ ‘dirt, mud-the’ > UA *hala 'moist/wet soil’ (1363)
hlk, impfv sg: yelek / yelku / *yelka ‘go’ > UA *yïNka ‘enter, move, travel’ (1085)
hillal- / -hallel ‘praise, exclaim halleluia’ > UA *hala / *halala ‘happy’ (712)
henaa ‘hither, toward here’; Arabic hunaa ‘here’ > Wr ena ‘come’; Tr enai / ena ‘here’ (1324)
hinné ‘behold!’ > UA ne ‘look! So then’ (1325)
hukkɛ ‘was smitten’ (< *hu-nkay) > Tb hookii ‘deceased grandfather / grandson after death’ (53)
hikkiir ‘recognize, know’ > Tr iki ‘know, be aware of’ (810)
har ‘mountain’; pl: haree^{y} ‘mountains (of)’ > UA *huya / *huri ‘mountain’ (1119)
-hattel (< *-hattil) ‘to mock’ > UACV-1282 *’atti / *ata / *aCti ‘laugh’ (809)

W

-w / -o ‘his/its’ > UA *-wa ‘possessed suffix’ (1124)
wa- ‘and, (also prefixed to change impfv to pfv / past) > UA *wa-/o- ‘prefix for past tense’ (1494)

Z

zbb ‘be in a frenzy, an ecstatic’ > UA *sakwo / sikwo ‘witch, bewitch’ (18-kw)
*zabboot ‘flies’ > UA *sakwoti ‘fly, bee’ (17-kw)
zgg / zagga, impfv *-zuggu ‘throw, squeeze, force, cram’ > UA *cukka/i ‘crowded, mixed’ (622)
zwsṭ- ‘belt’ > UA *ṣutka ‘belt’ (1048)
zɬl ‘creep, crawl’ > Ca cawa-y ‘to crawl, climb’ (627)
zkk ‘be bright, clean, pure’; zak ‘pure, clean’; zky / zakaa ‘be pure, clear’ > Ca cexi ‘to clear up (sky, water)’ (621)
zɛ́pɛt (< *zipt-) / zaapet ‘pitch’; Syriac zapt-aa / zept-aa ‘pitch’ > UA cope / copi ‘pitch’; UA co’re ‘pitch’ (1116)
zaqn-o ‘chin-his’ > NUA *ca’no ‘chin, jaw’; SUA *ca’lo ‘chin, jaw’ (628-kw)
zaaqen / zaaqan (< *đqn) ‘be/grow old’ > UA *cukuC ‘old’ (1019-p)
zrʕ / zaaraʕ ‘sow (seed)’; Arabic zaraʕa ‘sow, plant’ > CN cayawa ‘sew, scatter seed’ (623)
zrʕ / -zriiʕ ‘bear a child’ > CN ciiwa ‘beget, gender’ (624)
zéraʕ ‘seed, offspring, descendants’; Arabic zarʕ- ‘seed’ > Hopi cayo ‘child’ (625-kw)

đ (of proto-Semitic), Aramaic d

di’b-aa ‘wolf-the’ > UA *tïpa / *to’apa 'wolf’ (618-p)
di’b-aa ‘wolf-the’ > UA *tï’ï 'wolf’ (619-p)
*đabboot(ee^{y}) ‘flies’ > UA tapputi ‘flea’ (620-p)
dakar ‘male, man’ (Aramaic) > UA *takaC / *takaN ‘man, person, body’ (616-p)
đkr / dakar ‘remember’ > UA *tïkay ‘think’ (1262-p)
zrɧ ‘rise, shine’ (< Semitic *đrɧ); Syriac dinɧ-aa ‘sunrise, light, star’ > -tinuN- of UA *tatinuN-pi ‘star’ (1408-p)
diqn-aa ‘beard-the, chin-the’ > UA *tï’na > *tï’ni ‘mouth’ (617-p)
zərooʕ ‘arm, forearm, power’; Arabic điraaʕ ‘arm, forearm’ > UA *toC ‘with the hand’ (1234-p)
zry (< *đry)‘to scatter, sow’; Aramaic dry /dəraa ‘to winnow, scatter’, verbal n: dəree / dərii > Tr/Wr *tari ‘seed’ (1499)
đrr ‘strew, spray’ > Ktn tïyïyï’y ‘drizzle (weather)’ (1373-p)

ɧ

ɧbl (< *xbl) ‘spoil, mar, corrupt’ > UA/Hp *hupala ‘waste, dishearten’ (645-kw)
*-ɧabbil (< *ɧbl) ‘bind, tie together’ > SP wïkkwinta 'to wrap around, coil’ (658-kw)
ɧabaqa ‘to pass air, break wind’ > Hopi hovaqtï ‘have an odor, smell bad, stink’ (672)
ɧabéret ‘marriage companion (feminine), wife’ > UA *hupi 'woman, wife’ (81)
ɧgg / ɧagga ‘overcome, defeat’ > Hp hoŋvi ‘strong, sturdy, durable’ (955-kw)
ɧgz ‘hinder, block, detain’ > Hp oŋo-(k-) ‘collide with, reach an impasse, get blocked in one’s plans’ (956-kw)
ɧagor-taa ‘girdle, loincloth’ > UA *wikosa ‘belt’ (1046-kw)
ɧaadaaš ‘new, fresh’; ɧdš ‘happen, be/become new’ > UA *uta’a ‘be’ (1435)
ɧady-aa ‘breast/chest-the’, pl: ɧ^{ə}daawaat- > UA *tawi(C) 'chest' (1056)
ɧzy ‘see, perceive, notice’ > UA *husi / *h^{w}asi ‘look, peek at’ (82)
ɧoṭɛr ‘rod’ > UA *(h)uci ‘tree, stick’ (651-kw)
ɧṭ’ (< *xaṭi’a) / ɧaaṭaa’ ‘miss (a mark), do wrong’ > UA *wa(C)tiN / *waCtiC ‘lose, lost, misled’ (649-kw)
ɧṭ’ (< *xaṭi’a) / ɧaaṭaa’ ‘miss (a mark), do wrong’ > Ktn ’ačaw ‘miss (the mark)’ (650-p)
ɧaṭab ‘firewood’ > UA *hucakwa / Tep husaba ‘pitch’ (666)
ɧwg / ɧuug ‘circle, horizon’ often in the sense of ‘atmosphere, firmament’ > Ls huŋ-la ‘the wind’ (912-kw)
ɧwṭ / ɧuuṭ ‘thread’; Arabic xyṭ ‘to sew’, xayṭ ‘thread, twine, cord, string’ > UA *wit > *wi(C)- ‘string, rope’ (657-kw)
ɧwl / məɧolaa ‘a dance in a ring, n’ > UA *mulawa / mulawi ‘a dance, n’ (826)

ħwr / ħuur ‘look, behold, gaze’ > UA *hura ‘come up, look in/over’ (667)
ħwš / ħyš, impfv: *ya-ħuuš; (hiqtil) yaħiiš ‘hurry, hasten’ > TSh yawï(sï) ‘quickly, fast, in a hurry; hurry up!’ (1433)
ħyy / ħayaa, impfv: yi-ħye ‘to live’ > Wr ohee / ohoe ‘to live’ (1437)
ħayil / ħail / ħeel ‘strength, ability’ > UA *wïl 'strong, able' (653)
ħool ‘sand’; Aramaic ħaal-aa; Aramaic pl: haalaat-aa ‘sand, sandy area’ > UA *(h)ola (Tep) / *otta (Num) ‘sand’ (1141)
ħelɛb ‘fat’ < *ħilb > UA *wip / *wiCp / *wi’p (>*wi’i) ‘fat’ (652-p)
ħll (< *xll) / yə-ħallel ‘play the flute’; ħaaliil ‘flute, pipe’ > Tb luulu’~’uuluulu’ 'play a flute'; Ca yulily ‘pipe’ (648-kw)
ħlp, impfv: y-ħlVp ‘come by turns, pass on, pass over, fade away’ > Wr yuipa ‘be worn out’ (857)
ħml / ħamala ‘carry, pick up, load up and take along’ > UA *homa / *hu’ma ‘take, carry’ (1040)
ħml / ħamala ‘carry, take along’, impfv: -ħmol / -ħmul, infinitive ħəmol > Ca húmulku 'wrap around (1041)
ħmm ‘heat, bathe, wash’ > UA *homa ‘wash, bathe’ (671)
ħmṣ > Aramaic ħmʕ ‘to ferment, leaven, mix’ > Hopi homo’-ta ‘be mounded, bulged, convex’ (1278-p)
ħmr ‘to pitch, cover, smear’ (with s.th.); ħammar ‘to color or dye red’ > UA *humay ‘smear, spread, rub, paint’ (79)
ħnk ‘train up, dedicate’ > Ca huneke ‘to take an Indian bath’; Yq húnakte ‘sentence, direct, train/raise’ (673)
ħnn ‘to favor, have compassion on’ > -wen- of Eu na-wencem ‘pity’ (662)
ħnp ‘be pigeon-toed, walk bow-legged with toes pointing inward, turtle, lizard’ > UA *hunap ‘badger, bears’ (675)
ħny / maħʰne < *maħne ‘camp, people of the camp’ > UA *mo’ona ‘son-in-law, in-law’ (1407)
ħpz / *ħippaz ‘to urge, press, to hasten, incite’ > UA *wïpaC / *wïppaC 'whip' (1323)
ħpp ‘to rub off, wash’ > UA *up(p)a 'bathe, wash, rub’ (80)
ħippušit ‘beetle’ > UA *wippusi ‘stink beetle’ (853-kw)
ħaql-aa ‘field-the, open country-the’ > UA *oka ‘sand, earth, rock’ (1275)
ħqq ‘cut in, inscribe’ > UA *wïk ‘cut’ (659)
ħeṣ / ħeṣi ‘arrow’ > UA *huc(a) > *huC ‘arrow’ (78)
ħṣr (< *xḍr) ‘be green, verdure, vegetation’ > UA *husa ‘grass’ (644-kw)
ħṣr (< *xḍr) ‘be green, verdure, vegetation’ > Tb hul’hulat ‘be green’ (1412-kw)
ħrb ‘lay waste, destroy’; impfv ye-ħrab ‘massacre’, or hoqtal impfv: *yuħrab > SP yurava ‘be overcome’ (674)
ħirgaa’ ‘dust’ > UA *huCkuN ‘dust’ (665)
ħargol ‘type of locust’; Arabic *ħargal / *ħurgul ‘locust’ > Tr urugi-pari ‘type of grasshopper’ (1321-kw)
ħrk / ħaruka ‘set in motion, move, stir, be agitated’ > UA *huyuka ‘move’ (1156)
ħaram / ħurmat- / ħariim ‘woman, wife’ > Wr oerume / oorume ‘woman’ (660)
ħórep (< *xrp) ‘harvest-time, autumn’ > UA *or ‘to harvest’ (656-kw)
ħrp / ħɛrpaa ‘shame, mutilation, reproach, deficiency’ > Hp ööpï ‘sickly, wounded, invalid, one with disability’ (663)
ħariḍa ‘be yellow’; Syriac ħraaʕaa ‘gold-colored’ > Tr ura-kame ‘pale yellow’ (669)
ħɛrɛṣ ‘earthenware, vessel, potsherd’ > Ca wayisma-l ‘plate, dish’ (670)
ħrr / ħaaraa ‘be hot, burn’, Ethiopic/Arabic ħarra ‘be hot’ > UA *uru / *ïrï ‘hot’ (1322)
ħtr ‘to dig’ > UA *hotaC ‘to dig’ (664)

X (of proto-Semitic *x)

*xbṭ ‘beat, strike, knock, rap’ > UA *kappica ‘clap, slap’ (629-p)
*xbt ‘be low’ (e.g., *xabitt ‘flat cakes’; *maxabat ‘flat plate, griddle’ > UA *kapal / kapar ‘flat’ (635-p)
*xbt ‘be low’ (e.g., *xabitt ‘flat cakes’; *maxabat ‘flat plate, griddle’ > NUA *kapat ‘low, dish’ (636-p)
*xdl / xadila ‘cease doing, stiffen, become rigid’ > Hp hïrïï-ti ‘come to a stop, harden’ (1007-p)
*xdš ‘scratch’, verbal noun: xadš ‘scratching’; Arabic xadš ‘a scratch, scratch mark’ > UA *kïca 'scratch' (1490-p)
*xaluqa ‘be smooth’; Hebrew ħlq ‘be smooth, slippery’ > UA *kalu ‘slide’ (765-p)
*xamar ‘wine’; Arabic ximiir ‘drunkard’ > UA *kamaC 'drunk’ (631-p)
*xuld / *xild-aa’ ‘mole, cave dweller-the’ > UA *kita ‘groundhog’ (1088-p)
*xole ‘be sick, hurting’ > UA *koli ‘be sick, to hurt’ (630-p)
*xnq ‘put around neck’; *xanaaq-aa ‘band, collar, ropes/chains around neck’
> UA *konaka ‘necklace, collar, string of beads’ (632-p)
*xarb-aa ‘sword, blade’ > UA *haypa ‘edge, shore’ (557-p)
xanṣaatu (Akkadian); Mandaic halṣa / haṣa; Syriac ħaṣṣaa; Arabic xaṣr- ‘hip, haunch, waist’ > UA *kaca ‘hip’ (634-p)
*xrd > Hebrew ħrd, impfv: tɛ-ħ(ɛ)rad ‘tremble, worry’ > UA *tiwa ‘shy, embarrassed’ (1512-kw)
*xrr / xarra ‘to snore’ > Ls xaráá-ya ‘to snore’ (655-p)
*xasiya ‘to fear’; Arabic maxšaat ‘fear’ > UA *makasi ‘to fear’ (881-p)
*xatan-aa ‘in-law’ > UA *kusana ‘in-law’ (633-p)

Ṭ

ṭaan / ṭa’n ‘body of a shirt’ > UA *taa’ ‘shirt, clothing’ (869)
’aṭib / ’aṭ(’)ib / haṭṭiib ‘do good, treat well’ > UA *attip ‘good’ (1368)
ṭbl ‘dip s.th. into’ (quttal: ṭubbal) > UA *cuppa ‘sink, submerge, dip’ (1159-p)

ṭbl / *-ṭabbel ‘dip, immerse’ > CN cakwaa ‘to soak’ (1319-kw)
ṭbʕ ‘to sink down’ > UA *cipo-k- ‘quicksand, get stuck in mud, get bogged down’ (1320)
ṭibbuur ‘navel’ > UA *sikuC / *sikuN ‘navel’ (777-kw)
ṭabbuur / ṭibbuur ‘navel’ > Tb šappušt ‘belly’; NP sibudu ‘navel’; Cr sipu; Hp sivon-, Tewa sipu ‘navel’ (778-p)
ha-ṭṭob ‘the good (thing/one), good (abstract)’ > UA *ayu 'good' (< *acu) (786)
ṭhr / ṭaahar ‘be clean (dietarily, of animals/food)’ > UA *cahar ‘fork(ed)’ (789)
ṭwɦ ‘to over-spread, coat, besmear, over-lay’ > Wr cuhca ‘1 to rub, 2 to hang up, put on clothes’ (779)
ṭwy / ṭawaa ‘spin (thread)’ > CN cawa ‘to spin’ (770)
ṭwl ‘to cast, throw’ > UA *culi: TO šulig ‘to put, throw away, pl’ (781)
ṭwr- / ṭuur-aa ‘rock, hill, mountain-the’ > UA *toya ‘mountain’ (868)
ṭɦy / ṭaɦaa ‘to hurl, shoot’ > Wr cewa ‘to throw or hit with a missile’ (782)
ṭɦn ‘grind, pound, crush, destroy’ > UA *to’na(C) ‘hit, pierce (773)
ṭll / ṭalala ‘spray, sprinkle, drizzle, bedew, rain a fine rain’ > UA *cololo ‘sprinkle, rain lightly’ (709)
ṭlʕ ‘to arise, come up’ > Tb tulu’ula- ‘to get up from sitting’ (713)
ṭm’ ‘be unclean’, ṭum’a(t) ‘uncleanness’ > co’ma ‘mucus, have a cold’ (772)
ṭmr ‘hide, bury, cook underground with coals’ > UA *tï’ma ‘baked underground with coals’ (865)
ṭmr ‘hide, bury, cook underground with coals’ > UA *tïmal- (tamal-li) ‘what is baked underground’ (866)
ṭnn / ṭannana ‘to sound, hum, buzz’, muṭannin ‘humming one’ > UA *muttanaC ‘hummingbird’, *mutaN ‘bee’ (1101)
ṭʕm ‘taste, eat’; plural participle ṭoʕmiim > UA *cu’mi 'suck, sip (771)
ṭʕn ‘to load (as beasts of burden)’ > Wr cuhce ‘to place a load on a burro, horse, etc’ (780)
ṭap ‘little children’; Arabic ṭifl- < *ṭipl- ‘infant, child, baby, boy’ > UA *cupi ‘small’ (792)
ṭap ‘little children’; Arabic ṭifl- < *ṭipl- ‘infant, child, baby, boy’ > UA *cipi / *cippili ‘younger brother' (1051)
ṭpl ‘to smear or plaster over, coat, cover’ > Hopi cakwani ‘plaster’; Hopi cakwan-ta ‘be plastering, smearing on’ (783)
ṭariya ‘to be juicy, moist, fresh’ > UA/Wr *-cori ‘wet/moist’ (723)

Y / I

ya’ya’ / yaa’yaa’ / yaa’ayaa’ ‘beautiful’ > Ls yawáywa ‘good-looking’; Sr yï’aayï’a’n ‘beautiful’ (571-p)
yə’or ‘river’ > UA *yaway 'river, canyon’ (799)
yaabaal / yuubal ‘watercourse, stream’ > UA *yïppa ‘valley’ (802)
yabbɛlɛt ‘wart’ (Akkadian ublu ‘wart’) > UA *upuliwa ‘wart’ (1209)
ybš / yii-/tii-baš ‘dry’ > UA *pasaC ‘dry’ (1062)
ybš / tiibašuu ‘dry, pl’ > UA *tapasu ‘dry’ (1063-p)
ygʕ ‘grow weary, labor, struggle’; Arabic waǧiʕa ‘have pain, suffer’, yagʕa > UA *-yowa 'suffer' (1188)
ygʕ ‘grow weary, labor, struggle’; Arabic waǧiʕa ‘have pain, suffer’, yagʕa > UA *-yowa 'shake' (1189)
ygr / yaagor- ‘be afraid’; yooger ‘afraid’ > Ca yuki ‘get scared, be afraid’ (1318)
yagar ‘hill, heap of stones, stone monument’ > UA *yakaC / *yakaR ‘nose, point, ridge’ (1279-p)
ydʕ ‘know’, hiqtiil stems -diiʕ / -daʕ ‘inform, tell’ > UA *tïwa / *ta(hV)wa ‘say, advise’ (1149)
ydʕ ‘know’, hiqtiil stems -diiʕ / -daʕ ‘inform, tell’ > UA *tïwi learn’ / *tawa ‘tell’ (1150)
yhb / haabaa > haavaa ‘come on, let’s (do s.th.), go to (cohortative)’ > UA *hïpa > hïva ‘go ahead, hortative’ (1459)
Yahwe ‘Yehovah, God of the Israelites’ > UA *ya’u / *ya’wV ‘leader, deity’ (800)
yehwe ‘he is’ (Aramaic) > UA *yïhwa ‘that, he, she’ (112)
hayyownaa / hayyoonat ‘dove’ > UA *hayowi ‘dove’ (824)
yoorɛ ‘to water, send rain’ (< *yawri) > UA/Tak *yawya / *yuya / *yawi ‘rain, snow’ (1037-kw)
yoorɛ ‘to water, send rain’, pfv: hoora, inf: hooroot ‘watering’ > UA/TrC *hora / *horo ‘rain’ (1038-p)
iđaa / iđan ‘then, therefore, if, when, whenever’ > Tb tan / tanni ‘if’ (1416-p)
yɧm ‘be in heat, be warm’ > UA *yuma > *yoma ‘copulate’ (855)
yɧm ‘be in heat, be warm’ > UA *yu’mi ‘warm’ (856)
yayin / yain / yen ‘wine’ > Wr yena ‘strong (of liquor)’ (1316)
yld ‘give birth, lay eggs’ > UA *yoli ‘live, alive, give birth, be born, hatch’ (1028)
yall-aa’ ‘lizard’; Aramaic(CAL) yarl-aa’ ‘lizard’ > UA *yul ‘lizard, sp.’ (1239)
ha-yyamiin-aa ‘the-right-toward’ > UA *(h)ayamin- ‘right’: Wr ahamína ‘right side’; Sr -ayuno’ ‘right’ (801)
ba-yyamee^{y} ‘in the year of’ > UA *pami ‘year’ (823)
ynq ‘to suck’, impfv: yiinaq; yaanq-aa ‘nursing child-the’ > UA *yï’na ‘smoke tobacco, smoke by sucking’ (1160)
’isaa ‘wall, f’ (Syriac) > UA *isV ‘wall, dab, make mud wall’ (589-kw)
yáʕar ‘wood, forest, roadless terrain’ > UA *yuwiN ‘ponderosa pine’ (92-kw)
yáʕar ‘wood, forest, roadless terrain’ > UA *yuwa ‘open country, outside’ (1072-p)
yṣb or yṣg or yṣʕ ‘lay, put down, set, place’ > UA *yaca ‘put, set down’ (1126-kw)
yṣb or yṣg or yṣʕ ‘lay, put down, set, place’, hiqtiil *mooṣiiC > UA *moci ‘put, set down’ (1127-kw)
yiṣhar ‘oil’ > UA *yuhu ‘grease’ (1120)

yr’ / yiiraa’ ‘(he/it) fears’; yir’a(t) ‘fear, n’ > UA *iya-paka ‘fear, v’ (728)
yry / yoore (m) / toore (f) ‘instruct, teach’ (hiqtiil 3 sg impfv), toore le/la > Tb tooyla ‘teach (him/her)’ (1344)
yrq ‘be green’ > UA/Tep/TrC *yora ‘green’ (1093)
yšb / yašiba ‘sat/dwelt’ > UA *yasiba ‘sit, reside’ (3)
yšb / yoošbim ‘sit, pl’ > UA *yukkwi ‘sit, pl’ (1158-kw)
yšb ‘sit, dwell’ ≈ Arabic wθb ‘jump, hop, jump up, start’ > UA *yasa ‘fly’ (1027)
Aramaic ’yt / ’iit ‘(there) is/are’ > UA *ka’ita ‘there is not’ (ka = ‘no’; so -ita = ‘there is’ (913)

K

kbd ‘be heavy, honor, sweep’, impfv: -kbod > UA *poci ‘sweep’ (1353-p)
kbd ‘be heavy, honor, sweep’, hiqtiil: hi-kbad > UA *(hi)paca ‘sweep’ (1354-p)
kbd ‘be heavy, honor, sweep’, qattel: kabbed > UA *kapir ‘clean (house), good, well’ (1355-p)
kbl ‘bind, braid’ / məkabbal ‘bound, tied up’ > CN mekapal-li ‘tumpline, carrying net’ (1338)
kabara ‘be older, great, big, grow, increase’ > UA *kaparaC ‘long, tall’ (1015-p)
khh / kehah ‘be inexpressive, dim, dull, colorless, disheartened’ > Ktn ’a-kïhahïk ‘sad’ (903-p or kw?)
kaukb-aa(’) ‘star-the’ > UA *kuppaa’: Sr kupaa’ ‘to shine (as of the stars)’ (1274-p)
kwkby / kuukkəbay ‘owl’ > UA *kuku ‘burrowing owl’ (1117)
kuuky-aa ‘spider-the’ > UA *kuukya / *kukkaC ‘spider’ (1409-p)
kakkar ‘valley’ > UA *aki ‘arroyo, canyon, valley’ (974-kw)
kɛlɛb, kalb- ‘dog’ > UA *kalop ‘fox’ (711)
kly ‘complete’; kəliiy ‘untensil, tool, weapon, vessel’ > UA kïyii- ‘complete, arrowhead, liquid in container’ (1314)
koliit / kaliit ‘kidney’ > UA *kali ‘kidney’ (1105)
klm ‘address s.o.’ > Ls ’ulómi ‘call s.o. names’ (980)
kam’- / kama’aatum ‘truffles’ > UA *kamo’-ta ‘sweet potato’ (575-p)
kəmoo ‘like, as’ > UA *kïm ‘how’ (1212)
kmn ‘be hidden, concealed, latent’ > UA *kuman ‘sleep’ (1429)
kann ‘shelter, house, nest’ > UA *kanni ‘house’ (890)
kwn / knn / he-kannu ‘prepare, make ready, fix s.th.’ > UA *hanni 'do, make'; Hp/Tak -kin ‘causative’ (1011)
kns ‘gather, wrap’ > UA *kina / *kanas ‘cover’ (829)
knʕ / yi-kkaneʕ ‘be humble’; hi-knaʕ-‘humble vt’ > CN ikno-teka ‘be/make humble’, ikno-nemi-tia ‘live humbly’(1313)
kəpen / kəpin ‘be hungry’ > UA kopii- ‘be hungry’ (1369)
ksy ‘cover’; Hebrew kissaa / kissii- ‘cover’ > UA *kis / *kiCsi ‘shade’ (1154)
ksr / kasara ‘break’ > UA/Tr/Wr *kasi ‘break’ (985)
kpr, impfv: *-kpor ‘cover’ > Tr pora ‘cover’ (1396-p)
kəfiir (< *kapiir) ‘young lion’ > UA / PYp kaper ‘bobcat’ (803)
krr / krkr ‘go in circles, dance’ > SP kiya ‘have a round dance’ (64-kw)
karkara / qarqara ‘coo (pigeon), grumble, gurgle’ > UA *ka(k)kara ‘quail’ (960)
kəraaʕ ‘lower leg’ > UA *yï’u < *kVyu’u ‘leg’ (997-kw)
kirš / kariš ‘stomach, paunch, belly’ > UA *kïca ‘belly, waist’ (1003)
kutónet ‘shirt-like tunic’ > UA *kutuni ‘shirt’ (755)
kaatep / katip / katp-aa ‘shoulder’ > UA *kotapa / *kotapo ‘shoulder’ (51)
ktp ‘carry on the shoulders’ > UA *kucupu ‘carry on the back’ (753)
kootl-aa ‘wall-the’ > UA *-kowli / *kori 'wall' (1206)
ktš, makteš ‘mortar, grinding stone’ (< ktš ‘grind’) > UA *maCta /*mattas ‘grinding stone, mortar’ (614)
ktš ‘pound, pound fine, bray’; unattested *kitteš (< *kittaš) > Yq kitta / kittasu ‘grind, mash’ (615)
ktš / *-ktušu ‘pound, bray’ > tusu ‘grind’ (1094)

L

l- ‘to/for’; Aramaic le ‘to/for him’ > UA *li 'to, for' (1187)
l’y / loo’e ‘grow weary/tired’ > UA *loi ‘be tired’ (705)
l’m ‘to bandage, wrap, dress’ > UA *taluma ‘blanket, garment’ (1129)
lebb, hal/han-lebb ‘the heart’ > Hp ïnaŋwa ‘heart, life’ (1312-kw)
lbš / -lbaš-uu ‘put on (garment), clothe (oneself)’ (-lb- > -bb- > -kw-) > UA *kwasu ‘dress, shirt’ (50-kw)
lahgat ‘tongue’, pl: *lahgoot > UA *laŋi / *laŋu 'tongue' (698-kw)
lo ‘to him/it, has’ > UA lo (1026)
lwz / lawz ‘almonds’ > UA *lawas ‘pine nut cache’ (702)
lwy / laawaa ‘turn, bend, twist’ > UA *líwa/i ‘be tightly twisted’ (706)
lḫy / ləḫiy ‘chin, jawbone’; Arabic laḫy- ‘jawbone’ > Hopi öyi ‘chin’; Ls ’óóyi-l ‘jaw, chin’ (1431)
lxš / *-lxus-uu ‘whisper, mutter sounds’ > UA *kusu ‘make sound (characteristic of species)’ (1064)
lxš / *-lxus-uu ‘whisper, mutter sounds’ > UA *kus(pi) ‘throat, craw’ (1065)

lmd / loomed ‘learn’ > UA *lomi ‘know’ (699)
lummad ‘learned, trained, taught’ > UA *luma ‘good, beautiful, fit, nice’ (700)
-lmad ‘learn’ > UA *mata / mati ‘know’ (701)
lmm ‘gather, collect, befall, overcome’ > UA *lïmïmï ‘burn, fall in (a structure)’ (703)
lappiid-aa ‘torch-the, light pot-the’ > pita ‘fire’ (883-p)
laqlaq ‘stork’ > Ca la’la’ ‘goose’ (704)
lqẖ / laaqaẖ ‘take (in hand), grasp, take as wife’ > UA *loko ‘marry’ (695)
lqẖ / *ya-lqaẖ > *yi-qqaẖ ‘take, take as wife’ > *yïkoC / *yokoC ‘copulate’ (696)
lqẖ, -qqaẖ; imperative forms: qaẖ and qəẖaa > UA *ŋïha / *ŋïhi ‘grasp, catch’ (1465)

M

ma ‘what, relative pronoun’ > UA *ma ‘what, which, that, relative pronoun’ (767)
mə’od ‘strength, very, very greatly, exceedingly’ > UA *mu’i (850-kw)
m’n ‘refuse’ > Hp meewan- ‘forbid, warn’ (1333-p)
mwg / muug ‘to melt, soften, dissolve, faint’ > TO moik(a) ‘to be soft’ (1311)
mwq, pfv: *maaq ‘mock’ > UA *mak ‘laugh, tease’ (808)
mooq-aa ‘felt-sock or stocking, shoe-the’ > UA *moko ‘shoe, moccasin’ (1280)
mẖy / məẖa’ ‘to strike, smite, wound, and wound (with an arrow)’ > UA *mu’a/i / *mu(k/h)V ‘shoot (arrow)’ (1183)
mẖwṭ-aa’ ‘mucus’ > UA *mït... ‘snot, mucus’ (1109)
maẖ^{a}ne < *maẖne ‘camp, people of the camp’ > UA *mo’ona ‘son-in-law, in-law’ (1407)
mooṭ ‘pole, carrying frame’; mooṭaa ‘pole, bar of yoke’ > UA *mu(C)ti ‘point (of s.th.)’ (790)
muxx ‘brain’ > UA *mo’o ‘head’ (1078)
maṭṭɛ ‘staff, rod, branch’ > Hopi komaci ‘kindling, small sticks or chips of wood’ (Hopi ko- ‘fire’) (791)
miy / mii ‘Who?’ but also in place of maa ‘How? What?’ > UA *mi ‘wh-base, forms interrogatives’ (1213)
mayim / meem- ‘water’ > UA *mïma / *mïmï- ‘ocean’ (55)
miin ‘type, kind’ > UA *min ‘what kind, how’ (1456)
makyaan / mekaa ‘hurting, injuring’ > UA *mïka / *mï’a ‘kill’: Ca mékan/méqa; Ls mókna (768)
mkr / maakar ‘sell’ (3rd masc sg pfv) > UA *maka / *makaC ‘give’ (565-p)
mlk ‘to lead in council’; mɛlɛk / malk- / moolek ‘king’ > Hopi moŋwi ‘chief’ (1300)
mlk ‘lead in council’; mɛlɛk ‘leader in council, chief, king’; or muul / mool ‘front’ > UA *mul / *muluka ‘first’ (1301)
mukkɛ ‘smitten’ (*mu-nkay > mukkɛ) > UA *mukki ‘die, be sick’ (52)
*mn ’yn / Hebrew mee-’ayn ‘from where?’; Arabic min ’ayn ‘from where?’ > Tb maa’ayn ‘where from’ (1214)
maanoot ‘shares, portions’ > UA *man(n)u 'all, every, the count (of)’ (1029)
manzaal ‘star, moon’ > UA *mïcaC / *mïncaC (1077-p)
-mʕak ‘squeeze, crush, rub’ > UA *ŋaka/i ‘grind, scrape, rub against’ (940-kw)
mṣṣ, impfv: yi-moṣṣ ‘slurp, lap’ > UA *mos ‘suck’ (1173)
mʕṭ ‘be few, be too small’; məʕaṭ ‘a little, a little amount’ > UA *mi’a ‘small’ (1466-kw)
mar’ / maar-aa ‘lord, prince-the’, mar’a ‘princess’ > UA *mara / *mayha ‘daughter (more often than son)’ (1042)
mar’ < *mar’u ‘prince’, *mar’a ‘princess’ > UA *ma’a ‘woman’ (1043-p)
mrq ‘rub off, scour, polish, cleanse, vt’ > Sr mïyï’-kin ‘wipe out’ (1367-kw)
mrr ‘pass, go, walk’ > UA *miya ‘go’ (65-kw)
rʕ + mrr ‘sun-go’ > UA *ta-miya ‘sun, day, sun-going’ (1379)
moškat ‘bracelet, fetter, belt > Tb mohkat ‘belt’ (1045)
mšš; Arabic massa (perf pl: mass-uu, impfv: ya-massu) ‘feel, handle, grope, touch’ > UA *masu 'touch, feel' (1194)
maatn-aim ‘loins, dual’; Arabic matnat-aani ‘loins, dual’ > Ls mááča-t ‘back’ (1356)
motq- (< *moteq) ‘sweetness’, motq-o ‘its/his sweetness’; motq-aa ‘her/its …’ > UA *mumuko/ka ‘bee’ (1231)
meetar ‘bowstring, tent rope’ > CN maatla-tl ‘net, sling’ (1111)

N

-bbiiṭ ‘look’ (< *-nbiiṭ) > UA *pici / *pica ‘look, see’ (562-p)
n’bl / nebel ‘skin-bottle, skin (of wine)’ > no’pal- ‘prickly pear cactus fruit’ (often fermented to alcohol) (720-p)
naap-aa, written na’p-aa ‘louse egg-the’ > UA *no’pa / noppa ‘egg’ (1076-p)
n’q / na’aqat ‘groan’ > UA *ni’ok ‘speak’ (1147)
naar ‘fire’ written na’r / na’ar ‘fire’ > UA *na’ay / na’aya ‘fire’ (885)
nb’ / nabba’a ‘to tell, inform’; naba’ ‘news, report’ > Hp navo-ta ‘to know, learn by hearing’ (1309)
ngd / higgiid / haggiid / (y/t/’)aggiid ‘tell, announce, inform’ > TO ’aagid ‘tell s.o. s.th.’; Hp ki-ta ‘say’ (1310-p)
ngʕ / ti-ngaʕ ‘she/it touches’; Aramaic t-ngʕ > Hp toŋo(k-) ‘come into contact with, touch, reach’ (1196)
nagaš / niggaš ‘approach’ > Ca néq- ‘come’ (1018-p)
ndw / nadaa ‘invite, call together’ > UA *nata / *nara 'cry' (1425)
nhy / nahaa^{y} ‘to lament’; Hebrew nahi / nəhi ‘lamentation’ > UA *nï’ï ‘sing’ (1021)

nwn > naanii / naanaa ‘mother’ > UA *nana ‘mother’ (1079)
nwr, impfv: nuur(u), pfv: naar ‘make/become light’ > UA *nur / *nar ‘become daylight’ (1420)
náɦal (< *naxal) ‘river valley, wadi’ > Ktn naka-č ‘gully, ravine, cliff’ (646-p)
náɦal (< *naxal) ‘river valley, wadi’ > SP noiC ‘canyon, wash’ (647-kw)
nɦl / naaɦal, -nɦal ‘take/have as possession’; naɦ^{a}lat ‘inherited property’ > TO nolawt ‘buy, buy from’ (1308)
ntʕ ‘to plant’, yi-ṭṭaʕ ‘he plants’ > UA *’ïca ‘to plant’ (774-kw)
ntʕ ‘to plant’, nɛṭaʕ / naaṭaʕ ‘a growing plant’ > Hopi natwani ‘plants, harvest’ (775)
ntr ‘watch, guard’ > UA *natya ‘plan’, Tr natá ‘think’, TO nenašan ‘look, check, stay awake/alert’ (776)
mukkɛ ‘smitten’ (*mu-nkay > mukkɛ) > UA *mukki ‘die, be sick’ (52)
hukkɛ ‘was smitten’ (< *hu-nkay) > Tb hookii ‘deceased grandfather / grandson after death’ (53)
hikkiir ‘recognize, know’ (< *hi-nkiir) > Tr iki ‘know, be aware of’ (810)
nes ‘flag, standard, ensign’ > Hp na’ci / naci ‘standard outside kiva when not in use’ (1307)
nasaga, impfv: -nsugu ‘to weave’ > UA *sugu ‘to sew’ (1411)
nʕm ‘be lovely, pleasant, delightful, good, beautiful’ > UA *numa > *noma ‘good, good-looking’ (900)
naʕar ‘boy’ > UA *nowa ‘son’ (90-p)
naʕ^{a}ra(t) (< *naʕrat) ‘girl’ > NUA/Wr *nawiC 'girl' (91)
naʕar ‘boy’ / naʕ^{a}ra(t) (< *naʕrat) ‘girl’ > UA *na’a ‘boy/girl’ (1480-kw)
-nʕar ‘shake, grunt, roar’ > *ŋïy ‘shake, be dizzy’ (941-kw)
npɦ ‘blow, breathe’; *napxat ‘puff, breath, gust’ (*-px- > -k-; *napxa > nïka) > UA *nïka ‘be windy, blow’ (1218-p)
npl ‘fall, be born’; impv: -ppol > UA *puli ‘to fall, give birth, daughter’ (718)
npl / *ta-npiil > *teppil: ‘cause to fall’ > UA *tïppin ‘trip, hunt, track’ (822)
npš ‘to breathe’; nɛpɛš ‘breath, life, soul’; unattested: *hippiiš ‘breathe’ > UA *hikwis ‘breathe, spirit, heart’ (839-kw)
npš / niqtal: hinnapeš ‘breathe, recover’ > UA *hiapsi ‘breathe, rest, live, heart’ (1174)
nɛpɛš ‘soul, self’, napš-ó ‘itself, himself’; Syriac npɛš-uhu ‘life, soul, self-his’ > UA *pïsu / *pasu ‘self’ (1030)
nṣp ‘to reach mid-day, become noon’; Arabic niṣf- / nuṣf- ‘half, middle’ > UA *nasipa ‘half, middle’ (1452)
nṣr ‘keep watch, watch over’ > nese / nese-ro / nese-ri ‘watch over, take care of’ (1176-p)
nqm / naqama ‘revenge, be hostile, angry’ > *na-kamu ‘upset, angry’ (1034-p)
nqm / naqama ‘revenge, be hostile, angry’ > *naŋam ‘angry’ (1034-kw)
nś’ ‘to lift, carry, take, be lifted up in vision’ > SP nonosi ‘to dream’ (1306)
nš’ ‘lend out’ > Hopi nasi-moki ‘borrowed thing, loan’ (1439)
naaš-iim ‘women, pl’; Syriac nešaa ‘women’ > UA *nos-tu ‘old woman’ (1271)
nešaa ‘women’ > UA *nïsa ‘aunt, mother's older sister’ (1334)
ntn, imperative: ten / teni ‘give!’ (< *tani), impfv: -tten > UA *tani 'ask for’ (1036)

S

s’b ‘to age’, Syriac saa’ib(at) ‘old man/woman’ ≈ Hebrew *soo’ib(at) > Tb šo’ibit / šoobit ‘old woman’ (891)
sbb ‘to turn self around, go around, surround’ > Ca suvuvey ‘to whirl around’ (1305)
sbl ‘carry’; sabbaal ‘burden carriers’; *hisbiil > Hp iikwil-ta ‘put on the back to carry’ (40-kw)
šibl- ‘lion cub’ or Arabic sabʕ- / sabuʕ ‘beast of prey, lion’ > Wr teh-sebo-ri ‘baby mtn lion’ if teh- is ‘rock’ (1290)
sbr ‘be bright, intelligent, understand’, sabbaar ‘reasoner, scholar’ > UA *suNpa ‘know’ (1106)
sgd / səgod ‘bow down’ > UA *coko ‘kneel, knee’ (1255)
Arabic sahm- ‘arrow, dart’; pl suhuum > UA *suhuma 'arrow' (752)
Arabic šwy / šawaa ‘broil, grill, roast’ > UA *sawa ‘boil, apply heat, cause to melt’ (879)
Aramaic sw’ / swy / səwaa’ ‘to long, desire’ > UA *suwaC ‘to want’; UA *sïwaC ‘to want’ (1207)
sup-aa ‘end-the’; šuup-taa ‘chip, pin, n.f.’ > UA *cuppa ‘point, prick’ (1502)
suupaa, pl: suupoot ‘storm, storm-wind’, Aramaic šwp ‘to blow (of wind)’ > UA *sïpï ‘cold wind’ (1073)
sws / sawisa ‘be moth-eaten’, saas / suus ‘moth, mothworm’ > UA *soso- ‘butterfly’ (854)
saaɦil ‘coast, seashore’ > UA *suwil 'edge, shore, border' (1074)
saɦr- / suɦr-, pl: suɦuur ‘lungs’; also masaaɦir ‘lungs’ > Tb mošooha-t / mosooha-t ‘lungs’ (1421)
šakka ‘pierce, prick, stab’; Arabic šikkat ‘weapons’; Hebrew sek ‘thorn’ > UA *sikki ‘spear, pierce, stick’ (1291)
sly / salaa / saliya ‘think no more on (s.th.), forget, comfort, delight, take pleasure in’; Hebrew šalaa ‘rest’ > Hp salayti ‘be gratified, fulfilled, pleased by/from’ (1501)
saalʕaam ‘locust’ > UA *coho / *co’o ‘grasshopper’ (816-kw)
sm’l / Old Canaanite hassim’al ‘the-left’ > UA/ Tb ’aašiyan / aašiŋan ‘left side’ (1246)
smm / sammem ‘to poison’ > UA *samïm ‘be wet, numb’ (877)
simmora ‘squirrel’ > UA *ciCmo / *cimo ‘squirrel’ (1362)
snw ‘gleam, shine, be beautiful’ > Hp soniwa / sonwa-y ‘be beautiful, pleasing, bright’ (13)
Arabic singaab ‘squirrel’ = unattested Hebrew *siggoob ‘squirrel’ > UA *sikkuC ‘squirrel’ (57)
Arabic *saʕapat ‘palm leaves’ > UA *caupali ‘palm sp’ (804)

spd ‘mourn for, sing the lament for the dead, bewail’ > UA *osp/ops... 'tears, n’ (898)
səqaʕ, impfv -sqaʕ ‘to crouch, squat’ > *cuku 'stoop, bend over' (1254)
šarnaqat ‘cocoon’, pl *sarnaqoot > UA *ca’ïku / *cayïku < *caCCïku ‘cocoon’ (1058-kw)
śrq / srq ‘to comb’ > UA *siyuk / *ciyuk ‘to comb’ (62)
sirq-aa ‘comb-the’ > UA *cika ‘to comb, sweep’ (63)
swrr ‘turn, revolve, dance’ > UA *suyuyu ‘spin, whirl’ (727)

ʕ

ʕaab / ʕoob ‘beam, item of wood’ > UA *wop / *wopiN ‘wood, board, beam’ (1204)
ʕgz / ʕagaza ‘to age, grow old (of women)’ > Tr wegaca- 'grow old (of women)’; UA *okaci ‘old woman’ (87)
ʕagol ‘round’ > UA *wakol 'round’ (677)
ʕgl ‘make a circle, be round’; noun or f. impfv: *ta-ʕgol > UACV-433a *takola / *takula ‘round, (en)circle’ (1464)
ʕgm ‘be bent, weighed down, grieve’ > UA *wakam / *waŋam ‘down, deep’ (927)
ʕdw / ʕadaa ‘run, dash, race, pass’ > UA *wata ‘run’ (1233)
ʕwr > ʕaara / ya-ʕwaru ‘be/make blind, go away with (s.o./s.th.)’; IV aʕaara ‘lend, loan’ > UA *wara 'sell' (1202)
ʕzb / ʕazaba ‘leave, abandon, let go, give up s.th.’ > Sr wiđap-kin ‘leave, let go, abandon, quit, stop (doing s.th.)’ (688)
ʕ^{a}ṭallep ‘bat’; ha-ʕ^{a}ṭallep ‘the-bat’; Aramaic ʕ^{a}ṭallep-aa ‘bat-the’ > UA *ho’napi ‘bat’ (784)
ʕaṭmaa ‘thigh, n.f.’ > UA *uma ‘thigh, upper leg’ (1282-p)
ʕaṭiišaa ‘sneeze, n.f.’, ha-ʕṭiišaa ‘the-sneeze’ > UA *ha’tisa ‘sneeze’ (1162-kw)
ʕayṭ / ʕeeṭ ‘bird of prey’ > UA *wiCtiki ‘bird’ (878)
ʕlw / ʕly / ʕaalaa ‘ascend, go up, grow’ > UA *wïla/i ‘grow’; Hp wïŋwa (681)
ʕlw / ʕly / ʕaalaa ‘ascend, go up, grow’; taʕalɛ ‘it/she grows’ > UA *tïwïl ‘grow’ (682)
ʕlw / ʕly / ʕaalaa ‘ascend, stand up, arise’, participle: ʕoole > Tb oolït ‘get up’ (1257)
ʕlw / ʕly / ʕaalaa ‘ascend, stand up, arise’, pl: ʕaluu > *wïwïlu-ka ‘stand, pl’ (1258)
ʕlw / ʕly; maʕ^{a}le ‘rising, ascent, climb’; Hebrew maʕ^{a}laa ‘stairs, upwards’ > UA *-mo- ‘up(ward)’: i’móla 'stairs' (1268)
ʕlw / ʕly; maʕ^{a}le ‘causing to rise/go up’ > *mula / *molo ‘boil, steam, waft upward’ (1488)
ʕlw / ʕly; maʕ^{a}le ‘causing to rise/go up, cause (smoke) to rise’ > *mola / *moli ‘be smoke, give off smoke’ (1491)
ʕaluqaa ‘leech’; ʕalaqat ‘leech’ > UA *walaka ‘snail’ (88)
ʕmṭ ‘cloud over, become dark’ > UA *(w)umaC / *(w)ïmaC ‘rain, be cloudy / overcast’ (683)
ʕml / impfv: ya-ʕmalu ‘to do, work, take pains, exert oneself” or *yuʕmal > UA *yu’mal ‘tired’ (1267)
ʕmṣ (< ġmḍ), impfv *- ʕmuṣu ‘close eyes’ > UA *mucu ‘close eyes’ (831)
ʕṭw ‘give, present to’ > UA *utu (678)
ʕayn ‘eye’; ʕayyen ‘to eye, perceive, point out, show’ > Ktn ’ayn ‘show s.o. s.th.’ (1519-kw)
ʕeṣaa ‘advice’; *na-ʕaṣa/e ‘to argue, quarrel’ > UA *na-wïsa / *na-oca (> nooca) ‘speak’ (684)
ʕɛṣɛm ‘bone’, pl ʕəṣaam-iim ‘bones’ > UA/Num *cuhmi ‘bone’ (1476-kw)
ʕɛṣɛm ‘bone’, pl ʕəṣaam-iim ‘bones’ (< *ʕaṣm); Arabic ʕaẓm- ‘bone’ > UA/Azt *omi / *ohomï ‘bone’ (1477)
ʕiṣṣ / *ʕiḍḍ ‘prickly shrubs, brambles’; Arabic ʕiḍḍat ‘single prickly s.th.’ > *wiCcaC ‘thorn, awl’ (1182)
ʕiṣṣ / *ʕiḍḍ ‘prickly shrubs, brambles’; ʕiḍḍat ‘single prickly s.th.’, pl: ʕiṣṣoot > *wicu ‘prickly pair cactus’ (1182)
ʕaaqeb ‘heel, footprint’ > UA *wakVpi ‘track’ (685-p)
ʕaaqeb ‘heel, footprint’ > UA *woki ‘track, footprint’ (1197)
ʕaaqeb ‘heel, footprint’; yə-ʕaqqeb ‘to track down’ > UA *yïki ‘make/follow tracks’ (1199-kw)
ʕqb ‘seize by the heel, deceive’; *ʕooqeb ‘deceiver’ > UA *wokab > Hp lölöqaŋw ‘bullsnake, gopher snake’ (1198-kw)
ʕuqaab ‘eagle’ > NUA/Tak *yuŋapi 'buzzard' (953-kw)
ʕqr ‘uproot, weed, heal, be sterile’ > *waki ‘dry, shrivel, thin’ (1380)
ʕqr ‘uproot, weed, heal’ > UA *qaya/i ‘uproot, weed, clean, wash, heal’ (994-p)
ʕiqqaar ‘root’; Syriac ʕeqaar-aa ‘root, remedy-the’ > ŋa- of UA *ŋa-kaw ‘root’ (948-kw)
ʕrb (< *ġrb) ‘become evening’; ʕɛrɛb / ʕaarɛb ‘evening’ > UA *ari(b/w)a ‘late afternoon, evening’ (1442)
ʕɛrwaa ‘nakedness, genital area’ > UA *wowa ‘vulva, vagina’ (686)
ʕaroʕer / ʕarʕaar ‘juniper tree’ > *wa’wari > waorí / awarí ‘juniper’ (689)
ʕry / ʕr’ / ʕaraa, impfv: ta-ʕra ‘to contain, hold’ > UA *taŋa ‘bag, sack, put in container’ (1418)
ʕrq ‘flee, escape, shun, avoid’ > UA *wayaq ‘go out (fast)’ (1515)
ʕušb- ‘grass, herbage, plants, pasture’ > *(h)ukwi ‘grass’ (918-kw)
ʕśy, pfv: ʕaaśaa ‘make, make (write) books, create’ > UA *osa/i / *oswa ‘paint, draw, write’ (679)
ʕśy, impfv: yaʕaśɛ ‘make, make (write) books, create’ > UA *yo’osa ‘write, paper’ (680)

ġ (of proto-Semitic > ʕ in kw-Semitic, but > k in p-Semitic)

ġazzaalat ‘spider’ for -koso of > UA *tokoso 'spider' (1st morpheme likely *tuk- ‘black’) (1455-p)
ġayr- ‘other than, except, no, not, non-, un-’ > UA *qay ‘no’ (690-p)
ġpw / ġpy, iġpaa’a(t) ‘slumber, nap’; impfv: ya-ġpuw ‘to slumber, fall asleep’ > UA *ïppïwi / *ïCpïwi ‘sleep’ (1430)
ġasala / ya-ġsil(u) ‘to wash’ > UA *kasi ‘wash’ (693-p)

raġiba ‘to desire, wish, want, crave’ > UA *takuC ‘thirsty’ (691-p)
ṣaġura / ṣaġira ‘be small, little, scanty, young, dwindle’ > UA *cako ‘small’ (692-p)

P

p’y ‘be comely’, *pa’yuut ‘beauty, comeliness’ > Tr ba’ó- / ba’óre- / bayóre ‘beauty’ (1392)
pa’r- ‘mouse’ > UA *pa’i ‘mouse’ (578)
pa’r- ‘mouse’ > UA *pa’wiN ‘mouse’ (579-p)
pgʕ ‘meet, attack, confront, assault’ > UA *poŋo ‘hit, pound’ (952-kw)
pgl ‘be thick and soft or flaccid’ > Hp pöönala ‘thick (in size)’; Num pohon- ‘thick’ (1387)
pagr-aa ‘corpse, body’ > UA *pïkyaa ‘skin, animal hide, flesh’ (1130-p)
pgr ‘to cleave, break up’ II ‘to split, cleave’ > UA *piŋa ‘grind’ (1304-kw)
paddaan (*paddoon) ‘plow, yoke of oxen’; Syriac paduuʕ ‘iron bar, club, mace, axe’ > UA *poto 'digging stick' (1060)
pwṣ ‘spread, disperse, overflow’ > UA *puca 'blow' (840-kw)
pwṣ ‘spread, disperse, overflow’ > UA *puya ‘full’ (1520)
pẖd (< *pxd) and Akkadian paxaadu ‘be startled, tremble’ > Ktn pokat- ‘be frightened’; Numic *-paka- ‘afraid’ (637-p)
pɛṭɛr ‘firstborn’ < *paṭr- > UA *pa’ti / *paCti’i ‘older sibling’ (837)
ptš ‘make broad, flat and spread wide’; paṭṭiiš ‘forge-hammer’ > UA *patta / *pata ‘flat, level, smooth, slippery’ (1227)
pakken / etpakkan ‘speak much, chatter, gossip’ > UA *aNpaka- ‘talk’ (1151-p)
pol ‘bean(s)’ > UA *(tï-)pol 'bean' (847)
plpl ‘sprinkle with blood’ (<*palpil) > UA *païC / *pap 'blood, bleed' (1449)
pl’ ‘to be extraordinary, wonderful’ > UA *palaw ‘pretty’ (714-p)
plṭ ‘escape’, pl participle: poolṭiim > UA *puCti ‘escape’ (793)
plk ‘to be round’; Hebrew pelek ‘whirl of a spindle, circle’ > Hp pölà-ŋ-pï ‘round as a ball’ (1303)
pny / panaa^{y} ‘turn, look’, participle poone > UA *puni ‘turn, look, see’ (754)
pny ‘turn, turn head, look’; *-panniy ‘turn (something), direct’ > UA *pani ‘pull, drag’ (1122)
pny / *-panniy ‘have s.o./s.th. turn or head in a direction’ > UA *pana ‘put in’ (1123)
pny / panaa-w ‘face-his, surface-its’ > UA *pana ‘cheek, face’ (851)
pny / paanɛ ‘front, face, surface’, pl: *paniim, panee^{y}- / *panii^{y} ‘face, surface of’ > UA *pani ‘on, on surface of’ (852)
pny / bə-paney ‘on the surface of’ > UA/TrC bepán ‘on, on top of, over’ (1398-p)
pant-aa’ ‘upper leather of a shoe, instep of the foot-the’ > UA/Num *pacca / *paNca ‘shoe’ (1281-p)
pʕl ‘do, make, work’ > UA *pu’ay / *pu’al ‘do’ (825)
pʕl ‘to do, make, accomplish, have an effect / influence on’ > Hp powa-ta ‘to cure, tame’ (1302)
pʕl / poʕal ‘daily labor, deed, wage’; Hebrew pəʕullaa(t) ‘work, action, wage’ > UA *puwal 'count' (1467)
pʕm ‘step, pace, foot’, pʕm pʕm ‘step by step’ > puma- of Kw pumake’e ‘stomp in regular beat, beat (of heart)’ (902)
pġy / f.pfv: paġyaa ‘inquire, seek’ > UA *paya ‘call, summon’ (1067-p)
papuke ‘owl’ > UA *poko ‘burrowing owl’ (1361)
pqẖ / paqaẖa ‘to open (eyes), to blossom’ > UA *paka ‘open’; Ls páqa- ‘to sprout thru ground’; Ca púqi ‘bloom’ (1340)
paqʕ- ‘species of fungus’ > UA *pakuwa ‘mushroom, fungus’ (676)
pasada, impfv ya-psudu ‘go bad, rotten, decayed, putrid, spoiled’ > UA *sora ‘rot, go to waste, throw away’ (1143)
psẖ / *pissex, pl: pisx-iim ‘limping’ > UA *pisika / *pikka ‘bad, rotten, infected, limping’ (640-p)
psẖ < *psx, impfv *-psax ‘limp’ > UA *sakï ‘limp’ (639-p)
pṣl / paṣala / *-pṣVl ‘skin, peel off (bark), strip layers’, pəṣaalaa ‘stripped (of sticks)’ > UA *cala ‘bark, shell’ (841-kw)
pṣl / paṣala / *-pṣil ‘skin, peel off (bark), strip layers’ > UA *cila ‘to shell, hatch out’ (842-kw)
pṣl / bṣl ‘peel, strip’ > various UA forms (843-846)
pṣʕ ‘wound, injure, bruise, squash, squeeze’ > UA *pacu ‘squeeze, smash’ (1228)
pṣṣ ‘break into pieces’ > UA *pisa ‘pound’, Hp pïsïsï-ta ‘be a continuous drumming or pounding sound’ (1095-p)
pəraẖ (< *prx) ‘to fly, depart, flutter, a blossom’ > UA *pïyaw ‘feather, to fly’ (1167-kw)
prx ‘to flower’ (Egyptian); Hebrew hi-priiẖ (< *hi-priix) ‘cause to sprout, bloom’ > UA *hVpiNka ‘bloom’ (1500-p)
pry / paraa ‘to bear young, to bear fruit’ > SP pia ‘mother, female’ (1298)
prk ‘crush’ > SP puruqqwi ‘to break to pieces’ (1297)
pɛraʕ / *parʕ-aa ‘hair’ > UA *pï’wa ‘hair, hide, fur’ (1132)
prʕš ‘jump’ / parʕoš ‘flea (jumper)’ > *par’osi / *paro’osi ‘jackrabbit’ (724)
prq / paraq ‘drag away, tear away’ > UA *piyok ‘pull, drag’ (726-kw)
prq ‘separate from, depart, go away’ > SUA *pa’ku ‘out’ (1243-p)
prq ‘separate from, depart, go away’ > *piyaC / *pï’aC ‘leave, save’ (1244)
pšṭ ‘spread out’; Syriac pəšaṭ ‘stretch out, extend, spread out’ > Tr pesá ‘stretch, spread’ (1391)
pty / pətaa / pəta’ / pətiy ‘be enlarged, wide, broad’ > UA *pïttiya / *pït(t)ï’a ‘(be) heavy’ (812)
pətaa’aa / pətaawaa ‘wide, enlarged’ > UA *patawa 'wide' (1168)
ptẖ ‘to open, open up’ > UA *pïtïwa ‘open, uncover’ (1169)

ptt, impfv stem: -pott ‘smash, make crumble’ > UA *pot ‘pound, grind’ (815)

ʂ

ʂe’aa ‘dung, excrement’ (< *ʂi’aa) > UA *si’a ‘urine’ (739)
ʂe’aa ‘dung, excrement’ (< *ʂi’aa) > UA *sa’a ‘defecate’ (740)
ʂbb / ʂabba (< *ɖabba) ‘take hold, keep under lock’ > UA *cakwa / *cakwi 'catch, grasp, lock' (8-kw)
ʂbb / ʂabb (< *ɖabb) ‘lizard (< take hold)’ > UA *cakwa ‘lizard’ (9-kw)
ʂbb ‘pour, gush, flow’; Arabic ʂabiib ‘poured out, blood, sweat’ > CN espipika ‘blood flow out’ (1450-p)
ʂbb / ʂabba (< *ʂabba) ‘to pour, gush, flow, drip’ > UA *cikwa ‘to drizzle, rain’ (1457)
ʂby / ʂəbii / ʂəvii ‘gazelle’ > Hp cöövi-wï ‘antelope’ (29-kw)
ʂb’ / ʂəbee ‘wish, prefer, be pleased with, delight in’ > UA *supiC ‘like, want’ (901-p)
ʂibʕ- ‘finger’ > UA *sïwa /WMU *sipwa /Tep*capiwa ‘finger’ (747-p)
ʂibʕ- ‘finger’ > UA *cipo ‘five’, *cikwa ‘five’ (746-kw)
ʂbʕ ‘to dye’; *-ʂboʕ Arabic impfv ya-ɖbuġu ‘to dye’ > UA *pu ‘dye’ (1438-p)
ʂbr / ʂabara ‘to tie, bind, condense (contain/restrict)’ > UA *cokwiya > Tep soobid ‘head off’ (833)
sgy ‘be many, great’; *hosgay ‘be made great’ > Hopi hoskaya ‘large, huge, enormous’ (1414)
ʂd’ / ʂdi ‘grow rusty’ > UA *sïta / *sïti ‘red’ (1350)
ʂdq ‘be just, righteous’, ʂadooq ‘just, righteous’ > UA *siroka ‘be sad, suffer’ (1145-p)
ʂhr ‘be bright, clear’; Arabic ẓhr ‘appear, arise’ > UA *cihari / *ci’ra/i 'sunrise, east, morning' (745-p)
ʂwd / ʂyd ‘to hunt’; Hebrew ʂaad ‘hunter, (is) hunting’: Hebrew 3rd sg pfv ʂaad ‘hunt(ed)’ > TO šaad ‘to chase’ (732)
ʂwd / ʂyd ‘to hunt’; ʂaduu ‘they hunted’ > Tr seru ‘aim, hunt’, seru-ame ‘(person who is) a good aim, hunter’ (733)
ʂwd / ʂyd ‘to hunt’; ʂaad-iim / ʂaad-iin ‘hunters-pl’ > *sïr ‘shoot, hunt’; Tep *cïlinï 'straight' (736)
ʂayyaad ‘hunter’ > UA *caya ‘follow’ (1104-kw)
mə-ʂuudat ‘net, prey’ i.e., game > UA *masat / *masot (< *masuta) ‘deer’ (734)
*muuʂa(y)ad ‘game, what’s hunted’ > Hp cayrï ‘elk’; Hp cayrïra ‘moose’; Hp mosayrï / mosayïr- ‘buffalo’ (735)
ʂwy / ʂawa ‘give charge to, command, order’ > UA *sawi ‘command’ (731)
ʂwm ‘to fast’ (not eat) > UA *suma ‘be hungry’ (1102)
ʂuuʂ ‘bud, blossom, bloom’ > UA *coya or *coca ‘feather headdress’ (818)
ʂwr / ʂuur-aa ‘rock-the’ or Samaritan Aramaic ʂor-aa > UA *soya ‘rock’ (605-p)
ʂẖr ‘dry up, become yellow’ > UA *sa’wa / *sawari / *sawiya ‘yellow’ (1164)
ʂlẖ ‘rush’ > UA *coloa ‘flee, run swiftly’ (85)
ʂll ‘to tingle, quiver’ > UA *cïlïlï / *silala ‘shake, rattle’ (31-kw)
ʂll ‘to become dark or black’; Arabic ẓll ‘be black’ > Tr čona ‘become dark / black’ (if -ll- > -n-) (1296)
ʂlʕ / impfv: -ʂlVʕ ‘limp, be lame’ > UA *lo’i ‘lame, limp’ (1108)
ʂelaʕ / ʂalʕ- ‘rib’; Arabic ɖlʕ ‘incline/lean, be crooked, limp’, Arabic ɖilʕ- / ɖilaʕ- ‘rib’ > UA *cawa ‘rib’; UA/Hp/Ca caŋa ‘side, limp, rib’; Azt silaŋ ‘rib’ (744)
ʂmd ‘tie together’; Hebrew ʂummad ‘strapped on’: Aramaic ʂəmad ‘join, attach, harness’ > UA suma ‘tie s.th.’ (1186)
ʂmẖ / ʂaamaẖ (< Semitic *ɖamaxa) ‘sprout, grow’ > CN camawa ‘to grow, become big’ (814-kw)
ʂmẖ / yi-ʂmaẖ ‘sprout’ > UA *icmo ‘sprout, grow’ (84-kw)
ʂmẖ / yi-ʂmaẖ (< *ya-ɖmax) ‘sprout, grow’ > UA *yama ‘sprout, grow, up’ (813-p)
ʂmẖ (< *ʂmx) ‘sprout, grow (of plants, hair)’, ʂémaẖ ‘what sprouts, grass, etc’ > UA *samaC / *samuC ‘grass’ (1090)
ʂmm (< *ɖmm) *-ɖummu ‘close, compress (as lips)’ > UA *cummu ‘close eyes’ (830-kw or p?)
ʂɛmɛr ‘wool’ > UA *comi / *comya ‘hair’ (742-kw)
ʂinw- ‘one twin’, pl aʂnaa’ ‘twins’ > UA *cono’o 'twin(s)' (899)
ʂanawbar ‘stone pine’ (type of pine) > UA *sanawap ‘pine tree’ (892)
ʂnn ‘be cold’; ʂinnaa ‘cold, n’ > Tb ciina-l ‘hail’ (1393)
ʂnʕ ‘to be modest, humble, retiring’ > CN -cinoa ‘a verbal suffix of respect or love’ (1295)
ʂnp / ʂannep ‘wrap up, wind around’; ʂaaniip ‘headband, turban’ > UA *cini ‘cotton, cloth(ing) made of cotton’ (1503)
ʂʕy (< *ʂġy) ‘stoop, bend, incline’ > UA *cuwi ‘hunched over, on all fours, face down’ (694-kw)
ʂʕq ‘shout, call / cry out’; ʂəʕaaqaa ‘yelling, screaming, call for help’ > UA *coaka ‘cry’ (86-kw)
ʂaġura / ʂaġira ‘be small, little, scanty, young, dwindle’ > UA *cako ‘small’ (692-p)
ʂpy ‘keep watch, be on the look-out for’ > UA *capan ‘look for’ (1504)
ʂpp / ʂapʂep ‘chirp, peep, twitter, squeak’ > UA *cap ‘to rattle’ (1441)
ʂippoor ‘bird, small bird’ > UA *cipuri ‘bird’ (30-kw?)
ʂpr ‘to whistle, hiss, chirp’ > UA/Tep *ciporika 'whirlwind' (1222)
ʂˀpardeaʕ ‘frog’ > UA *siboro ‘tadpole’ (1377-p)
ʂˀpardeaʕ ‘frog’ > UA *kwa’ro ‘frog’; *haC ‘the’ enoucraged cluster *ha-ʂʂpardVʕ > kwa’ro ‘frog’ (1378-kw)
ʂar ‘enemy’ > UA/TrC/Num/Cr *say- ‘enemy, opponent’ (1478)
ʂor ‘flint’; Akkadian ʂurru ‘obsidian, flint’ > SP čoiC ‘bead’ (1376)

sarṭaan / *sarṭoon ‘scratcher, crab’ > *saCtun > siCtun / *suCtun ‘claw, nail, crab’ (832-p)
ḍirs ‘molar tooth’ (< Arabic ḍrs ‘to bite’) > UA *cara 'molar' (1221)
ṣurṣur / ṣurṣuur / ṣarṣuur ‘cricket’ > UA *corcor ‘cricket’ (28-p)
ṣaaráʕat ‘skin disease, leprosy’ > CN siyo-tl ‘rash, scab, leprosy’ (67-kw)
ṣirʕaa ‘hornets’ > UA *saŋa ‘yellowjacket, stinging one’ (737-p)
ṣrʕ (< *ḍrʕ) ‘be weak, lean, emaciated’, verbal nouns ḍarʕ, ḍuruuʕ > UA *corowa / *corwa > coŋo ‘be hungry’ (1066-p)
ṣrɧ ‘cry, roar’ > UA *cayaw ‘yell’ (83-kw)
ṣrɧ ‘groan, cry out’ (< *ṣrx) > UA *ïsoroN- ‘snore’; UA *sork (1299-p)

q

qa’t-aa ‘pelican’ > UA *koto / *ko’ota ‘crane’ (1000-p)
qubbaa ‘dome, vault, tent’ > UA *kuppa ‘head, hair of head’ (1098)
qbl, -qbiil ‘go forward’ > Hopi kwila- ‘take a step, to step forward’ (45-kw)
yiqqabeṣ / ya-qbiṣ ‘assemble, gather, meet’ > UA *yïpisa ‘come’ (862-p)
qabbəṣ-i or (hit/yit)-qabbəṣu ‘gather, meet’ > UA *hapsi 'arrive, reach, catch up to’ (863-p)
qbṣ (< qbḍ) / (ya)-qbiṣ(V) ‘seize, take, grab, collect’ > UA *kwisV ‘take, carry, grasp’ (44-kw)
qbr ‘bury’ > UA *kopor ‘dig’, *kapa ‘(make) a hole’ (1016-p)
qbr ‘bury’, impfv: *-qbor > UA *kuy / kuC ‘bury’ (1017-kw)
qədaal ‘neck, nape of neck’ > UA *kutaC ‘neck’ (1014)
qedɛm ‘in front, east’; qidmaa ‘(toward) east’ > UA *kitam 'south' (kw-Sem qid > kit vs -d- > l ‘neck’ in p-Sem, 1166-kw)
qwl / qiila ‘was said’ > CN kil ‘it is said that …’ (1001)
qawiin ‘strings’ > Ls *qaawina- ‘bowstring’ (1251)
qəwaayaa ‘loom, web’ > Ca qaawi ‘get tied, hooked’ (1347)
qwl / qawl ‘speaking, word, speech, saying, verbal noun’ > Hp qawï ‘say, speak’ (1002)
qwm / qaam ‘rise, stand up’ > UA *kam ‘water to rise, make wave’ (1210)
qooʕ-aa ‘throat’ > UA *kuwiC ‘throat’ / *ko’- ‘throat’ (962)
qəwuṣoot ‘locks (of hair)’ > UA *woC ‘hair’ (993)
qaaṭaan ‘small, young’ > UA *kuci 'child, girl' (860-p)
qṭp, Syriac qəṭap ‘pick, gather, harvest’ > UA *kïtta ‘harvest, v’ (787)
qṭp, impfv: -qṭop ‘pick, gather, harvest’ > UA *tupu ‘pick, gather’ (788)
qy’ / impfv *-qyo’ ‘to vomit’ (loss of -q- in cluster in *ya-qyo’ or infinitive qˀyo’ > UA *yo’a 'vomit' (1205)
qiynaa ‘funeral song, dirge’, qonen ‘to begin singing a dirge’ > Hp kïyna ‘begin singing a song’ (958-p)
qiynaa ‘funeral song, dirge’ > Tak ŋináŋna ‘feel sorry for, be broken hearted, sad’ (942-kw)
qayiṣ / qeyṣ ‘summer’ > UA *kuwïs 'summer' (738-p)
qiir ‘wall, town’ > UA *kiC ‘house’ (986)
qalb ‘heart, middle, center, core’ / *qeleb? > Tak ŋílveɲílva’a-š ‘nook, corner’ (947-kw)
qll / qaliil ‘be small, insignificant, light’ > *ali ‘little’ (982)
qalal ‘be small, contemptible’; *qillal / -qallel ‘declare accursed, consider bad’ > UA *’alal ‘bad, wrong’ (1217-kw)
qlʕ / qalaʕ ‘to sling, throw out (people from land)’ > Tak *ŋalaw ‘throw out, reject, fall/throw in a hole’ (946-kw)
qlp ‘peel off, shell, rub away’ > UA *kïlipi ‘shell or shuck corn’ (717)
qlp ‘to peel, shell, scrape off, strip off”’ > Hp hàapo(-k-) ‘get loosened, chipped’ (1010-kw?)
qimma(t) ‘top, summit, peak’ > UA *kumisa 'top, tuft, crest' (1195-p)
qmṭ ‘draw together, lay hold of, take, contract, shrink, shrivel’ > Hp homi- ‘grab, shrink, draw together, shrivel’ (1009)
qmṭ ‘lay hold of, take’, participle qaamiṭ; Hebrew qmṭ ‘seize’ > Tb kamiič|ït ‘to catch’ (1508)
qml ‘suffer from leanness, be thin’ > UA *komal ‘griddle, thin’ (959-p)
qmṣ / impfv: *ya-qmuṣu ‘take, be miserly, stingy’ > UA *yamuC ‘angry, stingy’ (1035-p)
qn’ / impfv -qna’ ‘be jealous’ > UA *nawa ‘jealous’ (1031-p)
qn’ / impfv -qna’ ‘be jealous’ > UA *ŋa’i ‘get even, be jealous’ (1032-kw)
qn’ / qannaa’ ‘jealous one’ > Kw kïnii-ga-dï ‘one who is greedy or covetous’ (1033)
qanqin ‘to chant, sing’ > Tak *ŋaŋi ‘cry’ (943-kw)
qanii- ‘acquire, buy’ > Tak *ŋani / *ŋina ‘pay’ (945-kw)
qaanɛh ‘reed, stalk’ > UA *pa-kaN ‘reed’ (1135-p)
qaanɛh ‘reed, stalk’ > UA *kana 'willow' (1216)
qnwqn(h/t’) ‘grape vine creeper’ > UA *kunuki 'elderberry' (1049)
qaʕda ‘sitting, backside, buttocks’ > Hp kïri ‘buttocks’ (1383)
qʕuul-aa ‘expansive as the lungs’ > UA *qoqolVpe) ‘lungs’ (1385)
qippaa’oon ‘sharp frost’ (< qp’ ‘to congeal, become rigid’) > UA *kïpa 'snow, ice' (1161)
qippod (< *qunpuɗ) / quuppaad / quppəd-aa ‘hedgehog-the’ > UA *kïNpa ‘prairie dog’ (1089)
qpd ‘draw together’, qapped ‘roll up, curled up’ > UA *qappit ‘break (by bending)’ (1381)

qpd ‘draw together’, et-qapped ‘be shortened, cut off, shrunk’ > UA *qappoc ‘short’ (1382)
quppat, pl *quuppoot ‘large basket(s) > UA *koppot ‘basket’ (864-p)
qippoz ‘arrowsnake’ > Tr aposini ‘venomous serpent’ (972)
qpy / qəpa’ ‘collect, swim on the surface’ > UA *qoppV ‘mark/stripe, float’ (1163-p)
qaaṣiir ‘branch(es)’ > UA *kusi ‘wood’ (963-p)
qṣr ‘to reap, harvest’; qaaṣiir ‘harvest, n’ > Wr kacuri ‘a kind of sweet corn’ (1006-kw)
qr’ / qara’a ‘call, cry out’ > UA/Azt/TrC *koyowa ‘yell, shout’ (580-p?)
qr’ / qara’a ‘call, cry out’ > UA/NUA *aya ‘call’ (990-kw)
ni-qra’ ‘he/it is called/named’ > UA *nihya ‘call, name’ (991-kw)
qr’ / qara’a ‘call, cry out’ > some UA suspects at 992
qr’ / qara’a ‘call, cry out’; many Semitic bird words from this root > UA/Num/Hp *kuyuC / kuyuŋV ‘turkey’ (1357)
qéreb ‘inward part, midst’ > UA/Tep *’ïrapa ‘inside’ (975-kw)
qarob ‘near’ > Tr ayobe ‘soon, near in time’ (976-kw)
qariib ‘near’ > UA *alip 'soon' (977-kw)
qrb ‘approach, be near’, qariib ‘near’, Syriac qərib ‘come near, draw nigh’ > Hp hayiŋw- ‘draw near’ (1008-kw)
qrb ‘approach, be near’ > Ls ŋááya ‘be close, be near’ (1489-kw)
qardammu ‘enemy, opponent’ (Akkadian) > UA *tïmmu ‘opponent’ (593-kw)
qarduun-aa ‘louse-the, nit-the’ > UA *aCtïN ‘louse’ (971-kw)
qrɬ ‘freeze’, qeraɬ ‘ice, frost, crystal’; Syriac quur-aa ‘cold, frost-the’ > Tr koro-čé ‘freeze (of water)’ (1493)
qɛrɛn / qarn- ‘horn’ > CN koyooniaa ‘perforate’ (964)
qeren / qarn- ‘horn, corner, tip’ > SP yïnnï ‘crown of the head’ (998-kw)
qarsol ‘ankle’ > UA *kwinco ‘ankle’ (858-p)
qursəl-aa ‘ankle bone-the’; Akkadian kursinnu ‘region of the ankle-bone’ > UA *koci 'ankle(bone)’ (859-p)
qrʕ ‘rip/tear to pieces’, impfv -qraʕ > UA *kowV ‘to tear’ (965)
qarʕ- ‘gourd, pumpkin’ > UA *kuyawi ‘gourd’ (987-p)
qarʕ- ‘gourd, pumpkin’ > UA *ayaw ‘squash’ (988-kw)
qarʕ- ‘gourd, pumpkin’ > UA *ayaC / *ayoC ‘turtle’ (989-kw)
qrṣ ‘bite’ > UA *kï’ca 'bite' (1447)
qarqađaan ‘squirrel’ > UA *koŋi 'squirrel' (957-p)
’etqaraš ‘to shade, put in the shade’ > UA *hïkka / *hïkya ‘shade’ (1220)
qaśwaa ‘jar, basket, f’; Hebrew pl: qəśoot > TO gihot ‘carrying basket’ (1005)
qśṭ ‘divide, measure’; qəśiiṭaa ‘coin, weight, money’; qesṭ-aa ‘measure-the’ > UA *koCta/i ‘bark, shell, money’ (1248)
qśṭ ‘divide, measure’; qəśiiṭaa ‘coin, weight, money’; qesṭ-aa ‘measure-the’ > UA *pa-koCci ‘shrimp’ (1249)
qš’ / qšy / qəšaa ‘difficult, severe, strong (of smell), harsh (of taste)’ > UA *kïsa ‘sour, harm(ed), bad’ (861-p)
qšb / qšeebuu ‘perk up (ears), listen’ > UA *kïpu ‘hear’ (1068)
qšb / qšeebuu ‘perk up (ears), listen’, *na-qšab ‘what is perked up’ > UA *naqa / *nakap / *nakas ‘ear, leaf’ (1070-71)
qšr ‘to peel, shell, derind, debark, skin, husk’, f. impfv ta-qšir > UA *asi’a ‘bark, peel, shell, n’ (1272)
qšš ‘be old, dried up’; qaš ‘straw, stubble, chaff’ > CN košon-ki ‘dry, crush’, CN košoni ‘resonate’ (1004)
qušṭ-aa ‘bow-the’ > UA *kuCta-pi ‘bow’ (967-p)
p’y-qušt ‘his-bow’ > UA *pikoti ‘bow, bowstring’ (968-p)
qašt-o ‘bow-his’ > Tepiman *gaato ‘bow’ (970)
qaššet ‘shoot an arrow with a bow’ > UA *kwaCti ‘shoot (arrow)’ (1184)
qaššet ‘shoot an arrow with a bow’ > UA *kuCkwiC ‘shoot (arrow)’ (1185)
qešet, qašt- ‘bow, weapon’ > UA *aCta ‘atlatl, bow’ (969-kw)
qatqet ‘burst out laughing, laugh loudly’ > UA *kasi ‘laugh’ (1386-p?)

R

r’y / raa’aa ‘see’ > UA *tïwa ‘find, see’ (600-p)
r’y / raa’aa ‘see’, ro’ɛh ‘seer’ > UA *tï’a ‘have a vision or supernatural power’ (1139)
r’y / raa’aa ‘see’, ro’ɛh ‘seer’ > UA *tïwi ‘deity, spirit, seer of supernatural means’ (1140-p)
r’y / raa’aa ‘see’; ra’oot(-aa) ‘seeing (it), to see (it), infinitive/ verbal noun (w/ object suffix)’ > UA *ta’uta ‘find’ (100)
r’y / raa’aa ‘see’; *na-r’ey ‘be seen, appear’ > UA *nï(r) / *nï(r/y)’i ‘see’ (1269)
r’y / raa’aa ‘see’ > Wr re’é ‘appear, be seen’ (1406)
rə’emaan-aa / reemaan-aa ‘antelope-the’ > UA *tïmïna 'antelope’ (604)
rooš ‘head’; Arabic ra’s- ‘head’ > UA *toci ‘head’ (93)
raa’taa / raataa ‘lung(s), n.f.’ > Cr ta’atime ‘lungs’ (1428)
rab ‘great, large, many’ > UA *tïpï / *tapu ‘long, tall’ (97)
rbb / *rabba ‘shoot (an arrow)’ > UA *tïkwa ‘hit by striking or throwing, shoot (arrow)’ (95-kw)
rby / raabaa ‘shoot (bow and arrow)’ > UA *tapa / *tapi 'throw, hit' (96)

rby / raabaa ‘shoot (bow and arrow)’ > UA *tap 'put' (1128)
rbṣ ‘lie down (often of animals)’; rebɛṣ / rabaṣ ‘resting place’ > UA *tosa / *ta’so / *tapa’sol ‘nest’ (1242-p)
rbṣ > Aramaic -rbaʕ ‘lie down’ (impfv stem) > UA *po’o / po’i ‘be lying down’ (1277-p)
rgl ‘come or go on foot, step, step forward’ > Tb taŋammin ‘step on, vt’; Tr ŕeke(ta) ‘step’ (1364)
ragul ‘man’ > UA *tihoyi ‘man, attractive’ (1240-kw)
régaʕ ‘a moment, in a moment, a short while’ > Tr teko ‘soon, in a short time, quickly’ (602)
rdm, inf: rədom ‘to sleep’ > Tb culuumat ‘to sleep’ (1415)
ha-ruuẖ ‘spirit’; Arabic riiẖ ‘wind, smell, odor’; ruuẖ ‘soul, spirit’ > UA *arewa ‘spirit’ (1170)
rwẖ / rawaẖ ‘go away (in the evening) to rest’ > Sr rïwïrïwïh-q ‘disappear’ (1427)
rwy ‘drink, quench’, rawwaay-aa ‘drunken one-the’; *rawwaan-aa ‘drunk one-the’ > UA *tawana 'drunk' (601)
rwy ‘drink, quench’, hirwaa / hirvaa, hirvee- ‘to water (person or thing)’ > *hiCpï / *hi’pa / *hiypi ‘drink’ (1061)
rwṣ ‘run’ > UA *tuca ‘run, hurry s.th. along (741-kw)
raaẖeel (< *raxel) ‘ewe’ > UA *tïkïya (> tïhïya) 'deer' (638/1083-p)
rẖl ‘to set out, emigrate, V to wander, roam’ > Tb tooiy ‘to travel about’ (1294)
rẖm ‘be loving, compassionate, wide’ > UA *tïha ‘feel pity for, space, room’ (1485)
rẖq / me-rəẖoq / me-rẖoq ‘far, from afar’ > *mïCka / *mïhka ‘far’ (821)
rẖṣ (< *rxḍ) ‘wash’ (though Egyptian rxt ‘wash’ would match as well) > UA *-tïki 'wash' (766-p)
rymh (= riimaa) / riimə-taa ‘large stone-the’ > UA *tïmï-ta ‘rock’ (603)
rkb / rakb-uu ‘they mounted, climbed’ > UA *tï’pu ‘climb up’ (< rakb-uu) (99-p)
rkb / rakb-uu-hi ‘they climbed it’ (Syriac) > UA *ciCpuhi 'climb' (< rakb-uu-hi) (99-p)
rkb ‘mount, climb up on’ > CN tlakpa-k ‘above, on top’ (887-p)
rkb ‘mount, climb up on’ > UA *cippih ‘prairie dog’ (what rVkbi > tikpi > tippi > cippi (888-p)
rkb ‘mount, climb up on’, rikb-aa ‘upper millstone-the’ > UA *tïppa ‘mortar (and/or) pestle’ (889-p)
rkl / rukla (less likely rukbat / rokba ‘knee’) > UA *toŋa ‘knee’ (1468-kw)
rkl / rakla, impfv: ta-rkulu ‘kick’ > UA *taŋa ‘kick’ / *cïŋï ‘kick’ (1507)
rmy / ramaa ‘throw, cast’ > UA *rima / *lima ‘throw out’ (1426)
ruumš-aa’ ‘evening-the’ > Sr *ruma’- ‘become dark’ (1283-p)
rnn / ranna ‘cry, ring, echo, resound’ > Hopi töna ‘voice, trachea’ (1444)
raqbubit ‘moth’ > UA *(V)kupïpika ‘butterfly’ (1054)
raqqa ‘be thin, fine, delicate’: Arabic rakiik ‘weak, thin’ > UA *takki 'thin' (894)
roq ‘spittle’; rqq / -roq/ruqqu ‘to spit’; ruqq-aa ‘spittle-the’ > UA *cukV ‘spit, v’ (1171)
rʕy / impfv: *ya-rʕay ‘to graze, to tend (a flock of animals)’ > Hopi layi ‘herd, drive (animals)’ (1358)
rʕm ‘to rage, roar, thunder’ > UA *to’om- / tom’mu ‘make a big noise, thunder’ (1341)
raġiba ‘to desire, wish, want, crave’ > UA *takuC ‘thirsty’ (691-p)
rp’ / raapaa’ ‘to heal’; *yurpa’ ‘(be caused to) be healed’ > UA *yowa / *yopa ‘cure’ (1235)
rp’ / raapaa’ ‘to heal’; hit-rappe’ (m)/ hit-rapp’aa (f) ‘have oneself healed’ > UA *hitowa ‘medicine’ (1236)
rp’ / raapaa’ ‘to heal’; *roop’-aa ‘healer-the’ > UA *toŋa ‘cure, to doctor s.o.’ (1237)
rqʕ ‘beat, stamp, spread out’; raaqii^{a}ʕ ‘expanse, sky’ > UA *tukuN- ‘sky, up, above’ (98)
ršʕ ‘act wickedly, be guilty’ > UA *tasawa ‘be/do bad’ (94)
rtẖ ‘seethe, be / grow hot’; compounded w/ xut ‘fire’: *xut-rVtVẖ > UA/Num *kuttutu ‘hot’ (1481)

Ś

śə’or ‘sour (leavened) dough’; Aramaic sii’uur / sy’wr ‘fermentation, leaven’ > UA *cipuC ‘bitter’ (1461)
śyb ‘be grey-headed, old’; Hebrew śeebaa ‘grey hair, advanced age’ > UA *siu ‘grey’; ahseba ‘be x years old’ (1292)
śyẖ / śiiẖ ‘grow (of plants), growth, vegetation’ > UA *siwi / *siyo ‘green, greenery, foliage’ (1096)
śyẖ / śiiẖ ‘grow (of plants), shrub, growth’ > NUA *sï’aC ‘grow, blossom’; SUA *siwa / sïwa ‘flower’ (1229)
hiśkiil, hiśkal- ‘understand, make wise, insightful’ > CN iskalia ‘be discreet, prudent’ (1293)
śəlaaw / salway ‘quail’; Samaritan šalwi; Hebrew pl: śalwiim ‘quail’ > UA *solwi ‘quail’ (1082)
śaameẖ ‘happy’; śimẖaa / śimẖat ‘joy, gladness’ > UA *sïm 'laugh, smile' (807)
śimlaa / śimla-t ‘wrapper, mantle, cloak’ > *sam’aC ‘to spread, v, a cover, rug, blanket, n’ (764)
śn’ ‘to hate’; *śannaa’ ‘enemy, one who hates’ > UA *sinawa ‘get angry, coyote, wolf’ (756-p)
śeeʕaar ‘hair’; Arabic šaʕr / šaʕar ‘hair, pelt’ > UA *suwi ‘body hair’ (89)
śeeʕaar ‘hair’; Arabic šaʕr / šaʕar ‘hair, pelt’ > UA *suwi ‘jackrabbit’ (1245)
śaapaa(t) ‘lip’ > UA *sapala (< *sapata) ‘lip’ (563)
śaapaa(t) ‘lip’, pl: śapoot ‘lips’, s^{ə}poote^{y} ‘lips of’ > UA *puti ‘lip’ (564)
śaapaa(t) ‘lip, speech, edge, shore (of sea), bank (of river)’ > UA *capa- 'ridge, edge' (1462)
śaapaa(t) ‘lip, speech, edge, shore (of sea), bank (of river)’ > UA *sap / *sïp ‘side’ (1463)
šqr ‘be fair complexion, blond, blondness, redness, fire color’ > Hopi sikya- ‘yellow’ (1405)
śrp ‘to burn completely’; Hebrew śərepa(t) ‘fire’ > UA/Tep/Wr *saypa / *saya ‘to burn’ (730)

Š

š’l ‘ask’ > UA *sï’wï ‘ask for’ (758-p)
š’p ‘pant, gasp for air’ > HN šošopaaka’ ‘make an inhaling noise’ (1052)
šə’er ‘flesh, meat’ > UA *sure’e ‘blood’ (882)
šibbólet ‘ear of grain’; Arabic sunbul ‘ear, spike (of grain) > *suŋu 'corn' (828-kw)
šibbeṣ, šibbaṣ- ‘to weave patterns’ > SP sikwa’a ‘to braid’ (748-kw)
šabber ‘break, break in pieces’ > UA *sakway ‘break, ruin’ (10-kw)
šgɦ ‘to look, to care for, mind’ > UA *(i)soko ‘look’ (1152)
šagni ‘remove from its place, alter, transform, change clothing’ > Hopi siiŋi ‘peel, shed skin (as of a snake)’ (1419)
šgʕ ‘be raging, mad’ > CN šiikoaa ‘be angry, jealous, displeased’ (1289)
šigr-aa ‘drain, ditch, gutter-the’ > Hp sikya ‘small valley, ravine, canyon with sloped sides’ (1403-p)
šdd ‘to be firm, solid, hard, strong’ > UA *sïCï / *sïï ‘strong’: Sh sïttawïtti ‘strong, muscular’ (1261)
šwb / šuub ‘turn back, return’ > Tb šiiub ‘back again’ (1053)
šwg, Aramaic aqtel: ašiig ‘wash’ > UA *asi / *asï ‘bathe, wash’ (1443)
šwp ‘to smooth, rub, polish, sharpen’ (Aramaic); Syriac šwp ‘to rub’ > Ktn šuvi’ ‘to rub clothes’ (1510)
šuušaan / šoošanaa(t) ‘lily’; Coptic šošen > UA *soci ‘flower’ (1230)
-škab ‘lie down’ > UA *hapi ‘lie down’ (983)
šɛkɛm ‘shoulder’; Samaritan šekam ‘shoulder’ > UA *sïka / sïkuN ‘shoulder, arm’ (56)
škr ‘be drunk’; šikkoor ‘drunken’ > UA/Tep *sikuri ‘peyote, intoxicat-ed/ing’ (58)
šakuur ‘drunk’ or šikkoor ‘drunk’ > UA/TrC *kuru ‘mescal, agave’ (59)
Arabic muskir ‘alcoholic beverage’; unattested *ma-škar / *mi-škar > CN meškal-li ‘mezcal, alcoholic drink’ (60)
Arabic muskir ‘alcoholic beverage’; unattested *ma-škar / *mi-škar > UA *maC(C)i / *mahi 'agave, mescal’ (61)
p’-šikur ‘the-drink’ > UA *packo’or ‘sp. of prickly pear’ (836)
šɛlɛg ‘snow’ (< * θalg) > UA *sïk: CN sek-tli ‘snow, ice’ (760)
tašleeg ‘it is snowing’ (hiqtil impfv) > UA *ta’asïC 'freeze' (1336)
šlɦ ‘stretch out, send, make water flow’ > UA various terms meaning ‘servant, pour, ear of corn’ (761-763)
šlk ‘throw, throw away, be thrown to the earth’ > UA *sïk ‘beat, throw (with power, furry)’ (1263)
šilaaš ‘weasel’ > UA *sïsïka ‘weasel’ (1211)
šmr ‘keep, watch over, have charge of, restrain (within bounds)’ > UA *summay /sumiya ‘think about’ (1181)
šʕyn-’ / šəʕiin-aa ‘mud-the’ > UA *pa-sakwinaC ‘mud’ (1226)
šʕʕ / šʕšʕ ‘delight in’; Syriac šʕy / sᵊwaʸ ‘delight, gladden, enjoy’ > UA *ta-soa ‘love, value’ (1208)
šipɦaa ‘maid’ > *siwa / *si(ŋ)wa 'female, girl, sister, daughter' (757)
šippaa ‘to make smooth’ > UA *sippa ‘scrape, shave’ (1339)
špl ‘be low, fall’ > TO šopol ‘short’ (759)
šaaq-aa ‘leg, branch, stem, stock’; Hebrew šooq ‘thigh’ > UA *co(k/’)i / *cuC-ki ‘trunk, base, stem, stalk’ (1253)
šql take, take (self away), depart’ > UA *saka(la) ‘go, leave’ (1086)
šiqma(t) ‘sycamore tree’ > UA *sïŋŋa(C) ‘cottonwood or aspen’ (1012)
šqp ‘look down on, seize, confiscate hold firmly’ > Hp sokopi ‘steal, (child) get to stage to hold onto things’ (966)
šor ‘navel, navel cord’; Arabic surr ‘navel cord’ > Sr ṣuur ‘navel’ (1138)
šrg / šrq ‘slip, slide’; or šrʕ / zlq ‘slip, slide, glide’ > NUA/Tr *siro ‘slide, slip’, CN -l- (1250)
šrd ‘to quake, be terrified’ > Ktn šariri’ ‘trembling’ (1511)
šrq ‘to whistle, hiss’; wayyišroq-uu ‘they whistled, hissed’ > UA *wisuko ‘whistle’ (1215)

T

tə’unaa ‘fig’ > UA *cuna ‘fig’ (817)
təbuu’at ‘produce, yield from the land, what comes in (of harvest, to be stored)’ > UA *tïpï’at ‘pine nut’ (74)
tebel ‘firm (dry) land’; Assyrian taabal ‘land’ > UA *tïpaC / *tïpal 'earth' (75)
tbʕ ‘follow, trail, observe’ > Tr tibú- ‘watch, take care of’ (1327)
tiigaar-(aa) ‘vessel-(the)’, Canaanite sound shift *tiigoor > UA *tïko-(ri) ‘dish’ (1125)
Aramaic tehwe ‘you are, sg’ > UA *tï / *tïhwa ‘you, sg’ (111)
twh, pfv: taah(a) ‘be alarmed, startled’ > Sr *tahitahi’ ‘hurry up’ (1366)
taxt-e ‘under-him/it’ or taxta ‘under’ > Wr te’ré ‘down on the ground’ (1389-p)
bə-taxat ‘at-under’ > UA *pïtaha ‘under’ (1390-p)
took ‘midst, middle, among, in the middle of, during’ > UA *tok ‘with, near, middle’ (1413)
tkk ‘squeeze, press, twist, twine’; tikk-aa ‘twisted cord, ring, chain’ w/ Egyptian -pu > UA *tïkapu ‘rope, thread’ (1146)
tiklaa ‘purple-blue, violet’ > UA *tï’kaC ‘red pigment’ (1134)
talg-aa ‘snow-the’ > UA *takka ‘snow’ (1276-p)
toolaaʕ ‘crimson, scarlet’ > *tula / *tulo 'charcoal, embers, black' (710)
tly ‘hang’; *yutla ‘be hung’ > UA *yula ‘hang’ (1247)

tmh, Aramaic təmah ‘be astounded, speechless, freeze with fear’ > Tb tehmat ‘be silent’; Ktn tïhmï-k ‘be afraid' (750)
tmh, impfv: -tmah ‘be astounded, freeze with fear’ -tmah > UA *maha- ‘fear’ (749)
tmm ‘be completed, finished, come to an end’ > UA *tama/i ‘finish’ (819)
tmm / tumma ‘be finished, come to an end’ > UA *tuma / *tu’ma ‘finish’ (820)
təmuuraa ‘exchange, substitution’; ha-ttəmuuraa ‘what is exchanged, exchanging’ > Num *tïmïrï ‘buy, trade’ (1201)
Aramaic tuumr-aa ‘palm-the, date-palm-the’ > UA *tu’ya ‘palm tree, sp’ (743-p)
Aramaic tanni’ ‘relate, tell’ > UA *tïni ‘tell, teach’ (1148)
taapel ‘whitewash’; Aramaic ṭəpel-aa ‘paste, plaster, coating-the’ > UA *tïpi- ‘white clay’ (54)
tuup-aa ‘spittle-the’ > UA *cupa / *top ‘spit, vi’ (1252)
tpr / tapper < *tappir ‘sew together’ > UA *tappiCta ‘tie’ (1264)
tpr / tuppar ‘sown’ > tuppa ‘tie(d)’ (1265)
tpr / -tpor ‘sow together’ > UA/Tep/TrC *pura/i ‘tie’ (1266)
Hebrew tiqqen ‘make straight, straighten s.th.’ > Ktn tïŋen ‘straighten arrows’ (944-kw)
Aramaic tqn ‘set, lay’ > UA *tïkaC ‘put lying down, stretched/spread flat’ (1023-p)
tqʕ ‘drive (peg, stake), thrust in (weapon), blow a horn’ > UA *takowa / *takawa ‘injure(d), damage(d), ruin’ (1469-p)
tqʕ ‘drive (peg, stake), thrust in (weapon), blow a horn’ > UA *tokowa / *takawa ‘crow, cackle, make noise’ (1471-p)
tqʕ ‘drive (peg, stake), thrust in (weapon), blow a horn’ > Ktn tï’ŋ- tï’ŋ-k ‘drive in a stake or nail’ (1470-kw)
tqʕ ‘drive (peg, stake), thrust in (weapon), blow a horn’ > UA *tïkowa ‘lord, master’ (1472-p)
tqʕ ‘drive (peg, stake), thrust in (weapon), blow a horn’ > UA *MaC-takowa ‘palm of the hand’ (1473-p)
tqʕ ‘drive (peg, stake), thrust in (weapon), blow a horn’ > UA * takkuwa ‘meat’ (1474-p)
tqp / *taqipa (sg), *taqipuu (pl) ‘prevail, overpower’ > UA *takipa / *takipu ‘push’ (769)
tqp ‘prevail, overpower’, təqoop ‘might, strength’ > UA *takopi ‘gamble’ (1080)
tqp, impfv: -tqap ‘prevail, overpower’, təqoop ‘might, strength’ > UA *kopi ‘win/lose in a game’ (1081)
toor ‘turtle-dove’ > SUA *tori ‘domestic bird’ (725)

Appendix D: Index to Egyptian Terms in Egyptian Alphabetical Order of Consonants

After Pronouns and Grammatical Morphemes First (’ i/y ʕ w b p f m n r h ḥ x h s š q k g t t̲ d d̲)

Egyptian p’y ‘this, that’ > UA *pa / *pï/pï’/pï’ï ‘he/she/it, that, 3rd person sg’
-i ‘old perfective/stative suffix’ > UA *-i ‘intransitive, passive, stative suffix’ (116)
-w/iw ‘passive’ > UA *-i-wa ‘passive’ (117)
-tw ‘passive’ > UA *-tw ‘passive’ (118)
-ti ‘stative suffix’ > UA *-ti / -tï ‘adjective, stative suffix’ (119)
i- / -ip ‘plural prefix’ > UA i(C)- ‘plural prefix’ (121)
-pw ‘this/it/he/they, often for emphasis’ > UA *-pu ‘he/she/it, also used on emphatic pronouns’ (122)
-w ‘masculine plural suffix’ > UA *-wï / *-wa (500)
tmmw ‘mankind’ > UA *tammu ‘we’ (1526)

’ (’aleph / glottal stop)

’wi ‘long, wide’; ’wt ‘length, space’; wti ‘tall, big’ > UA *otï / *uta ‘long, tall’ (468)
’xi / i’xi ‘sweep together’ > UA *wak ‘sweep, comb’; UA *wok ‘comb, sweep’ (515)
’sx ‘sickle off, mow, harvest, cut off/down’ > UA *sika / *siki ‘cut hair, clip, mow’ (444)
’t̲p ‘load (cargo, animal, ship); be heavy-laden’ (Coptic ootp) > UA *hitapa 'carry (heavy load)' (314)
’t̲p ‘box, case’ > UA *otapa ‘bedrock mortar’ (460)

Y/I

i’w ‘old (age/man) > UA *yo’o ‘old’ (151-2)
i’bty ‘east, left’ (Coptic yebt ‘east’) (*ya’baty? > *yo’boty) > UA *oCpoti ‘left’ (300)
i’rt ‘hair’ > UA *yul / *yuwi / *yuCC; Ls yúú-la ‘hair, head’ (389)
i’dt ‘net’ (Coptic ate) > UA *yuta ‘rabbit net’ (317)
iʕi ‘to wash, clean’; iwy ‘to water’ > UA *pa’-iwi ‘get/fetch water’ (pa- ‘water’) (492)
iwn’ ‘2nd part of negative’ > wa̲’ ‘2nd part of negative’ (410)
iwty ‘who … not, which … not, one without, a not-haver’ > Kw yuwa’i ‘negative’; Kw yuw-aa-tï ‘negative’ (423)
ib ‘heart’; ib ‘wish, want’; ib-i ‘I want’ > UA pii / iba’ ‘I want’; Tep ibïdaga ‘hear’ (217)
ib’ ‘dance, run’ > *yab’a/i > UA *yawa / *yawi ‘dance’ (296) (bilabial > ø as 1st C in cluster)
ip ‘count’ > Cr hihibe ‘read’ (522)
ifdw ‘four’ > UA *wattiwi ‘four’ (435)
im ‘there’ > UA *ama(ni) ‘there’ (461)
imi ‘negative verb’ > UA *im ‘no’ (213)
imi ‘give!’ > UA *himi ‘give, hand over’ (501)
t’-imnti ‘the west’ > UA *tïmïnïmïn ‘north, west’ (470)
in / in’ ‘introduces yes-no questios’ (Coptic ene) > ina ‘introduces yes-no questios’ (216)
ini ‘bring, fetch, carry off, buy’ > Hopi ini ‘contents in container’; in-ta ‘go along carrying in a container’ (512)
inqt ‘net’ > UA *ikkaC / *iCkaC ‘carrying net’ (384)
ir ‘do, make’ > UA *yara ‘do, make’ (214)
irp ‘wine’ > UA *iyaapi ‘wild grape’ (414)
irtyw ‘blue’ > UA *tayawi > *tïyawi / *tïyowi ‘blue/green’ (307)
ir̲t̲t ‘milk’ (Coptic eroote) > UA *rïti / *rïci ‘milk’ (306)
ixr/xr ‘by, through, with, under’ > UA *ikar ‘with, using (instrumental)’ (246)
isnwi ‘testicles’ (initial vowel and s in a cluster lost, leaving nwi) > UA *noyo ‘egg, testicle’ (1524)
ishb ‘jackal, fox’ > UA *isap / *isa’apa ‘coyote’ (391)
isq ‘linger, wait for’ (s lost in cluster, *isqV > *ïska > * ïka) > UA *ïka / *ïkï ‘remain, be in a place, let lie’ (525)
išdd ‘sweat’ > UA *pa-sura 'sweat' (308)
iqr ‘skillful, excellent, capable, intelligent’ > UA *yikar ‘knowing, intelligent’ (219)
itrw ‘river’ > UA *pa-tiwa / tawi ‘river’ (309)
it̲’ ‘take, carry, steal’ (> Coptic oj ‘thief’) > UA *itu’i > i’tu ‘to steal, take’ (157)
it̲i ‘take, carry off, rob’ > UA *ïci ‘steal, take’ (158)
it̲t ‘fly up’ > UA *yïtti / *yotti ‘jump, fly’ (215)

ʕ

ʕ’ ‘here, there’ > Wr i’wá ‘here’ (495)
ʕʕ ‘shake’ > UA *wiwi-puku ‘tremble’ (481)
ʕbxn ‘frog’ (*wapkan) > UA *wakaN-ta > *wakatta ‘frog’ (bilabial > ø as 1st C in cluster) (298)
ʕnr(t) ‘flint’ > UA *wi’naC ‘flint, arrowhead’ (426)
ʕnx ‘to live, v, (living) person, n’ > UA *onka / *oŋa ‘baby’ (427)

ʕnx ‘to be conscious of’ > UA *winikaï’ ‘remember’ (428)
ʕnxt ‘grain’ > UA *(w)o’na ‘corn cob, olote’ (443)
ʕnt ‘nail, claw’ (Coptic ine) > UA *watti 'claw, fingernail’ (262)
ʕrq ‘basket’; ʕrʕr ‘a basket’ > UA *wari ‘basket’ (161)
ʕš’ ‘many, numerous, much, plentiful’ > UA *oso ‘more, much, very’ (425)
ʕq ‘to enter’, ʕq-w ‘pl’ > UA *wakuC ‘enter, pl’ (464)

W

w’g ‘shout with joy, call out, cry’ > UA *wa’aNki ‘shout’; NP wa’agi ‘shout’ (483)
w’t ‘road, way’ > Hp waala ‘gap, pass, saddle in ridge’ (*w > Hp l) (514)
wi’ ‘ward off, protect’ > Hp wayoŋ- ‘protection’; Hp wayoŋ-ni ‘windbreak’ (516)
win ‘thrust aside, push away, set aside’ > UA *wina 'throw down/out, spill, empty' (136)
wpi ‘open, part, separate, divide’ > UA *wopa ‘divide in two, cut in half’ (519)
wf’ ‘lungs’ (Coptic wof) > UA *wopaN-s ‘lungs’ (282)
wn ‘be, exist’ > UA *wïnï ‘stand, stop, be’ (1256)
wnm ‘eat’ > UA *wïnïmi ‘dance, dancer in harvest ceremoney’ (226)
wnx ‘be clothed, cloth, clothing’ > *wanaC ‘cloth, clothing’ (222)
wnxyt ‘clothing’ > UA *waCkay(la) ‘clothing, shirt’ (223)
wnš ‘jackal’; Coptic: woonš ‘wolf’; wnšt ‘female jackal’; wnšiw ‘jackal’ > UA *wancio / wocia ‘fox’ (129)
wr ‘great, big, much, many’; wrw ‘the greatest’ > UA *wïr ‘big, much, many’; UA *wïrwïru ‘big’ (221)
wr ‘reed flute’ > UA *wiru ‘play a reed flute’ (347)
wr(t) ɧq’w ‘buzzard, great (of) magic’ > *wirhukuN 'buzzard, turkey vulture' (381)
whi ‘escape, miss, fail’ > UA wahi ‘throw out’, wehe ‘spill out’ (469)
wɧ’ ‘hew (stone), break (stone)’ > Hopi waho(-k-) ‘for particulate matter to spill’ (186)
wɧm ‘repeat, do again’ > UA *omV ‘two’ (490)
wx’ ‘seek, desire’ > UA *wi’wa / *wa’wa ‘seek, want’ (288)
wx’ti ‘pair of sandals’ > UA *wakaC- ‘shoe’ (482)
wxd ‘be painful, suffer, endure’; wxdt ‘pain’ > UA *okotï ‘be in pain, suffer, sorrow’ (224)
wsx ‘broad, wide’ > Sr wiiṣa’ ‘be wide’ (504)
wt / wt’ ‘wrap in, wrap around, bandage, bind’ > UA *witta ‘tie, wrap’ (225)
wtw ‘welp, pup (of dog, fox)’ > UA *woci / *woti ‘dog’ (447)
wdn ‘to load, consecrate, basket’ > Hp warani ‘s.th. reserved, saved for future use’ (516)

B

b’ ‘buck, ram, soul’; b’t ‘female of the species’ > UATak *pa’at ‘bighorn sheep’; Num *pa’a ‘all living creatures’ (406)
b’q ‘oily’ > UA *po’oki ‘fat’ (144)
b’k(t) ‘document’ > UA *po’ok ‘mark, draw, write, read’ (431)
bi ‘no’ > UA *pi ‘no’ (146)
bi’ ‘ore, metal, iron, sky, quartz, mine-products’ > UA *ka-payu ‘knife’; *papayuC ‘flint-tipped ceremonial staff’ (465)
bit ‘bee’ > UA *pita ‘bee, wasp’ (141)
bik ‘falcon’ > UA *pik ‘hawk’ (142)
bbyt ‘region of throat’ > UA *papi ‘larynx, throat, voice’ (137)
bnt ‘harp’ > UA *pona ‘play music, play drum’ (145)
bnty ‘breasts’ > UA *piCti ‘breast’ (139)
bšw ‘spittle, vomit, vomiting’ > UA *piso- ‘to vomit’ (138)
bk’ ‘pregnant’ > UA *poka ‘stomach, pregnant’ (143)

P

p’y ‘that of, possessive article’; p’y-i- ‘my s.th.’ > UA *pa’i ‘have’ (473)
su ‘he/it’ + p’ʕt ‘quail’ > su-p’ʕt ‘quail’ > UA *supa’awi ‘quail’ (475-6)
p’q ‘a flat thin cake or biscuit’ > Hp piiki ‘wafer bread’ (432)
p’q ‘thin blade, leaf, sheet (of metal)’ > UA pikkaC ‘knife’ (433)
pwtr / ptr / pty ‘who? what?’ > Tr piri ‘what?’; WMU pu ‘what?’ (315)
px’ ‘purge, clean’ > UA *pi’wa ‘clean’ (286)
phr ‘turn, turn about, revolve, surround, travel around’ > UA *pi’ri-na > *piyi(na) ‘spin/twist thread, make rope’ (289)
phr ‘turn, turn about, revolve, surround, travel around’ > -pihíri in Wr tehpihíri ‘whirlwind’ (with t’ ‘the, f’) (292)
phrt / phrty ‘remedy, prescription’ > UA *puha ‘supernatural power, medicine, healing power’ (290)
phr ‘turn, turn about, revolve, surround, travel around’ > UA *puhaC ‘circle, look around’ (291)
phrw ‘water’ > UA *parawa ‘juice, soup, stew’ > UA *parawa ‘juice, soup, stew’ (491)
psi ‘cook’; psw ‘preparation (of food)’ > UA *poso ‘boil’ (319)
ps / pss ‘pot’ > UA *pasa ‘pot’ (383)

psḫ ‘bite, sting’ > UA *upcu ‘stinger’ (485)
pssṭ ‘mat (made of the pss plant)’ > UA *ha-pït 'blanket' (402)
pds ‘stamp flat, flatten, beat broad’ > Eu pitása ‘smash, flatten’ (293)

F

f’i ‘raise, lift up, carry, support’ > UA *po’i / *po’iy ‘take s.th. away, dispossess’ (275)
f’k ‘be bald, shorn’ > UA *piCka / *piNka ‘smooth, bald’ (276)
fnṯ ‘snake, intestinal worm’ (Coptic feet) > UA *-puti ‘worm, snake’ (278)
fx ‘loose(n), release, etc’ > UA *pu’ta ‘loosen, untie’ (277)
ftft / *ftt ‘leap’; fttw ‘jumpers’ > UA *putta / *poci < *potti ‘jump’ (279)

M

m’’ / m’ ‘see, look on’, ‘look, behold!’ > UA *mï’ ‘look!’, UA *mahay / *ma’ay ‘see, find’ (480)
m’i ‘lion’ > UA *mawiya ‘mtn lion’ (147)
m’yt ‘sheath, vagina’ > UA *muci or *muti 'vagina' (235) (cf. mḫyt ‘fish’ > UA *muti ‘fish’)
m’m’ ‘dom-palm tree’ > UA *maCwa ‘palm tree’ (227)
m’st ‘knee’ > UA *ta-mo’ ‘knee’ (ta- ‘leg’) (484)
mi ‘like’; mity ‘similar to’ > Sr mitkin ‘seem’ (228)
mw ‘water’ > UA *muwa / muwi ‘wet’ (229)
mn ‘to be firm, established, remain, dwell’ > *mana ‘put (flat/lying down)’; *mani ‘be put, be, lie’ (135)
mn ‘be ill, suffer’ > UA *mana(ya) ‘hurt’ (230)
mni’ ‘arm-and-hand’ > UA *man ‘hand’ (523)
msnḫ ‘rotate, turn backwards,turn, turn away’ (*masnVḫ) > UA *manu 'turn, change' (524)
mnt ‘thigh’; mnty ‘thighs, dual’ > UA *macci / *maCti ‘thigh, upper leg’ (301)
mri ‘want, wish, love’; mr ‘canal’ > UA *mïri ‘run, flow’; UA *mïra ‘future marker’ (231-2)
mhr / mhi ‘milk-jar’ > UA *mu’i ‘milk’ (193)
mht ‘insect’ > UA *matta / *maCti ‘tick’ (437)
mḫi ‘drown, inundate, be in water’; mḫt ‘swamp’; mḫtiw ‘marsh dwellers’> UA *muCta ‘sink, be in water/liquid’ (233)
mḫyt ‘fish (collective), literally: swimmers’ > UA *muti ‘fish’ (234)
mḥr ‘low-lying land’ > UA *muira ‘be deep, of water’ (236)
msi ‘bear, give birth, be born, create’ (Coptic mas ‘child’); mst ‘mother’; ms ‘creator’ > UA *masi ‘father’ (237)
mx’ ‘make fast, tie, bind’ > UA *maĝo’i- ‘bag, bind, wrap, blanket’ (1402)

N

n’yt ‘weaving’ > UA *nawi ‘apron, skirt’ (442)
nyw (of, belonging to, pl possessions) > Ktn niw ‘possession, belongings’ (313)
nʕi ‘travel, traverse’ or nwi ‘come’ > UA *nawa / *nawi / *noi ‘go, come, move’ (239)
nʕw ‘serpent’ (perhaps from Egyptian nʕi ‘traverse’) UA as if from nʕiw > UA *nuyua ‘snake’ (240)
nʕw ‘to mate, pair up’ > UA *nawi ‘together with, accompany’ (438)
nw ‘see’ > Tr no- ‘observe, look at’ (424)
nw ‘be weak (due to age)’ > Hp naawa-ta ‘groan, moan’ (518)
nwx ‘burn, singe, scorch, cook’ > UA *nook ‘roast (meat)’ (173)
nb ‘any, every, all’ (Coptic nim) > UA *napi ‘all, every’ (241)
nb ‘lord, master, owner’ > UA *pohi-napi ‘chief, i.e., medicine/magic-owner’ (242)
nb ‘flame, burn’ > UA *napi ‘fire’ (243)
nm ‘kife’, p’-nm ‘the-knife’ > UA *panomi ‘knife, iron, tool’ (466)
nmi ‘travel, traverse, pass through’ > UA *nïmi ‘walk around, live’ (126)
nmi ‘travel, traverse, pass through’ > UA *nïmi ‘Indian, one who lives walking around (hunting/gathering)’ (127)
nmi ‘travel, traverse, pass through’ > UA *nami ‘cross (river), traverse (an area, etc.)’ (128)
nms ‘to clothe with the head-cloth’ > *noma / *nama ‘cover’ (441)
nny ‘be weary, inert’ > UA *nina ‘bad, useless’ (429)
nhp ‘copulate’ > UA *na’pa ‘join/be together, copulate’ (192) see also 506
nhsi ‘wake up’ > UA *nïC ‘wake up’; TO nïhhim ‘wake up’ (s > TO h) (212)
nḫb ‘to harness, yoke animals’ > UA *noC / *noCop 'carry on back’ (189)
nḫbt ‘neck, nape of neck’ > UA *nohopi / *nopi ‘arm, hand’ (188)
nḫbt ‘neck, nape of neck’ > UA *no’piC ‘house’ (190)
nḫm ‘take away, carry off, save, rescue’ (Coptic nuuhm) > Tak *nuŋu ‘hold, carry’; SUA *nuk ‘carry, take’ (369)
nxx ‘be/grow old’ / nxn ‘child, youth’ > UA *nakana ‘grow’ (244)
nxt ‘strong, stiff, hard’ (Coptic nuušt) > *nokat ‘upper arm’ (336)
nk ‘copulate’ > UA *naka / *naki ‘copulate’; *naki ‘want, like, love’ (409)
ngg ‘goose’ > UA *nakï ‘goose’ (395)

R

r’-ib ‘stomach’ > UA *to’i ‘stomach’ (337)
rʕ / rʕw ‘sun’ (Coptic ree) > UA *tawa ‘sun, day’ (163)
rwi ‘dance’ > UA *tawiya / *tuwiya > *tuya ‘dance’ (165)
rwi ‘go away, depart’ > UA *tawa > *towa 'leave, remain, wait' (166)
rwt / rwty ‘the outside’ > UA *tïta (< *tuta) ‘outside’ (471)
rwd ‘cord, bow-string, sinews’ > UA *tïsa ‘rope’ (167)
rm ‘fish’, pl: rmw > Tr ramu ‘fish’ (168)
rmn ‘shoulder, side, half, row of rowers’ > UA *taman ‘tooth’ (508)
rmṯ ‘man’ (Coptic rome, rem- ‘man, one, person’) > UA *tïmatí / *rïmatí ‘young man’ (169)
rn ‘young one, of animals’ > UA *tana ‘offspring’ (164)
rkḫ ‘fan into flames, burn, vi, be on fire’ > UA *taha / *taka ‘burn’ (450)
rkḫ ‘fan into flames, burn, vi, be on fire’ > UA *takwa / *taxkwa ‘ceremonial official, fire tender’ (451)
rd ‘foot, leg’ > UA *tara ‘foot’ (403)
rdwy ‘feet, dual’ > UA *taru ‘roadrunner’ (418)
wr-rdwy ‘great/big/long (of) legs’ > UA *wiC-taru ‘roadrunner’ (419)
rdi ‘give, put, grant’ > UA *tari ‘sell’ (422)
rdi ‘give, put, grant’ > UA *tari ‘put’ (474)

h

h’y ‘groom, husband’ > UA *hu’i ‘male member’ (417)
h’i ‘come, come and go’ > Wr ho’i ‘walk’ (509)
h’i ‘mourn, wail’ > Wr ho’kewa ‘tears’ (510)

ḫ

ḫ’ ‘back of the head’ > UA *hoo’o / *howa ‘back’ (511)
ḫ’ ‘behind, around’ > UA *huwï ‘around’ (370)
ḫ’ti ‘cloak’; ḫ’tyw ‘fine linen’ > -ho’oti of AYq taho’ori ‘clothes, clothing’ (503)
ḫ’dt ‘basket’ > UA *huCta / *huCca ‘basket’ (404)
t’-ḫimat ‘the-wife’ (Coptic hime) > UA *tïhima 'spouse' (339)
t’-ḫimat ‘the-wife’; pl ḫmwt > UA *hamut ‘woman’ (340)
ḫʕ / ḫʕw ‘body’ > hoŋa ‘body’ (411)
ḫʕi ‘be glad, happy, rejoice’ > UA *hoŋ > Ls heŋča-wu-t ‘cheerful, contented’ (412)
ḫʕ’ ‘boy, child’ > Ls hiŋe’-ma-l ‘boy’ (413)
ḫw’ ‘foul, putrid, smell offensive, stink’ (Coptic how) > UA *hu’a / *hu’i ‘break wind, stink’ (187)
ḫwi ‘to flow, flood’ > UA *huwiC ‘canyon, water way’ (387)
ḫby ‘be / make festival’ > UA *hupiya ‘sing, song’ (180)
ḫbs ‘garment, covering’ > UA *upa ‘wedding robe’ (316)
ḫpt ‘oar’ > UA *ipa ‘wooden paddle’ could be from *hopa (472)
ḫfd ‘climb, rise’ > UA *hu(w)at ‘climb, rise’ (346)
ḫm ‘majesty, king’; ḫmt ‘queen, ruler’s wife’ > Ktn wot ‘chief, male or female, or chief’s wife’ (505)
ḫm’ / ḫm’t ‘salt’ (Coptic hmu) > UA *omwa > *oŋwa / *oŋa ‘salt’ (280)
ḫn ‘pillar’ > UA *huna ‘sit up straight’ (416)
ḫn ‘equip, command, charge s.o. with a task’ > UA *huna ‘send’ (477-8)
ḫnt / ḫnw ‘watercourse’ > UA *hunuC ‘canyon’ (401)
ḫnn ‘penis’ > UA *hun ‘penis’ (415)
ḫnqt ‘beer’ > UA *hunaka: Hp hoonaqa ‘drunkard, drinking habit’; Hp honaq-kïyi ‘alcoholic drink’ (181)
ḫnt’sw ‘lizard’ (Coptic anθus) > UA *-hoto- ‘lizard’ (185)
ḫrrt ‘flower’ > UA *huya ‘bud, branch’ (457)
ḫti ‘smoke, vapor, cloudiness’ > UA *uci / *uti 'dew, vapor, frost’ (397)
ḫtp ‘be gracious, at peace, set (of sun), pacify’ > UA *huCpi ‘peaceable, behave well, sink, go down’ (182-4)
t’-ḫḏt ‘the-white’ a phrase for ‘white’ > *tosa ‘white’; Wr to’osa ‘white’ (494)

X

x’yt ‘slaughter, carnage’ > UA *ko’ya ‘fight, kill pl objects’ (178-9)
x’m ‘bow, bend, bend (arm), bow down’ > UA *ko’om / *kom(a) ‘bend, carry in arms’ (176)
x’m ‘bow, bend, bend (arm), bow down’ > UA *ko’om ‘down, low’ (177)
xpx ‘rob’ > UA *kïpïk ‘take, grasp’ (320)
xpš ‘foreleg, thigh’ (Coptic šopš) > UA *kapsi ‘thigh’ (294)
xpd ‘buttock’ > UA *kupta ‘buttocks’ (295)
xpdw ‘buttocks’ > NP hopoto / UA *hupito ‘back, buttocks’ (371)

xfty(w) ‘enemies’ > UA *kaytu ‘enemy, opponent’ (486)
xnm ‘inhale, smell, enjoy, eat (food)’ > UA *kuCma/i / *kunmi (Kaufman) 'chew, nibble' (302)
xnm ‘inhale, smell, enjoy, eat (food)’ > UA *kaNmu / *kanmï (Kaufman) ‘jackrabbit’ (463)
xnm ‘inhale, smell, enjoy, eat (food)’ > UA *kaNma / *kamma / *kanma (Kaufman) ‘taste, have a taste like’ (303)
xnm ‘inhale, smell, enjoy, eat (food)’ > UA *kaCma ‘cheeks, mouth’ (304)
xnt ‘face, n; in front of, prep’ > Tbr kota ‘face’ (245)
xr ‘fall’ > UA *kuri ‘fall’ (247)
xr ‘speak to, say’ > UA *kara ‘belch, croak, ring, play music’ (248)
xt ‘fire’ > UA *kut ‘fire’ (452-4)
xt ‘wood, stick, tree’ > UA *kut ‘tree, wood, firewood’ (489)
xdw / xddw ‘fish(es), coll. pl’ > UA *kïcu ‘fish’ (365-6)

h

hʕq ‘shave, shear’ > Hp hèewi ‘scrape out, scrape clean’ (341)
hpʕ ‘chew’ > UA *hiwa ‘taste’ (299)

S

s’ ‘son’; s’t ‘daughter’ > UA *piso’o ‘child, boy, children’ (153)
s’ ‘maggot’ > UA *sa’wa / *si’a ‘louse’ (310)
s’w ‘break (to pieces), demolish’ > UA *si’u ‘break to pieces’ (399)
s’xmw ‘species of bat’ > UA *so’o- in UA *so’o-paCti ‘bat’ (249)
sin ‘clay’, sint ‘clay seal’; t’-sint > Ca tésnat ‘clay for pottery’ (520)
sʕ’y ‘tremble’ > UA *sowa (< *sawa) ‘shake’ (250)
sʕ’y ‘tremble’ > UA *sawiya ‘fear’ (251)
sʕr ‘thorn bush(es), thorny undergrowth’ > UA *sawaro ‘saguaro cactus’ (400)
swn ‘suffer, experience/recognize, open’ > UA *suna ‘heart, core, inside, suffer, be sad/poor, escape’ (218)
swr ‘fish, sp.’ > CN šowil-in 'catfish’ (455)
swḫ ‘loincloth, apron’ > Wr sa’wela ‘loincloth’ (338)
swḫty / sḫty ‘fish, sp.’ > Wr so’cí ‘fish’ (456)
sb’ ‘star, door’ > UA *sipo’ / *si’po ‘star’ (154)
sb’ ‘star, door’ > UA *pu’u ‘door’ (154)
sbr ‘wine’ > UA *sïpi ‘berry tree’ (405)
sbq ‘calf of leg’ > UA *sipika ‘lower leg’ (132)
sobek < *subak ‘crocodile’ > UA *supak ‘crocodile’ (115)
sbty ‘enclosure’; Coptic sobt ‘wall, fence’ > Yq sápti ‘fence of branches’ (133)
sp’ ‘centipede’ > UA *ma-siwa ‘centipede’ (*sipwa > siwa, bilabial > ø as 1st C in cluster) (297)
spr ‘rib’; (Coptic spir ‘rib’) > UA *-sisve- in Cp amsisve-l ‘rib’ (252)
spd ‘sharp, sharp-pointed’ > UA *sipaC ‘point’ (253)
sm’ ‘lung’ > UA *somwo ‘lung’ (281)
sm’ ‘lung’ > UA *sumaC ‘breathe’ (436)
sm’ ‘unite, put together’ > UA *sïma’ / *sïmï' 'one’ (496)
smḫy ‘flood, drown, sink, vt’ (causative of Egyptian mḫi ‘drown’ at 229) > UA *sum ‘sink’ (254)
smx ‘forget, neglect’ > UA *suma / *sumiCa ‘forget’ (318)
snw ‘companion, fellow, equal’ > UA *sïnu ‘another, different’ (130)
srqt / s’qt ‘the-scorpion’ > UA *saka ‘scorpion’ (363)
t’-srqt / t’-s’qt ‘the-scorpion’ > UA *taska ‘scorpion’ (364)
sxn / zxn ‘kidney fat, kidney tallow, pancreas’ > UA *sikun ‘kidney’ (171)
(s)x’x ‘hasten, vt’; sxsx ‘run, hurry’; sxti ‘run! hurry!’ > UA *soko-miya ‘walk’ (459)
sxt ‘field, country, pasture, willow’ > UA *sakat ‘willow’ (174)
sxt ‘field, country, pasture, willow’ > UA *sïhï ‘willow’ (174)
shr ‘to milk, v’; shrt ‘milking’ > UA *soyti ‘to milk’ (342)
sq’ḫ ‘to whitewash, to mud (s.th.), plaster’ > UA *sokoC / *coka ‘earth, mud, plaster’ (448)
sqd ‘slope (of pyramid)’ > UA *sikiC ‘slanted (terrain), side’ (255)
st’ ‘warm, heat up’ > UA *taku-sito’i ‘sweat’ (260)
stpt ‘choice things of food’ > sa’pa ‘meat’; *sa’pï ‘fat’ (256)
st’ ‘weave, spin (yarn)’ > *sito of UA *sitoko’V ‘braid’ (257)
st’ ‘drag, pull, pull out, draw’ > *(piC)-sutu’a ‘(behind)-pull, drag’ (258)
st’ ‘jar, jug’ > UA *soto’o ‘pot, jar’ (259)
sd ‘tail’ (> *st > Coptic sat/set ‘tail, penis’) > UA/Num *sari ‘tail’; Hp sïrï ‘tail’ (261)

Š

š’ ‘vegetation, pastureland’ > UA *sawa / *sakwa ‘blue/green’ (430)
šʕy ‘sand’ (Coptic šoo) > UA *siwal > NUA siwaN ‘sand’ (162)
šʕt / šʕyt ‘type of bread’ > UA *sawa / *sawiC ‘tortillas, make tortillas’ (488)
šw ‘dry, dried’ (Coptic šowe) > Tb šuu’ ‘dry, vt’ (360)
šw ‘sun, sunlight’ > UA *siw ‘hot’ (361)
šwt ‘shade, shadow’ > CN seewal-li ‘shade’ (263)
šm ‘go, walk, set out, leave’ > UA *sima ‘go, leave’ (131)
šmrt ‘bow’, pl: šmrwt > *-samaaloo-t in CN koo-samaaloo-tl ‘rainbow’ (264)
šms ‘follow, accompany, bring, present’ > UA *samsa ‘buy, sell’ (265)
šni ‘enclose, cover’; šni ‘hair, grass’; šnw ‘hair, grass’ > UA *soni / *sono ‘grass, straw, blanket’ (266)
šnbt ‘breast’ > UA *sanaC ‘breast’ (140)
šnd̲t ‘thornbush’ > UA *sacani 'saguaro cactus' (439)

q

q’yt ‘high ground, hill’; q’i ‘tall, high’ > UA *kawi ‘mountain, rock’ (322-3)
q’r ‘bundle, pocket’ > UA *kawaC ‘pocket, bag’ (327)
q’r ‘bundle, pocket’ > UA *kawaC ‘rat, packrat’ (328)
qbb ‘cool, calm, quiet’ > UA *koppa ‘quiet, calm’ (134)
qm’ ‘create, beget’ > UA *kumma ‘create, make’ (283)
qm’ ‘create, beget’ > UA *kumCa ‘husband’ (284)
qm’y ‘color’ > UA *ma’ay / *mayï ‘color, be the color of, paint’ (393)
qm’tyw ‘enemies, pl’, qm’ fight’ > UA *kïmmaN-(ci) / *kïma’a ‘different, enemy’ (446)
qny ‘be yellow’; qnit ‘a yellow pigment’ > Cp kenekene’e-š ‘yellow’ (331)
qrrt ‘cavern’ > Hp koro ‘small cavity, cave, or hollow in a cliff or wall’ (368)
qrɧt ‘serpent, ally, partner’ > UA *koNwa ‘snake, twin’ (332)
qq / q’q’ ‘eat’ > UA *koki 'to graze' (449)
qd / qdi ‘go round, walk about’ (Coptic koote); qdd ‘sleep’ > UA *katï ‘dwell, sit’ (329)
qd / qdi ‘go round, use potter’s wheel’ (Coptic koote); qdd ‘sleep’ > UA *koti / *kuri ‘turn, go around, stir, mix’ (333)
qd ‘go round, use potter’s wheel, pot’ (Coptic koote); qdd ‘sleep’ > UA *wakoti ‘pot’ (335)

K

k’w ‘sycamore figs’ > UA *ku’u / *kuhu 'elderberry' (324)
k’p ‘close (eyes), cover, hide self, droop (eyebrows)’ > UA *kuppa / *kuCpa ‘close (eyes)’ (398)
k’pt ‘linen cover’ > Eu kapát ‘clothing’ (521)
k’mwtt ‘ear (or grain)’ > UA *mura ‘ear of grain’ (392)
k’nw ‘vineyard’ > UA *kunuki ‘elderberry’ (325)
kf’ ‘hinder parts of bird, base, bottom (of jar)’ > Cp kəpawe ‘hip’ (344)
kfi ‘take off, remove’ > UA *kappiwa ‘degrain grain from ear’ (458)
km ‘black’ > UA *kuma > *koma ‘dark, gray, brown, black’ (125)
kmt ‘a jar, n.f.’ > CN koma-tl ‘vessel, container’ (312)
kns ‘pubic region’ > Wr kohsí ‘anus, vagina’ (358)
ktkt ‘quiver, v’ > UA *kaci ‘tremble, shake’ (359)

G

g’ sing’ > UA *kawa / *kaa ‘sing’ (408)
g’p ‘cut’ > UA *kappi ‘break, cut’ (434)
g’p ‘cut’ > UA *koppi ‘break’ (435)
gwn sack’ > UA *kuna ‘bag, sack’ (330)
gnn ‘weak, loose, limp, sluggish, inert’ > Eu kanánki ‘lame, limp, maimed’ (388)
gnh̲t ‘a star’ > SP kaŋa ‘morning star’ (156)
gr ‘be silent, quiet, still’ > Tr kiri ‘tranquil, quiet’ (353)
gr / grt ‘also, too, further(more)’ > Wr gari ‘also’ (354)
grɧ ‘night’ (Coptic čoorh) > UA *kï(C)aNwi / *kïaw ‘yesterday’ (355)
grɧ ‘complete, finish off’ > Tr gare/kare ‘be able, finish’; Wr kahu ‘finish, be able’ (356)
t’-ggt ‘the-kidney’ > UA *takkiC ‘kidney’ (357)

T

t’ ‘earth, land, ground, country’ (Coptic to) > UA *tïwa ‘sand, dust’ (150)
t’ ‘be hot’ > UA *tu’i ‘hot’; UA *ta’ta ‘hot’ (285)
t’/p’/n’ ‘the’ > UA tV-/pV-/nV- (373-380)

t’yt ‘shroud’ > UA *tawayi ‘wrap around’ (148)
twr ‘reed’ > CN tool-in ‘sedgegrass, reeds’; UA *to’i ‘cattail’ (267)
tbs ‘prick, stab, pierce’ > UA *tapusa ‘pierce’ / *tupusi ‘pierce’ (445)
tbt/tebt ‘fish’ (Coptic) > UA *-topa ‘fish’ (204)
tp ‘head, point, tip, peak’ > UA topo ‘peaked, pointed, sticking up/out’ (507)
tm ‘negative, no, not’ > UA *tam ‘no’ (202)
tm ‘close (mouth)’; tm ‘be complete’; Hebrew tmm ‘be complete, finished’ > UA *tïmaC / *tïmam 'to close’ (203)
thi ‘go astray, transgress, reject, deviate’ > UA *toha ‘go different directions, leave, abandon’ (191)
txi ‘be drunk, drink deep’; txw ‘drunkard’ > UA *tïku 'drunk’ (170)
tš ‘spit out’ > UA *tusaC / *tusiC ‘spit’ (382)
tks ‘pierce’ > UA *tïkso ‘pierce, poke’ (124)

T

ṯ’y / t’w ‘man, male’ > UA *tawa / *tawi ‘man, male’ (205)
ṯ’y / t’w ‘man, male’ > UA *tuwa / *tu’a ‘bear a son’; *tuwi / *tu’i ‘boy, child’ (206)
ṯ’w / t’y ‘take up, seize, steal, collect, bring together’ (Coptic jiwe) > UA *tï’wi / *tu’wi ‘to gather seeds, harvest’ (159)
ṯ’w / t’y ‘take up, seize, steal, collect, bring together’ (Coptic jiwe) > UA *to’ / tu’ ‘fetch, go get, go to do’ (160)
twt ‘perfect, complete’ > tuti ‘beautiful, attractive’ (420)
twt ‘statue, standing image’ > UA *tuC / *tutu ‘be standing, pl inanimate’ (421)
ṯwt ‘sole, sandal, foot’ > UA *tuti ‘sandal, shoe’ (210)
ṯbt ‘sole, sandal, foot’ > UA *tapat-ta ‘footwear’ (209)
ṯpḫt ‘cavern, hole (of snake)’ > UA *tapu 'hole' (207)
ṯm ‘think’ > UA *tama ‘remember’ (487)
ṯm ‘connect, join’ > UA *tama ‘secure, tie tight’ (498)
ṯnf ‘drink, dance’ > UA *tani ‘dance’ (396)
ṯhm ‘hunt’ > UA *tïm ‘look for’ (348)
ṯḫn ‘sparkle, shine, gleam’; ṯḫnḫn ‘be bright’; ṯḫnw ‘Libya’ (ie, the glistening desert) > UA *tohono ‘desert, plain’ (208)
ṯḫn ‘sparkle, shine, gleam’; ṯḫnḫn ‘be bright’ > UA *toŋa ‘hot, heat (of) sun/day, shine’ (462)
ṯs ‘neck’ > CN toski-tl ‘throat, voice’; CN toskak ‘throat’ (349)
ṯs ‘tie, weave, order, arrange, marshal (troops)’ > UA *tïsa ‘order, command’ (350)
ṯs ‘tie, weave’ > UA *tuCtusi ‘spider’ (351)
ṯsi ‘raise, lift up’ > UA *tïcayi 'climb, raise' (440)
tsw ‘commander, protector’ > UA *tusu’ ‘learn, know, be smart’ (220)

D

d’ ‘copulate’ > UA *toC ‘copulate’ (394)
dw’ ‘rise early’; dw’yt ‘dawn, morning’ > UA *to’ay ‘emerge, come up/out (especially sun, stars, etc)’ (273)
dwn ‘stretch, straighten’ > UA *tuna ‘straight’ (268)
dbḫ ‘ask for, beg’ (Coptic toobh) > UA *tïpiwa / *tïpiN 'ask' (270)
dm ‘be sharp, sharpen’ (Coptic toom) > UA *tama ‘be sharp’ (271)
dmr / dmi ‘touch, reach’ > UA *tam ‘touch, feel’ (272)
dnit ‘a festival’ > UA *tuniti ‘do ceremonial singing’ (372)
dr ‘spread out, stretch out’ > UA *ta’ra ‘spread, stretch out’ (526)
dhnt ‘mountain top’, pl: dhnwt > tonoC ‘hill’ (274)
dqr ‘fruit’ > UA *taka(C) ‘fruit’ (269)

D

ḏ’i ‘1. extend/cross, 2 pierce/transfix 3 devour’ > UA *sowa / *so’a / *so’i ‘pierce, thorn’ (194)
ḏ’i ‘1 extend/cross (water, area), 2 pierce 3 devour’ > UA *suwa ‘eat up, consume’ (195), Wr sueni ‘cross (river)’ (196)
ḏ’rt ‘bitter gourd’ > UA *sawara 'gourd’ (198)
ḏ’rt ‘scorpion’ > UA *suyi 'scorpion, sting' (479)
ḏʕb ‘coal-black’ > UA *so’opa ‘black, dark’ (197)
ḏwt ‘mosquito’ > UA *suti ‘mosquito, gnat’ (390)
ḏb’ ‘to clothe, garment’ > UA *sipu’ > *si’pu ‘underclothing’ (199)
ḏb’ ‘leaf’, pl: ḏb’-w ‘leaves’ > UA *sawa ‘leaf’ (467) (bilabial > ø as 1st C in cluster)
ḏbt ‘brick’ (Coptic too’be ‘adobe’) > UA *supa ‘adobe’ (200)
ḏnnwtt ‘snake’ > UA *sinawi ‘snake’ (201)
ḏḫʕwt ‘bitterness’ > UA *sïhïw(kV) ‘sour’ (513)
ḏdfṯ ‘snake, internal bodily worm’ (Coptic jatfe) > Sr sïväṭ-ṭ ‘body louse’ (311)

Bibliography

Sources are listed by subject area: first, Egyptian sources, then Comparative Semitic sources, then Hebrew, Arabic, Aramaic, Ugaritic, Yiddish, non-UA linguistic sources, and last is the lengthy Uto-Aztecan bibliography. Abbreviations for the sources most frequently cited are to the right. Sources not showing an abbreviation are cited with a standard parenthetical note: e.g., (Blau 1976).

Egyptian and Coptic sources

Allen, James P. 2010. *Middle Egyptian: An Introduction to the Language and Culture of the Hieroglyphs.* 2nd ed. Cambridge: Cambridge University Press.

Allen, James P. 2000. *Middle Egyptian: An Introduction to the Language and Culture of the Hieroglyphs.* 1st ed. Cambridge: Cambridge University Press.

Allen, James P. 2013. *The Ancient Egyptian Language: An Historical Study.* Cambridge: Cambridge University Press.

Bendjaballah, Sabrina, and Chris Reintges. "Ancient Egyptian Verbal Reduplication: Typology, Diachrony, and the Morphology-Syntax Interface." Online www-classic.uni-graz.at. July 30, 2014.

Cerny, Jaroslav. 1976. *Coptic Etymological Dictionary*. Cambridge: Cambridge University Press.

Cerny, Jaroslav, and Sarah Israelit Groll, assisted by Christopher Eyre. 1993. *A Late Egyptian Grammar*. 4th ed. Studia Pohl: Series Maior 4. Roma: Editrice Pontificio Istituto Biblico.

Hannig, Rainer. 1995. *Die Sprache der Pharaonen: Grosses Handwörter Buch: Ägyptisch – Deutsch*. Band 64. Mainz: Philipp von Zabern. — Egyptian(H)

Hannig, Rainer. 2000. *Die Sprache der Pharaonen: Grosses Handwörter Buch: Deutsch – Ägyptisch*. Band 86. Mainz: Philipp von Zabern.

Faulkner, Raymond O. 1962. *A Concise Dictionary of Middle Egyptian*. London: Griffith Institute at the Oxford University Press. — Egyptian(F)

Gardiner, Alan H. 1969. *Egyptian Grammar*. London: Oxford Universtiy Press.

Gee, John. 2004. Personal communication via email.

Lambdin, Thomas O. 1983. *Introduction to Sahidic Coptic*. Macon, GA: Mercer University Press.

Loprieno, Antonio. 1995. *Ancient Egyptian: A Linguistic Introduction*. Cambridge: Universtiy of Cambridge Press.

Satzinger, H. "Types of consonant reduplication in Egyptian roots." Online: homepage.univie.ac.at. July 30, 2014.

Smith, Richard. 1983. *A Concise Coptic-English Lexicon*. Grand Rapids, Michigan: William B. Eerdsman Publishing Company.

Takács, Gábor. Etymological Dictionary of Egyptian. Brill, 2007. Available online 2012.

Comparative Semitic sources

Bennett, Patrick R. 1998. *Comparative Semitic Linguistics: A Manual*. Winona Lake, Indiana: Eisenbrauns.

Ehret, Christopher. 1995. *Reconstructing Proto-Afroasiatic (Proto-Afrasian): Vowels, Tone, Consonants, and Vocabulary*. University of California Publications in Linguistics: volume 126. Berkeley: U of C Press.

Goldenberg, Gideon. 2013. *Semitic Languages: Features, Structures, Relations, Processes*. Oxford, United Kingdom: Oxford University Press.

Izre'el, Shlomo, Ed. 2002. *Semitic Linguistics: The State of the Art at the Turn of the 21st Century*. Israel Oriental Studies XX, Tel-Aviv University. Jerusalem: Graphit Press Ltd and Eisenbrauns.

Kapelium, Olga. 2002. "Languages in Contact: The Contemporary Semitic World." In *Semitic Linguistics: The State of the Art at the Turn of the 21st Century*, 307-340. Shlomo Izre'el, Ed. Israel Oriental Studies XX, Tel-Aviv University. Jerusalem: Graphit Press Ltd and Eisenbrauns.

Lipinski, Edward. 2001. *Semitic Languages: Outline of a Comparative Grammar*. Leuven, Belgium: Peeters Publishers & Department of Oriental Studies.

Moscati, Sabatino, Anton Spitaler, Edward Ullendorff, and Wolfram von Soden. 1964. *An Introduction to the Comparative Grammar of the Semitic Languages: Phonology and Morphology*, edited by Sabatino Moscati. Porta Linguarum Orientalium n.s. 6. Wiesbaden: Harrassowitz.

Rubin, Aaron D. 2010. *A Brief Introduction to the Semitic Languages*. Piscataway, New Jersey: Gorgias Press.

Hebrew sources

Blau, Joshua. 1976. *A Grammar of Biblical Hebrew*. Wiesbaden: Otto Harrassowitz.

Blau, Joshua. 1998. *Topics in Hebrew and Semitic Linguistics*. Jerusalem: Magnes Press.

Blau, Joshua. 2010. *Phonology and Morphology of Biblical Hebrew*. Winona Lake, Indiana: Eisenbrauns.

Brown, Francis, S. R. Driver, and Charles A. Briggs. 1975. Hebrew(BDB)
A Hebrew and English Lexicon of the Old Testament. Oxford: Clarendon Press.
Gesenius, Wilhelm. 1910. *Gesenius' Hebrew Grammar*. German edition edited and enlarged by E. Kautzsch; 2nd English edition revised and edited from the 28th German edition (1909) and translated by A. E. Cowley. London: Oxford University Press.
Gesenius, Wilhelm. 1949. *Gesenius' Hebrew and Chaldee Lexicon*. Translated and edited by Samuel Prideaux Tregelles. Grand Rapids: Eerdmans.
Klein, Ernest. 1987. *A Comprehensive Etymological Dictionary of the Hebrew Language*. Ed. Baruch Sarel. Jerusalem: Carta. Hebrew(K)
Koehler, Ludwig, and Walter Baumgartner. 1994. *The Hebrew and Aramaic Lexicon of the Old Testament*. Revised by Walter Baumgartner and Johann Jakob Stamm; translated and edited under the supervision of M.E.J. Richardson. Leiden: E. J. Brill. Hebrew or Hebrew(KB)
Kutscher, Eduard Yechezkel. 1982. *A History of the Hebrew Language*. Jerusalem: Magnes Press, The Hebrew University, E.J. Brill.
Rendsburg, Gary A. 1997. Chapter 5 "Ancient Hebrew Phonology." Online offprint from *Phonologies of Asia and Africa*. Alan S. Kaye, ed. Eisenbrauns. Read online December 12, 2013.
Sáenz-Badillos, Angel. 1993. *A History of the Hebrew Language*. Cambridge: Cambridge University Press.
White, Marsha. 1997. Review of *Diversity in Pre-Exilic Hebrew*, by Ian Young. In *Journal of Biblical Literature*, vol. 116, no. 4.
Young, Ian. 1993. *Diversity in Pre-Exilic Hebrew*. Tübingen: J.C.B. Mohr-Siebeck.

Arabic sources

Badger, George Percy. 1967. *English-Arabic Lexicon*. Beirut: Librairie de Liban.
Biella, Joan Copeland. 1982. *Dictionary of Old South Arabic: Sabaean Dialect*. Harvard Semitic Studies, no. 25. Frank Moore Cross, Jr., ed. Chico, CA: Scholars Press.
Johnstone, T.M. 1987. *Mehri Lexicon and English-Mehri Word-List*. School of Oriental and African Studies, University of London. Printed and bound in Great Britain by Biddles Ltd. Guildford and King's Lynn.
Lane, Edward W. 1863-1893. *An Arabic-English Lexicon*. Online. Arabic(Lane)
London: Williams and Norgate.
Ricks, Stephen D. 1989. *Lexicon of Inscriptional Qatabanian*. Studia Pohl: Dissertationes Scientificae de Rebus Orientis Antiqui. Roma: Editrice Pontificio Instituto Biblico.
Wehr, Hans. 1976. *A Dictionary of Modern Written Arabic*. Ed. J. Milton Cowan. Arabic
New York: Spoken Language Services, Inc.
Wright, W. 2005. Arabic Grammar. Third edition revised by W. Robertson Smith and M.J. de Goege. Mineola, New York: Dover Publications, Inc. Translated from the German of Caspari and edited with numerous additions and corrections by W. Wright, and published in two volumes by Cambridge University Press, 1896-1898. Originally published in Latin, 1844-1848.

Aramaic and Syriac sources

Comprehensive Aramaic Lexicon. Cincinnati: Hebrew Union College and Jewish Institute of Religion. Online database. Searched 2012-13. Aramaic (CAL)
Smith, R. Payne, and J. Payne Smith. 1999. A Compendious Syriac Dictionary. Syriac
Founded on the Thesaurus Syriacus of R. Payne Smith.
Edited by J. Payne Smith (Mrs Margoliouth). Ancient Language Resources.
Previously published by Oxford University Press, 1902.
Republished in Eugene, Oregon: Wipf and Stock Publishers, 1999.
Sokoloff, Michael. 2009. *A Syriac Lexicon*: A Translation from the Latin, Correction, Expansion, and Update of Carl Brockelmann's *Lexicon Syriacum*, first published in 1895 and later expanded 1923-1928. Winona Lake, Indiana: Eisenbrauns, and Piscataway, New Jersey: Gorgias Press. Syriac(S)
Jastrow, Marcus. 1971, 2004. Dictionary of the Targumim, Talmud Bavli, Talmud Yerushalmi, and Midrashic Literature. Judaica Treasury. Aramaic(J)
Sokoloff, Michael. 2002. A Dictionary of Jewish Babylonian Aramaic of the Talmudic and Geonic Periods. Baltimore and London: John Hopkins University Press and Ramat-Gan, Israel: Bar Ilan University Press. Aramaic(S)
Koehler, Ludwig, and Walter Baumgartner. 1994. *The Hebrew and Aramaic Lexicon of the Old Testament*. Revised by Walter Baumgartner and Johann Jakob Stamm; translated and edited under the supervision of M.E.J. Richardson. Leiden: E. J. Brill. Hebrew(KB) Aramaic(KB)

Thackston, Wheeler M. 1999. *Introduction to Syriac*. Bethesda, Maryland: Ibex Publishers, Inc.
Awde, Nicholas, Nineb Lamassu, and Nicholas Al-Jeloo. 2007. Modern Aramaic(A)
Modern Aramaic (Assyrian/Syriac). New York: Hippocrene Books, Inc.

Ugaritic sources

Gordon, Cyrus H. 1947. *Ugaritic Handbook I: Revised Grammar, Paradigms*.
Rome: Pontificum Institutum Biblicum.
Huehnergard, John. 1987. *Ugaritic Vocabulary in Syllabic Transcription*.
Ed. Frank Moore Cross. Atlanta: Scholars Press.
Segert, Stanislav. 1984. *A Basic Grammar of the Ugaritic Language*.
Berkeley: Universtiy of California Press.

Yiddish Sources

Harshaw, Benjamin. 1990. *The Meaning of Yiddish*. Berkeley: University of California Press.
Kerler, Dov-Ber. 1999. *The Origins of Modern Literary Yiddish*. Oxford Modern Languages and
Literature Monographs. Oxford: Oxford University Press.
Kriwaczek, Paul. 2006. *Yiddish Civilization: The Rise and Fall of a Forgotten Nation*.
New York: First Vintage Books Edition.
Spolsky, Bernard. 2014. *The Languages of the Jews: A Sociolinguistic History*. Cambridge University Press.
Weinreich, Max. 1980. *History of the Yiddish Language*. Translated by Shlomo Noble, with Joshua A Fishman.
Chicago: The University of Chicago Press. First published in Yiddish as *Geshikhte fun der Yidisher shprakh*,
By YIVO Institute for Jewish Research, 1973.
Wexler, Paul. 1993. *The Ashkenazic Jews: A Slavo-Turkic People in Search of a Jewish Identity*.
Slavica Publishers, Inc.

General Linguistic Sources and Non-Uto-Aztecan Linguistic Sources

Arends, Jacques, Silvia Kouwenberg, and Norval Smith. 1995. Theories focusing on the non-European input.
In *Pidgins and Creoles: An Introduction*. Eds. Jacques Arends, Pieter Muysken, and Norval Smith, 99-110.
Amsterdam: John Benjamins.
Bakker, Peter, and Pieter Muysken. 1995. Mixed languages and language intertwining. In *Pidgins and Creoles: An Introduction*. Eds. Jacques Arends, Pieter Muysken, and Norval Smith, 41-52. Amsterdam: John Benjamins.
Bartholomew, Doris Aileen. 1965. The Reconstruction of Otopamean (Mexico).
Ph.D. dissertation, University of Chicago.
Blust, Robert. 1990. "Patterns of sound change in the Austronesian languages."
In *Linguistic Change and Reconstruction Methodology*, ed. Philip Baldi, 231-267.
Trends in Linguistics Studies and Monographs, vol 45. Berlin and New York: Mouton de Gruyter.
Baugh, Albert C., and Thomas Cable. 1978. *A History of the English Language*, 3rd ed.
Englewood Cliffs, N.J.: Prentice Hall.
Beekes, Robert S.P. 1995. *Comparative Indo-European Linguistics: An Introduction*.
Translated by UvA Vertalers/Paul Gabriner. Amsterdam: John Benjamins.
Bills, Garland D., and Neddy A. Vijil. *The Spanish Language of New Mexico and Southern Colorado: A Linguistic Atlas*. Albuquerque: University of New Mexico Press.
Campbell, Lyle. 1977. *Quichean Linguistic Prehistory*. Berkeley: University of California Press.
Campbell, Lyle. 1997. *American Indian Languages: The Historical Linguistics of Native America*.
New York: Oxford University Press.
Campbell, Lyle. 1998. *Historical Linguistics: An Introduction*. Edinburgh: Edinburgh University Press,
Reprint, Cambridge, Massachusetts: The MIT Press, 1999.
Campbell, Lyle, and William J. Poser. 2008. *Language Classification: History and Method*.
Cambridge: Cambridge University Press.
Cavalli-Sforza, L. Luca, Paolo Menozzi, and Alberto Piazza. *The History and
Geography of Human Genes*. Princeton: Princeton University Press, 1994.
Chamberlain, Alexander Francis. 1888. The Catawba Language. Toronto: Imrie and Graham.
Dickerton, Derek. 1981. *Roots of Language*. Ann Arbor: Karoma Publishers, Inc.
Gee, John. "La trahison des Clercs: On the language and Translation of the Book of
Mormon." *Review of Books on the Book of Mormon* 6/1 (1994): 79-82, 94-99.
Gordon, Cyrus H. 1971. *Before Columbus: Links between the Old World and Ancient America*.
New York: Crown Publishers.
Gregor, Douglas Bartlett. 1980. *Celtic: A Comparative Study*. Cambridge, England: The Oleander Press.
Grimm, Jacob. 1822. Deutsche Grammatik. Second edition of the first volume.

Haas, Mary. 1958. Algonkian-Ritwan: the end of a controversy. IJAL 24:159-73.
Hale, Kenneth. 1962. Jemez and Kiowa correspondences in reference to Kiowa-Tanoan. IJAL 28:1-5.
Hale, Kenneth. 1967. Toward a reconstruction of Kiowa-Tanoan phonology. IJAL 33:112-120.
Jannedy, Stefanie, Robert Polleto, and Tracey L. Weldon, eds. 1994. *Language Files*. 6th ed. Columbus: Ohio State University Press.
Klar, Kathryn Ann. 1977. Topics in historical Chumash grammar. Ph.D dissertation, University of California, Berkeley.
"Languages of the World." In *The New Encyclopedia Britannica* 1997, 15th ed. Vol. 22, pp. 572-796. Chicago: Encyclopedia Britannica, Inc. The 220-page article is as good as any book.
"List of French Words of Germanic Origin (C-G)." Wikipedia. en.wikipedia.org. January 18, 2014.
Pinker, Steven. *The Language Instinct*. New York: William Morrow and Co., 1994. Reprint, New York: HarperPerennial, 1995.
Purse, Lisa, and Lyle Campbell. 2013. *Historical Linguistics: An Introduction*. Edinburgh University Press.
The New Encyclopædia Britannica, 15th ed. S.v. "Languages of the World." Vol. 22, pp. 572-796. Chicago: Encyclopædia Britannica, Inc., 1997.
Salmons, Joseph. 2012. *A History of German*: *What the Past Reveals about Today's Language*. Oxford, United Kingdom: Oxford University Press.
Shafer, Robert. 1952. "Athapaskan and Sino-Tibetan." *International Journal of American Linguistics* 18/1: 12-19.
Siebert, Frank. 1945. Linguistic classification of Catawba. IJAL 11:100-4,211-8.
Stubbs, Brian D. "Athapaskans, Puebloans, and the Ancestry of the Navaho." In preparation.
Stubbs, Brian D. 1992. "Book of Mormon Language." *Encyclopedia of Mormonism*, Vol. I: 179-181. New York: Macmillan.
Stubbs, Brian D. 1996a. *Rio Grande Tewa*. The beginnings of a dictionary in suspended preparation.
Stubbs, Brian D. 2009. "The Subconscious Mind's Role in Language Acquisition" in *Morsels for the Mind mingled with Mirth*.
Taylor, Allan R. 1963. "Comparative Caddoan." *IJAL* 29:113-31.
Verner, Karl. 1877. "Eine Ausnahme der ersten Lautverschiebung." Zeitschrift für vergleichende Sprachforschung auf dem Gebiete der indogermanischen Sprachen 23.2:97-130.

Uto-Aztecan cognate collections (in chronological order) and their **abbreviations**

Sapir	Sapir's "Southern Paiute and Nahuatl: a Study in Uto-Aztecan" (1913, 1915)
VVH	Voegelin, Voegelin, and Hale's *Typological and Comparative Grammar of UA* (1962)
B.Tep	Burton Bascom's *Proto-Tepiman* (1965)
M67	Wick Miller's *Uto-Aztecan Cognate Sets* (1967)
BH.Cup	William Bright and Jane Hill's "The Linguistic History of the Cupeño" *IJAL* 33 (1967)
HH.Cup	Jane Hill and Kenneth Hill's "Stress in the Cupan Languages" *IJAL* 34 (1968)
I.Num	David Iannucci's *Numic Historical Phonology* (1972)
CL.Azt	Campbell and Langacker's "Proto-Aztecan Vowels," *IJAL* 44 (1978)
Fowler83	Catherine Fowler's "Lexical Clues to UA Prehistory" *IJAL* 49 (1983) and her fieldnotes
L.Son	Andrés Lionnet's *Relaciones Internas de la Rama Sonorense* (1985)
M88	Wick Miller's 1988 Computerized Database of Uto-Aztecan Cognate Sets (1988)
Munro.Cup	Pamelo Munro's "Stress and Vowel Length in Cupan Absolute Nouns" *IJAL* 56 (1990)
KH.NUA	Kenneth Hill's *Serrano Dictionary*, with comparative notes relevant to NUA (2001)
KH/M06	Kenneth Hill's *Miller's Uto-Aztecan Cognate Sets*: *revised and expanded by KCH* (2006)
UACV	Brian Stubbs' *Uto-Aztecan: A Comparative Vocabulary* (2011)

Uto-Aztecan Bibliography

Albert, Roy, and David Leedom Shaul. 1985. *A Concise Hopi and English Lexicon*. John Benjamins.
Anderson, Arthur J.O. 1973. *Rules of the Aztec Language*. Translation of Francisco Xavier Clavigero, Reglas de la Lengua Mexicana. Salt Lake City: University of Utah Press.
Anderton, Alice Jeanne. 1988. *The Language of the Kitanemuks of California*. Ph.D. dissertation, UCLA.
Andrews, J. Richard. 1975. *Introduction to Classical Nahuatl*. Austin: University of Texas Press.
Anonymous. 1981. *Arte y Vocabulario de la Lengua Dohema, Heve, o Eudeva*, ed. Campbell W. Pennington. Mexico City: Mexico, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de Mexico.
Armagost, James L. Comanche ma-: Undistinguished Deictic, Narrative Obviative. *IJAL* 51/3:302-10.
Babel, Molly, Andrew Garrett, Michael J. Houser, and Maziar Toosarvandani. 2013. "Descent and Diffusion in Language Diversification: A Study of Western Numic Dialectology." IJAL79(4):445-489.

Bahr, Donald M. 1975. *Pima and Papago Ritual Oratory*. San Francisco: The Indian Historian Press.
Bahr, Donald M. 1986. Pima-Papago –ga 'alienability'. *IJAL* 52:161-71.
Balbastro, Pablo. 1878. Vocabulario de la lengua ópata, dialecto tehuima. Ms. Bancroft Library.
Barbastro, Antonio. 1792. Sermones en la lengua ópata. Ms. Bancroft Library.
Barragan, Luis M. 2003. Movement and Allomorphy in the Cupeño Verb Construction. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 141-161. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Barragan, Luis M. and Jason D. Haugen, eds. 2002. Reduplication in the Sonoran Languages. In *Sexto Encuentro Internacional de Lingüística en el Noroeste*, Memorias Tomo 2, Rosa María Ortiz Ciscomani and Zarina Estrada Fernández, eds., 53-76. Hermosillo: Universidad de Sonora.
Barragan, Luis M. and Jason D. Haugen, eds. 2003. *Studies in Uto-Aztecan*. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Barreras, Isabel. 1988. Posesión en Guarijio. Paper presented in the Simposio sobre lingüística yutoazteca, CILI, Universidad de Guadalajara, Guadalajara, Jalisco, Mexico.
Barreras Aguilar, Isabel. 2000. Orden de Palabras en el Guarijío de Sonora. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 125-38. Hermosillo, Mexico: Universidad de Sonora.
Bascom, Burton W. 1965. *Proto-Tepiman*. Ph.D. Dissertation, University of Washington.
Bascom, Burton W. *Northern Tepehuan Dictionary*. in preparation.
Bascom, Burton W. 1982. Northern Tepehuan. *Studies in Uto-Aztecan Grammar: Uto-Aztecan Grammatical Sketches*. vol. 3. Ronald W. Langacker, ed. Arlington: Summer Institute of Linguistics.
Bednark, James, and Arie Poldevaart. Project director. 1987. *Paiute-English, English-Paiute Dictionary*. A publication of the Yerington Paiute Tribe. Anchorage: Bilingual Education Series.
Beller, Richard and Patricia Beller. 1979. Huasteca Nahuatl. *Studies in Uto-Aztecan Grammar: Uto-Aztecan Grammatical Sketches*. vol. 2. Ronald W. Langacker, ed., 199-306. Dallas, TX: Summer Institute of Linguistics.
Bethel, Rosalie, Paul V. Kroskrity, Christopher Loether, and Gregory A. Reinhardt. 1993. *A Dictionary of Western Mono*, 2nd ed.
Bickerton, Derek. 1981. *Roots of Language*. Ann Arbor: Karoma Publishers Inc.
Boas, Franz. 1917. El Dialecto Mexicano de Pochutla, Oaxaca. *IJAL* 1:9-44.
Brambila, David, and José Vergara Bianchi. 1953. *Gramática Raramuri*. Editorial Buena Prensa: México.
Brambila, David. 1976. *Diccionario Raramuri-Castellano*. Mexico: La Obra Nacional de la Buena Prensa.
Brambila, David. 1983. *Diccionario Castellano-Rarámuri*. Mexico: La Obra Nacional de la Buena Prensa.
Brewer, Forrest, and Jean G. Brewer. 1962. Vocabulario mexicano de Tetelcingo, Morelos: Castellano-mexicano, mexicano-castellano. México, D.F.: Instituto Lingüístico de Verano.
Bright, William. 1960. Accent in Classical Aztec. *IJAL* 26:66-68.
Bright, William. 1965. The History of the Cahuilla Sound System. *IJAL* 31:241-44.
Bright, William, and Jane Hill. 1967. The Linguistic History of the Cupeño. In *Studies in Southwestern Linguistics*, Dell Hymes and William E. Bittle, eds., 351-371.
Bright, William. 1968. *A Luiseño Dictionary*. UCPL 51. Berkeley and Los Angeles: University of California Press.
Bright, William, ed. 1978. *Coyote Stories*. IJAL-Native American Texts Series.
Brinton, Daniel. 1891. *The American Race*. New York: N.D.C. Hodges.
Brockway, Earl. 1979. North Puebla Nahuatl. *Studies in Uto-Aztecan Grammar: Modern Aztec Grammatical Sketches*. vol. 2. Ronald W. Langacker, ed., 141-198. Dallas, TX: Summer Institute of Linguistics.
Buelna, Eustaquio. 1890. Arte de la Lengua Cahita por un Padre de la Compañía de Jesús. Mexico: D.F. [First published in 1737 by Juan B. de Velasco.]
Bunte, Pamela A. 1979. *Problems in Southern Paiute Syntax and Semantics*. Dissertation, Indiana University.
Bunte, Pamela A. 1986. Subordinate Clauses in Southern Paiute. *IJAL* 52/3:275-300.
Burgess, Don H. 1984. Western Tarahumara [Grammar]. In *Studies in Uto-Aztecan Grammar,* vol. 4*: Southern Uto-Aztecan Grammatical Sketches*, Ronald W. Langacker, ed., 1-149. Dallas, TX: Summer Institute of Linguistics.
Burnham, Jeffrey. 1988. Mayo Suprasegmentals: Synchronic and Diachronic Considerations. In William Shipley, ed. *In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*: 37-51. Berlin and New York: Mouton de Gruyter.
Buschmann, Johann Carl Eduard. 1859. Die Spuren der Aztekischen Sprache im nordlichen Mexiko und höheren amerikanischen Norden. *Abhandlungen der Königlichen Akademie der Wissenschaften* 1854, Supplement-Band II: 512-76.

Caballero Hernandez, Gabriela. 2003. Valence and Transitivity Changing Operations in Rarámuri. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., pp. 163-180. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Caballero Hernandez, Gabriela. 2005. Central Rarámuri Phonology and Morphology: An Overview. Ms. University of California, Berkeley.
Callaghan, Catherine A. 2001. "More Evidence for Yok-Utian: A Reanalysis of the Dixon-Kroeber Sets." *IJAL* 67(3): 313-345.
Campbell, Lyle. 1977. *Quichean Linguistic Prehistory*. Berkeley: University of California Press.
Campbell, Lyle. 1979. Middle American Languages. In Campbell and Mithun, eds.,902-1000.
Campbell, Lyle. 1985. *The Pipil Language of El Salvador*. Berlin, New York, Amsterdam: Mouton Publishers.
Campbell, Lyle. 1987. Syntactic Change in Pipil. *IJAL* 53:253-80.
Campbell, Lyle. 1988. *The Linguistics of Southeast Chiapas*. Papers of the New World Archaeology Foundation 50. Provo: New World Archaeology Foundation-Brigham Young University.
Campbell, Lyle. 1997. *American Indian Languages: The Historical Linguistics of Native America*. New York: Oxford University Press.
Campbell, Lyle. 1998. *Historical Linguistics: An Introduction*. Edinburgh: Edinburgh University Press; reprinted at Cambridge: MIT Press, 1999.
Campbell, Lyle. 2001. What's wrong with grammaticalization? *Language Sciences* 23(2-3): 113-161.
Campbell, Lyle and Alice C. Harris. 2002. Syntactic reconstruction and demythologizing 'Myths and the prehistory of grammars'. *Journal of Linguistics* 38: 599-618.
Campbell, Lyle, and Ronald W. Langacker. 1978. Proto-Aztecan Vowels. *IJAL* 44: 85-102, 197-210, 262-279.
Campbell, Lyle, and Marianne Mithun, eds. 1979. *The Languages of Native America: A Historical and Comparative Assessment*. Austin: University of Texas.
Campbell, R. Joe. 1976. Underlying /ŋw/ in Hueyapan Nahuatl. *IJAL* 42:46-50.
Campbell, R. Joe. 2006. Draft Lexicon of Molina and Florentine Codex Vocabulary.
Canger, Una. 1988. Nahuatl Dialectology: A Survey and Some Suggestions. *IJAL* 54/1:28-72.
Canger, Una, and Karen Adrian. 1976. Diccionario de vocablos aztecas contenidos en El Arte de la Lengua Mexicana de Horacio Carochi.Copenhague: Universidad de Copenhague.
Canger, Una, and Karen Dakin. 1985. An Inconspicuous Basic Split in Nahuatl. *IJAL* 51/4: 358-361.
Canonge, Elliott D. 1958. *Comanche Texts*. Arlington, TX: Summer Institute of Linguistics.
Carpenter, John P., and Jonathan B. Mabry. 2001. La arqueología de los grupos yutoaztecas tempranos. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, eds. José Luis Moctezuma Zamarrón y Jane H. Hill, 359-73.
Casad, Eugene H. 1984. Cora. In Ronald Langacker (ed.), *Southern Uto-Aztecan Grammatical Sketches*, vol. 3: 153-475. Arlington: The Summer Institute of Linguistics and the University of Texas at Arlington.
Casad, Eugene H. 1992. Cora postpositions. Leuvense Bijdragen 81: 45-70.
Charney, Jean Ormsbee. 1993. *A Grammar of Comanche*. Lincoln: University of Nebraska Press.
Charney, Jean O. 1996. *Ute Dictionary*. Ignacio, Colorado: Southern Ute Indian Tribe.
Collard, Howard, and Elisabeth Scott Collard. 1984. *Vocabulario Mayo*. Serie de vocabularios indígenas, no. 6. Mexico, D.F.: Instituto Lingüistico de Verano.
Copeland, James E. 1993. Tarahumara Reduplication: the Grammaticalization of iconic intensification. Published by The Linguistic Association of Canada and the United States, first edition.
Copeland, James E. 1996. The copula in Tarahumara: paths of grammaticalization. In Bates Hoffer, ed. The twenty-second LACUS forum 1995. Linguistic Association of Canada and the United States. Chapel Hill, North Carolina.
Cortina-Borja, Mario, and Leopoldo Valiñas C. 1989. Some Remarks on Uto-Aztecan Classification. *IJAL* 55(2): 214-39.
Crapo, Richley H. 1970. The Origins of Directional Adverbs in Uto-Aztecan Languages. IJAL 36: 181-89.
Crapo, Richley H. 1976. *Big Smokey Valley Shoshoni*. Desert Research Insitute Publications in the Social Sciences, number 10. Don D. Fowler, ed.
Crum, Beverly, and Jon Dayley. 1993. *Western Shoshoni Grammar*. Boise State University Occasional Papers and Monographs in Cultural Anthropology and Linguistics, no. 1.
Dakin, Karen. 1979. Phonological Changes in Nahuatl: The Tense/Aspect/Number Systems. *IJAL* 45/1:48-71.
Dakin, Karen. 1982. *La Evolución Fonológica del Protonáhuatl*. México: Universidad Nacional Autónoma de México.
Dakin, Karen. 1983. Proto-Aztecan Vowels and Pochutec: An Alternative Analysis. *IJAL* 49/2:196-219.
Dakin, Karen. 1989. Los Origenes Yutoaztecas de –ilC en en Nahuatl. Estudios de Cultura Nahuatl, 19:347-360.

Dakin, Karen. 1991. Nahuatl Direct and Mediated Possession: A Historical Explanation for Irregularities. *IJAL* 57/3: 298-329.
Dakin, Karen. 1994. El Nahuatl en el Yutoazteca sureño. In Carolyn J. Mackay and Verónica Vazquez, eds. *Investigaciones Lingüisticas en Mesoamerica*, 53-86. Mexico: Universidad Nacional Autonóma de Mexico.
Dakin, Karen. 1997. Long Vowels and Morpheme Boundaries in Nahuatl and Uto-Aztecan: Comments on Historical Developments. *Amerindia* 21:55-76.
Dakin, Karen. 1999. Animals and vegetables, Uto-Aztecan noun derivation, semantic classification, and cultural history. In Laurel J. Brinton, ed. Selected papers from the 14th international conference on Historical Linguistics. Amsterdam/Philadelphia: John Benjamins.
Dakin, Karen. 2000. Proto-Uto-Aztecan *p and the e-/ye- Isogloss in Nahuatl Dialectology. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 213-19. Hermosillo, Mexico: Universidad de Sonora.
Dakin, Karen. Raíces en ih- y ah- en el Nahuatl y la **p Proto-Yuto-Azteca. Monograph.
Dakin, Karen. 2001. Isoglosas e innovaciones yutoaztecas. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, eds. José Luis Moctezuma Zamarrón y Jane H. Hill, 313-343. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
Dakin, Karen. 2004a. Nahuatl -ka words: Evidence for a proto-Uto-Aztecan derivational Pattern. *Sprachtypologie and Universalienforschung* 57:6-22.
Dakin, Karen. 2004b. El Xolotl Mesoamericano: Una Metáfora de Transformación Yutonahua? In *La Metáfora en Mesoamérica, ed. Mercedes Montes de Oca Vega*, 193-233. Universidad Nacional Autónoma de México.
Dakin, Karen and Soren Wichmann. 2000. Cacao and Chocolate: A Uto-Aztecan Perspective. *Ancient Mesoamerica* 11:55-75.
Davis, Irvine. 1966. Numic Consonantal Correspondences. *IJAL* 32/2: 124-40.
Davis, John F. 1976. 'Some Notes on Luiseño Phonology'. *IJAL* 42, 192-216.
Dayley, Jon P. 1989a. *Tümpisa(Panamint) Shoshone Dictionary*. Berkeley: University of California Press.
Dayley, Jon P. 1989b. *Tümpisa (Panamint) Shoshone Grammar*. *UCPL* 115. Berkeley: University of California Press.
De Wolf, Paul P. 1997. Esbozo del Mayo Sonorense. Hermosillo, Sonora: Universidad de Sonora.
De Wolf, Paul P. 2001. Eudeve and Opata: A Reassessment of their Classification. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, eds. José Luis Moctezuma Zamarrón y Jane H. Hill, 237-65. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
Dedrick, John M., and Eugene H. Casad. 1999. *Sonora Yaqui Language Structures*. Tucson: University of Arizona Press.
Demers, Richard, Fernando Escalante, and Eloise Jelinek. 1999. Prominence in Yaqui Words. *IJAL* 65(1): 40-55.
Dibble, Charles E., and Arthur J.O. Anderson. 1970. *Florentine Codex, Book 1—The Gods*. Translation of Fray Bernardion de Sahagún, General History of the Things of New Spain. Santa Fe, New Mexico: School of American Research and University of Utah. Monographs of the School of American Research. No. 14, part 7.
Dibble, Charles E., and Arthur J.O. Anderson. 1961. *Florentine Codex, Book 10—The People*. Translation of Fray Bernardion de Sahagún, General History of the Things of New Spain. Santa Fe, New Mexico: School of American Research and University of Utah. Monographs of the School of American Research. No. 14, part 11.
Elliott, Eric B. 1999. *Dictionary of Rincon Luiseño*. University of California, San Diego doctoral dissertation.
Elzinga, Dirk. 1999. The Consonants of Gosiute. PhD dissertation, University of Arizona.
Encinas, Manuel Carlos Silva, Pablo Alvarez Romero, and Crescencio Buitimea Valenzuela. 1998. *Jiák Nokpo Etéjoim*. Hermosillo, Mexico: Departamento de Letras y Lingüistica, Universidad de Sonora.
Escalante, Fernando. 1985. A preliminary view of the structure of Yaqui. MA thesis, University of Arizona.
Escalante, Fernando. 1990. Voice and Argument Structure in Yaqui. PhD dissertation, University of Arizona.
Escalante, Roberto, and Zarina Estrada Fernandez. 1993. *Textos y Gramática del Pima Bajo*. Hermosillo, Mexico: Departamento de Letras y Lingüistica, Universidad de Sonora.
Estrada Fernández, Zarina. 1991. *Arguments and Clausal Relations in Pima Bajo*. PhD dissertation. University of Arizona.
Estrada Fernández, Zarina. 1994. Pima Bajo Dialectal Variation. *Anthropological Linguistics*. Vol. 36/2:223-239.

Estrada Fernández, Zarina. 1996. Grammatical Sketch of Pima Bajo. Languages of the World/Materials 71. München-Newcastle: Lincom Europa.
Estrada Fernández, Zarina. 1998. Pima Bajo de Yepachi, Chihuahua. Archivo de Lenguas Indígenas de México. México, D.F.: El Colegio de México.
Estrada Fernández, Zarina. 2000. Copulative Constructions in Uto-Aztecan. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 139-54. Hermosillo, Mexico: Universidad de Sonora.
Estrada Fernández, Zarina. 2001. El vocabulario del pima bajo o névome. Lingüística Mexicana. Vol. 1/1:65-78.
Estrada Fernández, Zarina. 2003-4. Construcciones posesivas en pima bajo. LIAMES (Linguas Indígenas Americanas). No. 3:23-37.
Estrada Fernández, Zarina. 2003. Typological Correlations and Middle Voice: The Case of Pima Bajo. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 181-200. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Estrada Fernández, Zarina. 2005. The Pronominal Form -a as a Middle Marker in Pima Bajo. *IJAL* 71/3: 277-302.
Estrada Fernández, Zarina. 2012. From demonstrative to a relative marker to clause linker: The relative clause formation in Pima Bajo. In Bernard Comrie and Zarina Estrada Fernández (eds), *Relative clauses in languages of the Americas: a typological overview*, 127-146. Amsterdam: John Benjamins.
Estrada, Zarina and Susan Steele. 1999. Person prefixes in Pima Bajo and analytical decisions. *IJAL* 65(1): 84-120.
Estrada Fernández, Zarina, Crescencio Buitimea Valenzuela, Adriana Elizabeth Gurrola Camacho, Maria Elena Castillo Celaya, and Anabela Carlon Flores. 2004. *Diccionario Yaqui-Español y Textos: Obra de Preservación Lingüística*. Mexico, D.F.: Editorial Plaza y Valdez.
Estrada Fernández, Zarina, y Yolanda Valdez Jara. 2014. La obra de fray Miguel de Tellechea: agunas diferencias del tarahumara un siglo despues. In *Lenguas Yutoaztecas: Acercamiento a Su Diversidad Lingüistica*, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 147-175. Mexico, D. F.: Universidad Nacional Autónoma de México.
Fitzgerald, Colleen M. 1997. O'odham Rythms. PhD dissertation, University of Arizona.
Fitzgerald, Colleen M. 2003. How Prosodically Consistent is Tohono O'odham? In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 55-74. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Fowler, Catherine S. 1983. Some Lexical Clues to Uto-Aztecan Perhistory. *IJAL* 49: 224-57.
Fowler, Catherine S. 1994. Corn, Beans, and Squash: Some Linguistic Perspectives from Uto-Aztecan. In *Corn and Culture in the Prehistoric New World*, Sissel Johannessen and Christine A. Hastorf, eds., 445-468.
Fowler, Catherine S. 2001. Numic Cardinal Directions. In *Avances y balances de lenguas yutoaztecas: Homenaje a Wick R. Miller*, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 267-291.
Franklin, Robert, and Pamela Bunte. 1981. Southern Paiute Stress and Related Phenomena. Linguistics Association of Canada and the United States 7:339-43.
Freeze, Ray, and David Iannucci. 1979. Internal Classification of the Numic Languages of Uto-Aztecan. *Amerindia* 4:17-29.
Gelo, Daniel, ed. 1995. *Comanche Vocabulary: Trilingual Edition*. Austin: University of Texas.
Givon, Talmy, ed., and the Southern Ute Tribe. 1979. *Ute Dictionary*. Ignacio, Colorado: Ute Press.
Givon, Talmy, ed., and the Southern Ute Tribe. 1980. *Ute Reference Grammar*. Ignacio, Colorado: Ute Press.
Givon, Talmy, ed., and the Southern Ute Tribe. 1985. *Ute Traditional Narratives*. Ignacio, Colorado: Ute Press.
Givon, Talmy. 2000. The Grammaticalization of Verbs to Postpositions in Ute. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 221-39. Hermosillo, Mexico: Universidad de Sonora.
Goddard, Ives. 1996. The Classification of the Native Languages of North America. In William C. Sturtevant (ed.), *Handbook of American Indians*, Ives Goddard, vol. ed. of vol. 17 *Languages*. Washington: Smithsonian Institute, pp. 693-720.
Gomez Lopez, Paula. 2014. Los estudios sobre adquisicion de la morfologia verbal en huichol. In *Lenguas Yutoaztecas: Acercamiento a Su Diversidad Lingüistica*, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 107-125. Mexico, D. F.: Universidad Nacional Autónoma de México.
Gould, Drusilla, and Chris Loether. *An Introduction to the Shoshoni Language*. Salt Lake City: University of Utah Press, 2002.
Goss, James A. 1965. Ute Linguistics and Anasazi Abandonment of the Four Corners Area. In *Contributions of the Wetherill Mesa Archaeological Project*, Douglas Osborne, ed., 73-81. Memoirs of the Society of American Archaeology, no. 19. Supplement to American Antiquity 31.2.

Goss, James A. 1968. Culture-historical inference from Utaztekan linguistic evidence. In *Utaztekan Prehistory*, Earl H. Swanton, Jr., ed., 1-42. Pocatello, ID: Occasional Papers of the Idaho State University Museum, no. 22.
Grimes, Joseph E. 1959. Huichol Tone and Intonation. *IJAL* 25:221-32.
Grimes, Joseph E. 1964. *Huichol Syntax*. The Hague: Mouton de Gruyter, Janua Linguarum Series, Practica 11.
Grimes, José E., Pedro de la Cruz Avila, José Carrillo Vicente, Filiberto Díaz, Román Díaz, Antonio de la Rosa, and Toribio Rentería. 1981. *El Huichol: Apuntes Sobre el Léxico*. Ithaca, New York: Cornell University.
Hagberg, Larry. 1988. Stress and Length in Mayo. *In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*, William Shipley, ed., 37-51. Berlin and New York: Mouton de Gruyter.
Hagberg, Larry. 1990. Syllabification of Long Vowels in Mayo. Papers from the 26th meeting of The Chicago Linguistic Society, CLS 26.
Hagberg, Larry. 1990. Stem, Word, and Phrase as Morpho-Syntactic Strata in Mayo. Friends of UA conference paper.
Hagberg, Larry. 1993. An Autosegmental Theory of Stress. PhD dissertation, University of Arizona.
Hagberg, Larry. 2000. Glottal Stop in Mayo: Consonant or Vowel Feature?. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 91-100. Hermosillo, Mexico: Universidad de Sonora.
Hale, Horatio. 1846. *Ethnography and Philology. United States Exploring Expedition, 1838-42*. Reprinted: The Gregg Press, Ridgewood, N. J., 1968.
Hale, Kenneth. 1959. *A Papago Grammar*. PhD dissertation, Indiana University.
Hale, Kenneth. 1969. Papago /čim/. IJAL 35, 203-212.
Hale, Kenneth. 1970. On Papago Laryngeals. In *Languages and Cultures of Western North America: Essays in Honor of Sven S. Liljeblad*, Earl H. Swanson, Jr., ed. Pocatello: Idaho State University Press.
Harley, Heidi, and Maria Amarillas. 2003. Reduplication Multiplication in Yaqui: Meaning X Form. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 105-140. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Harms, Robert T. 1966. Stress, Voice, and Length in Southern Paiute. *IJAL* 32:228-235.
Haugen, Jason D. 2003. Allomorphy in Yaqui Reduplication. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 75-104. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Haugen, Jason D. 2004. *Issues in Comparative Uto-Aztecan Morphosyntax*. PhD dissertation, University of Arizona.
Haugen, Jason D. 2004. Denominal Verbs in Yaqui. In *Estudios en lenguas amerindias: Homenaje a Ken L. Hale*, Z. Estrada Fernández, A. Fernández Garay, and A. Álvarez Gonzákez (eds.), 229-267. Hermosillo, Sonora: Editorial Unison.
Haugen, Jason D. 2005. Reduplicative allopmorphy and language prehistory in Uto-Aztecan. In *Studies on Reduplication*, Bernhard Hurch, ed., 315-49. Berlin: Mouton de Gruyter.
Haugen, Jason D. 2006a. Comitative and Instrumental Postpositions in Uto-Aztecan. Ms.
Haugen, Jason D. 2006b. Derived Verbs of Possession in Uto-Aztecan: Reconstruction and Paths of Change. Ms.
Haugen, Jason D. 2007. On the development of pronominal clitics and affixes in Uto-Aztecan. *Southwest Journal of Linguistics* 26:1.
Haugen, Jason D. 2008. *Morphology at the Interfaces: Reduplication and Noun Incorporation in Uto-Aztecan*. Linguistics Today, volume 117. Amsterdam/Philadelphia: John Benjamins Publishing Co.
Haugen, Jason D. 2014. Laryngeals in Guarijio (Uto-Aztecan): Synchrony. In Ryan Bennett, Ricker Dockum, Emily Gasser, Dolly Goldenberg, Ryan Kasak, Patrick Patterson (eds), *Proceedings of the Workshop on the Sound Systems of Mexico and Central America*. Yale University, Dept of Linguistics.
Haugen, Jason D. "Uto-Aztecan Languages." 80-page article to appear in *Oxford Research Encyclopedia of Linguistics*.
Haugen, Jason D. "Uto-Aztecan." Forthcoming in *Mesoamerican Languages*, Loren Wichmann, ed.
Haugen, Jason D., and Luis M. Barragan, eds. 2003. *Studies in Uto-Aztecan*. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Haugen, Jason D., and Michael Everdell. 2015. 'To kill' and 'to die' (and other suppletive verbs) in Uto-Aztecan. Forthcoming in *Language Dynamics and Change*.
Heath, Jeffrey. 1977. Uto-Aztecan Morphophonemics. *IJAL* 43/1: 27-36.
Heath, Jeffrey. 1978. Uto-Aztecan *na-class Verbs. *IJAL* 44/3: 211-222.
Heath, Jeffrey. 1985. Proto-Northern Uto-Aztecan Participles. *IJAL* 51/4:441-3.
Heath, Jeffrey. 1998. Hermit crabs: Formal renewal of morphology by phonologically mediated affix substitution. *Language* 74:728-750.

Hill, Jane H. 1966. *A Grammar of the Cupeño Language*. PhD dissertation, UCLA.
Hill, Jane H. 1972. Cupeño Lexicalization and Language History. *IJAL* 38:161-72.
Hill, Jane H. 1973. Subordinate Clause Density and Language Function. Proceedings of the Chicago Linguistics Society.
Hill, Jane H. 1983. Language Death in Uto-Aztecan. *IJAL* 49/3: 258-76.
Hill, Jane H. 1985. On the Etymology of Classical Nahuatl *teekw-tli* 'Lord, Master'. *IJAL* 51/4: 451-3.
Hill, Jane H. 1992. The flower world of Old Uto-Aztecan. *Journal of Anthropological Research* 48:117-144.
Hill, Jane H. 2001a. Proto-Uto-Aztecan: A Community of Cultivators in Central Mexico? *American Anthropologist* 103(4): 913-34.
Hill, Jane H. 2001b. Dating the breakup of Southern Uto-Aztecan. In *Avances y balances de lenguas yutoaztecas*. Homenaje a Wick R. Miller, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 345-58. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
Hill, Jane H. 2002. Toward a linguistic prehistory of the Southwest: Azteco-Tanoan and the arrival of Maize Cultivation. *Journal of Anthropological Research* 58(4):457-76.
Hill, Jane H. 2003a. Cupeño discontinuous constituents. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 245-276. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Hill, Jane H. 2003b. Proto-Uto-Aztecan and the northern devolution. In *Examining the Farming/Language Dispersal Hypothesis*, Peter Bellwood and Colin Renfrew, eds., 331-40. Cambridge: McDonald Institute for Archaeological Research.
Hill, Jane H. 2005. *A Grammar of Cupeño*. University of California Publications in Linguistics, vol. 136. Berkeley and Los Angeles, California: University of California Press.
Hill, Jane H. 2007. The Proto-Uto-Aztecan Cultivation Hypothesis: New Linguistic Evidence. Monograph to be published.
Hill, Jane H. 2008. Northern Uto-Aztecan and Kiowa-Tanoan: Evidence of Contact Between the Proto Languages? *IJAL* 74(2): 155-88.
Hill, Jane H. 2009. Old California Uto-Aztecan: A Reevaluation.
Hill, Jane H. 2010, March 16. New evidence for a Mesoamerican homeland for Proto-Uto-Aztecan. Proceedings of the National Academy of Sciences of the United States of America 107(11): E33.
Hill, Jane H. 2014. 'Old California Uto-Aztecan': A reevaluation. In *Lenguas Yutoaztecas: Acercamiento a Su Diversidad Lingüistica*, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 301-320. Mexico, D. F.: Universidad Nacional Autónoma de México.
Hill, Jane H., and Kenneth C. Hill. 1968. Stress in the Cupan (Uto-Aztecan) Languages. *IJAL* 34:233-241.
Hill, Jane H., and Kenneth C. Hill. 1970. A Note on Uto-Aztecan Color Terminologies. *Anthropological Linguistics* 12:231-38.
Hill, Jane H., and Kenneth C. Hill. 1978. Honorific usage in modern Nahuatl. *Language* 54:123-55.
Hill, Jane H., and Kenneth C. Hill. 1981. Regularities in Vocabulary Replacement in Modern Nahuatl. *IJAL* 47/3:215-26.
Hill, Jane H., and Kenneth C. Hill. 1986. Viable developments of modern Mexicano –axca > possession. *IJAL* 52:404-410.
Hill, Jane H., and Kenneth C. Hill. 1997. Culture influencing language: Plurals of Hopi kin terms in comparative Uto-Aztecan perspective. *Journal of Linguistic Anthropology* 7:166-180.
Hill, Jane H., and Kenneth C. Hill. 2000. Marked and Unmarked Plural Nouns in Uto-Aztecan. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 241-75. Hermosillo, Mexico: Universidad de Sonora.
Hill, Jane H., and Ofelia Zepeda. 1998. Tohono O'odham (Papago) Plurals. *Anthropological Linguistics* 40/1:1-42.
Hill, Jane H., and Rosinda Nolasquez. 1973. *Mulu'wetam: the First People: Cupeño Oral History and Language*. Banning: Malki Museum Press.
Hill, Kenneth C. 1967. *A Grammar of the Serrano Language*. PhD dissertation, UCLA.
Hill, Kenneth C. 1969. Some Implications of Serrano Phonology. Proceedings of the Chicago Linguistics Society.
Hill, Kenneth C. 1971. Gabrielino Data, from J.P. Harrington's Field Notes. Ms.
Hill, Kenneth C. 1978. The Coyote and the Flood (Serrano text). In Bright, ed., 112-16.
Hill, Kenneth C. 1994, 2001. *A Grammatical Sketch of Serrano*. Drafts of work in progress.
Hill, Kenneth C. 1994, 2001. *Serrano Dictionary Draft*. Drafts of the work in progress.
Hill, Kenneth C. 1998a. Introduction, in Hopi Dictionary Project (eds.), Hopi Dictionary: Hopìikwa Laváytutuveni. Tucson: The University of Arizona Press.

Hill, Kenneth C., Emory Sekaquaptewa, and Mary Black, eds. The Hopi Dictionary Project. 1998b. *Hopi Dictionary/Hopìikwa Lavàytutuveni*: *A Hopi English Dictionary of the Third Mesa Dialect*. Tucson: The University of Arizona Press.
Hill, Kenneth C. 1998c. Hopi Grammar. In *Hopi Dictionary: Hopìikwa Laváytutuveni*. Tucson: The University of Arizona Press.
Hill, Kenneth C. 2001. Comments on Hopi and Comparative Uto-Aztecan. In *Avances y balances de lenguas yutoaztecas*, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 293-307.
Hill, Kenneth C. 2003. Denominal and Noun-Incorporating Verbs in Hopi. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds, 215-244. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Hill, Kenneth C. 2006, 2008. Revision and Expansion of Miller's 1988 Computerized Data Base for Uto-Aztecan Cognate Sets.
Hill, Kenneth C. 2010. Tübatulabal Dictionary. Draft manuscript.
Hill, Kenneth C. 2011. Friends of Uto-Aztecan Conference presentation on the rhotacized vowels of Serrano signifying a nearby rounding effect.
Hill, Kenneth C. 2012. Review of *Uto-Aztecan: A Comparative Vocabulary*, by Brian Stubbs. IJAL 78/4 (2012), 591-3.
Hilton, Kenneth Simón. *Tarahumara y Español*. Mexico City: Instituto Lingüístico de Verano. Serie de Vocabularios Indíginas, No. 1.
Hilton, Kenneth Simón. *Diccionario Tarahumara de Samachique*. 2nd ed. Serie de vocabularios indígenas, no. 101. Tuscon: Instituto Lingüistico de Verano, 1993.
Hinton, Leanne. 1991. Takic and Yuman: A Study in Phonological Convergence. *IJAL* 57/2:133-57.
Hopkins, Nicholas. 1965. Great Basin prehistory and Uto-Aztecan. *American Antiquity* 31:48-60.
Hyde, Villiana. 1971. *An Introduction to the Luiseño Language*. Ronald Langacker et al, eds. Banning, California: Malki Museum Press.
Hyde, Villiana Calac, and Eric Elliot. 1994. *Yumáyk Yumáyk: Long Ago*. Universtiy of California Publications in Linguistics 125.
Iannucci, David. 1972. *Numic Historical Phonology*. Ph.D. Dissertation. Ithaca, New York: Cornell University.
Iturrioz Leza, Jose Luis. 2014. Caracteristicas tipologicas fundamentals del huichol. In *Lenguas Yutoaztecas: Acercamiento a Su Diversidad Lingüistica*, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 17-58. Mexico, D. F.: Universidad Nacional Autónoma de México.
Jacobs, Roderick A. 1975. *Syntactic Change: A Cupan (Uto-Aztecan) Case Study*. Berkeley and L.A.: University of California Press. UCPL 79.
Jeanne, LaVerne Masayesva. 1982. Some Phonological Rules of Hopi. *IJAL* 48/3: 245-70.
Jelinek, Eloise, and Fernando Escalante. 1988. Verbless Possessive Sentences in Yaqui. *In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*, William Shipley, ed., 37-51. Berlin and New York: Mouton de Gruyter.
Jelinek, Eloise. 2003. Quantification in Yaqui Possessive Sentences. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds, 201-214. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Johnson, Jean B. 1950. *The Opata: An Inland Tribe of Sonora*. Albuquerque: University of New Mexico Press. University of New Mexico Publications in Anthropology, no. 6.
Johnson, Jean B. 1962. *El Idioma Yaqui*. Mexico, D.F.: Instituto Nacional de Antropología e Historia, Departamento de Investigaciones Antropológicas, Publicaciones 10.
Kalectaca, Milo. 1978. *Lessons in Hopi*. Edited by Ronald W. Langacker. Tucson: University of Arizona Press.
Karttunen, Frances. 1983. *An Analytical Dictionary of Nahuatl*. Austin: University of Texas Press.
Kaufman, Terrence. 1981. Comparative Uto-Aztecan Phonology. Ms.
Key, Harold, and Mary Ritchie Key. 1953. *Vocabulario Mejicano de la Sierra de Zacapoaxtla, Puebla*. México: Instituto Lingüístico y la Secretaría de Educación Pública.
Kimball, Geoffrey. 1990. Noun Pluralization in Eastern Huasteca Nahuatl. *IJAL* 56/2:196-216.
Klein, Sheldon. 1959. Comparative Mono-Kawaiisu. *IJAL* 25:233-38.
Kroeber, Alfred L. 1906-7. Shoshonean Dialects of California. University of California Publications in American Archaeology and Ethnology, no. 4, 66-165.

Kroeber, Alfred L. 1925. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin 78. (Reprinted 1976 by Dover Publications.)
Kroeber, Alfred L. 1934. Uto-Aztecan Languages of Mexico. *Ibero-Americana* 8. Berkeley: University of California Press.
Kroeber, Alfred L., and George William Grace. 1960. *The Sparkman Grammar of Luiseño*. Berkeley and Los Angeles: University of California Press. UCPL 16.
Kroch, Anthony S., and Byron Marshall. 1973. Movement Rules and Modal Expressions in Papago. *IJAL* 39: 80-88.
Laird, Carobeth. 1976. *The Chemehuevis*. Banning, California: Malki Museum.
Lamb, Sydney M. 1958a. *Mono Grammar*. PhD dissertation, Berkeley: University of California.
Lamb, Sydney M. 1958b. Linguistic Prehistory of the Great Basin. *IJAL* 24/2: 95-100.
Lamb, Sydney M. 1964. The Classification of the Uto-Aztecan Languages: A Historical Survey. University of California Publications in Linguistics 34:106-25.
Lander, Herbert. 1967. Syntactic Patterns in Navaho and Huichol. *IJAL* 33:121-27.
Langacker, Ronald W. 1970. The Vowels of Proto Uto-Aztecan. *IJAL* 36/3:169-80.
Langacker, Ronald W. 1972. Possessives in Classical Nahuatl. *IJAL* 38:173-86.
Langacker, Ronald W. 1975. Relative Clauses in Classical Nahuatl. IJAL 41:46-68.
Langacker, Ronald W. 1976a. A Note on Uto-Aztecan Consonant Gradation. *IJAL* 42:374-9.
Langacker, Ronald W. 1976b. *Non-Distinct Arguments in Uto-Atecan*. Berkeley and L.A.: University of California Press.
Langacker, Ronald W. 1977a. *Studies in Uto-Aztecan Grammar I: An Overview of Uto-Aztecan Grammar*. Dallas: Summer Institute of Linguistics.
Langacker, Ronald W. 1977b. The Syntax of Postpositions in Uto-Aztecan. *IJAL* 43:11-26.
Lastra de Suárez, Yolanda. 1986. *Las Áreas Dialectales del Náhuatl Moderno*. México: Universidad Nacional Autónoma de México.
Lindenfeld, Jacqueline. 1973. *Yaqui Syntax*. Berkeley and L.A.: University of California Press. UCPL 76.
Lionnet, Andrés. 1968. Los Intensivos en Tarahumara. *Anales del Instituto Nacional de Antropologí e Historia* (México) 19:135-46.
Lionnet, Andrés. 1972. *Los Elementos de la lengua Tarahumar.* México: Universidad Nacional Autónoma de México.
Lionnet, Andrés. 1977. *Elementos de la lengua Cahita (Yaqui-Mayo)*. México: Universidad Nacional Autónoma de México.
Lionnet, Andrés. 1978. *El Idioma Tubar y Los Tubares, según Documentos Inéditos de C.S. Lumholtz y C. V. Hartman*. México, D.F.: Universidad Iberoamericana.
Lionnet, Andrés. 1985. Relaciones Internas de la Rama Sonorense. *Amerindia* 10:25-58.
Lionnet, Andrés. 1986. *Un Idioma Extinto de Sonora: El Eudeve*. Mexico City: Universidad Nacional Autónoma de México.
Lionnet, Andrés. 1986. La Oclusión Glotal en Taraguarijío. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 101-104. Hermosillo, Mexico: Universidad de Sonora.
Lombardo, Natal. 1641. Arte de la Lengua Tegüima vulgarmente llamada Ópata. Ayer ms. 1641, Newberry Library, Chicago.
Lombardo, Natal. 1702. Arte de la lengua tegüima vulgarmente llamada Ópata. México: Miguel de Ribera. [251 folios]
Luna, Felipe S. 1876. Vocabulario de la lengua oputo. Ms., Bancroft Library.
Malécot, André. 1963-64. Luiseño, A Structural Analysis I: Phonology; II Morpho-Syntax; III Texts and Lexicon; IV Appendices. *IJAL* 29: 89-95, 196-210; 30:14-31, 243-250.
Manaster Ramer, Alexis. 1984. Kern Laws. *IJAL* 50/3:325-34.
Manaster Ramer, Alexis. 1986. The Genesis of Hopi Tones. *IJAL* 52: 154-160.
Manaster Ramer, Alexis. 1991a. Proto-geminates in the Uto-Aztecan Languages of California. *Languages of the World* 2:34-35.
Manaster Ramer, Alexis. 1991b. Some Tubatulabal kinship etymologies. California Linguistic Newsletter 22(3): 8-9.
Manaster Ramer, Alexis. 1991c. Tubatulabal takaah 'quail'. California Linguistic Notes 23(1): 34.
Manaster Ramer, Alexis. 1991d. Uto-Aztecan *tw. California Linguistic Newsletter 22(3): 25.
Manaster Ramer, Alexis. 1992a. A Northern Uto-Aztecan Sound Law: *-c- > *-y-. *International Journal of American Linguistics* 58/3:251-268.
Manaster Ramer, Alexis. 1992b. Uto-Aztecan Phonology: Evidence from Tubatulabal Morphophonemics. *IJAL* 58/4: 436-446.

Manaster Ramer, Alexis. 1992c. Tubatulabal /k/ before low vowels. Folia Linguistica Historica 11(1-2): 183-186.
Manaster Ramer, Alexis. 1992d. Tubatulabal 'man' and the classification of Uto-Aztecan languages. California Linguistic Notes 22.4.
Manaster Ramer, Alexis. 1992e. Proto-Uto-Aztecan *pi 'younger sister' > 'great-grandmother'. *American Indian Culture and Research Journal* 16(1): 111-117.
Manaster Ramer, Alexis. 1992f. A consonant-final pronominal stem in Tubatulabal. California Linguistic Notes 23(1): 27.
Manaster Ramer, Alexis. 1993a. Blood, Tears, and Murder. In *Historical Linguistics 1991: Papers from the 10th International Conference on Historical Linguistics*, J. van Marle, ed., 199-209. Amsterdam and Philadelphia: John Benjamins.
Manaster Ramer, Alexis. 1993c. On Lenition in Some Northern Uto-Aztecan languages. *IJAL* 59:334-341.
Manaster Ramer, Alexis. 1993d. Arguing about 'quail'. California Linguistic Notes 24(1): 4-6.
Manaster Ramer, Alexis. 1993e. 'One' and 'only.' California Linguistic Notes 24(1): 4.
Manaster Ramer, Alexis. 1994a. Eudeve and Huichol Evidence for Proto-Uto-Aztecan Phonology. Ms.
Manaster Ramer, Alexis. 1994b. Proto-Uto-Aztecan Stems with Two Heavy Syllables. Ms.
Manaster Ramer, Alexis. 1995a. On Nahuatl tl and Related Questions of Aztecan Vocalism. Ms.
Manaster Ramer, Alexis. 1995b. The Search for the Sources of the Nahuatl Saltillo. Anthropological Linguistics 37:15.
Manaster Ramer, Alexis. 1996a. Lautgesetzlichkeit and Uto-Aztecan *-/w/- in Southern Paiute. Folia Linguistica Historica 16.
Manaster Ramer, Alexis. 1996b. On Whorf's law and related questions of Aztecan phonology and etymology. *IJAL* 62: 176-187.
Manaster Ramer, Alexis. 1996c. Some Eudeve and Huichol evidence for Proto-Uto-Aztecan phonology. Journal de la Société des Americanistes 82: 117-127.
Manaster Ramer, Alexis. 1996d. The distribution of /s/ vs. /š/ and related issues in Aztecan phonology and etymology. Acta Linguistica Hafniensia 28:107-122.
Manaster Ramer, Alexis. 1997. Uto-Aztecan *ps and Similar Clusters, Again. *IJAL* 63: 248-256.
Manaster Ramer, Alexis. ? A tangled web: the reflexes of Uto-Aztecan vowels in Pochutec. Anthropological Linguistics.
Manaster Ramer, Alexis. 2000. A word to the wise: Tubatulabal oolï- 'to get up'. In *Uto-Aztecan: Structural, Temporal and Geographic Perspectives: Essays in Honor of Wick R. Miller*, Gene Casad and Tom Willett, eds., 287-91. Universidad de Sonora.
Manaster Ramer, Alexis. 2004. Ontology. A draft in preparation.
Manaster Ramer, Alexis, and Ralph Charles Blight. 1993. Uto-Aztecan *ps (and *sp, Too?). *IJAL* 59/1:38-43.
Marsden, W. L. 1923. The Northern Paiute Language of Oregon. *University of California Publications in American Archaeology and Ethnology* 20:175-91.
Martinez, Esther, and Peter Povijua. 1982. San Juan Pueblo Tewa Dictionary. San Juan Pueblo, New Mexico: San Juan Pueblo Bilingual Program. Monograph.
Mason, J. Alden. 1916. Tepecano: A Piman Language of Western Mexico. *Annals of the New York Academy of Science* 25:309-416.
Mathiot, Madeleine. 1976. *A Dictionary of Papago Usage*. Tucson: University of Arizona Press.
McIntosh, John B. 1945. Huichol Phonemes. *IJAL* 11: 31-35.
McLaughlin, John E. 1987. *A Phonology and Morphology of Panamint*. PhD dissertation, University of Kansas.
McLaughlin, John E. 1989. A Note on the Change of Strident to Nonstrident in Gosiute Shoshoni. *IJAL* 55/2:240-247.
McLaughlin, John E. 1992. A Counterintuitive Solution in Central Numic. *IJAL* 58/2:158-81.
McLaughlin, John E. 2000. Language Boundaries and Phonological Borrowing in the Central Numic Languages. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 357-69. Hermosillo, Mexico: Universidad de Sonora.
McLaughlin, John E. 2001. Momentous aspect and durative aspect in Numic languages. Paper presented at the Friends of Uto-Aztecan Conference. Santa Barbara, CA.
McMahon, Ambrosio, and Maria Aiton de McMahon. 1959. *Cora y Español*. Serie de Vocabularios Indigenas, no. 2. Mexico City: Instituto Lingüistica de Verano.
McMahon, Ambrosio. 1967. Phonemes and Phonemic Units of Cora (Mexico). *IJAL* 33:128-34.
Medina Murillo, Ana Aurora. 2012. *Diccionario Léxico-Morfológico del Guarijío*. Ediciones Especiales, 63. Hermosillo, Mexico: Universidad Nacional Autónoma de México, Instituto de Investigaciones filológicas, Universidad de Sonora.

Merlan, Francesca. 1976. Noun incorporation and discourse reference in Modern Nahuatl. *IJAL* 42: 177-191.
Merriam, C. Hart. Fieldnotes in Bancroft Library, UC at Berkeley.
www.archive.org/stream/bancroft_chartmerriam-1556-59/60/61
Merrill, William L. 2007. La Obra Lingüística del padre Matthäus Steffel, S.J. In Karl Kohut and Maria Cristina Torales Pacheco, eds., Desde los confines de los imperios ibéricos: Los Jesuitas de habla alemana en las misiones americanas, 409-439. Frankfurt and Madrid: Vervuert-Iberoamericana.
Merrill, William L., Robert J. Hard, Jonathan B. Mabry, Gayle J. Fritz, Karen R. Adams, John R. Roney, and A.C. MacWilliams. 2009. The diffusion of Maize to the Southwestern United States and Its Impact. Proceedings of the National Academy of Sciences of the United States of America 106: 21029-21026.
Merrill, William L., Robert J. Hard, Jonathan B. Mabry, Gayle J. Fritz, Karen R. Adams, John R. Roney, and A.C. MacWilliams. 2010. Reply to Hill and Brown: Maize and Uto-Aztecan Cultural History. Proceedings of the National Academy of Sciences of the United States of America 107: E35-E36.
Merrill, William L. 2012. The Historical Linguistics of Uto-Aztecan Agriculture. *Anthropological Linguistics* 54(2):203-260.
Merrill, William L. 2013. The Genetic Unity of Southern-Uto-Aztecan. *Language Dynamics and Change* 3:68-104.
Merrill, William L., and Don Burgess. Forthcoming. Ralámuri Kinship Terminology: A Diachronic Perspective on Diversity in the Sierra Tarahumara of Northwestern Mexico. Anthropological Linguistics.
Miller, Irving W. 1982. Southern Paiute and Numic Final Features. *IJAL* 48/4: 444-49.
Miller, Wick R. 1967. *Uto-Aztecan Cognate Sets*. UCPL 48.
Berkeley and Los Angeles: University of California Press.
Miller, Wick R. 1972. *Newe Natekwinappeh: Shoshone Stories and Dictionary*.
University of Utah Anthropological Papers, no. 94.
Jesse D. Jennings, ed. Salt Lake City: University of Utah Press.
Miller, Wick R. 1983. Uto-Aztecan Languages. In William C. Sturtevant, (ed), *Handbook of North American Indians*, Alfonso Ortiz (vol. ed.) of vol. 10, *Southwest*, Washington DC: Smithsonian Institute, 113-124.
Miller, Wick R. 1984. The Classification of the Uto-Aztecan Languages Based on Lexical Evidence. *IJAL* 50/1:1-24.
Miller, Wick R. 1985. Lionnet's Article on the Intensive in Tarahumara. *IJAL* 51:502-04.
Miller, Wick R. 1986. Numic Languages. In *Handbook of American Indians*, ed. William C. Sturtevant, vol. ed. Warren L. D'Azevedo, vol. 11, Great Basin, 98-106.
Washington DC: Smithsonian Institute.
Miller, Wick R. 1988. Computerized Database for Uto-Aztecan Cognate Sets.
Unpublished monograph. Salt Lake City: Anthropology Dept., University of Utah.
Miller, Wick R. 1991. Agent in Passive Sentences in Yaqui and Guarijio. *IJAL* 57:519-523.
Miller, Wick R. 1996a. *Guarijio: Gramática, Textos, y Vocabulario*. Mexico, D.F.: Universidad Nacional Autónoma de Mexico: Instituto de Investigaciones Antropológicas.
Miller, Wick R. 1996b. Sketch of Shoshone, a Uto-Aztecan Language. In *Handbook of American Indians*, ed. William C. Sturtevant, vol. ed. Ives Goddard, vol. 17, Languages, 693-720.
Washington DC: Smithsonian Institute.
Miller, Wick R., and Irvine Davis. 1963. Proto-Keresan Phonology. *IJAL* 29/4: 310-330.
Miller, Wick R., and Shirley Silver. 1997. *American Indian Languages: Social and Cultural Contexts*. Tucson: University of Arizona Press.
Miller, Wick R., Dirk Elzinga, and John E. McLaughlin. 2005. Preaspiration and Gemination in Central Numic. *IJAL* 71/4:413-44.
Mithun, Marianne. 1999. *The Languages of Native North America*. Cambridge: Cambridge University Press.
Miyashita, Mizuki. 2002. Tohono O'odham Syllable Weight: Descriptive, Theoretical, and Applied Aspects. PhD dissertation, University of Arizona.
Miyashita, Mizuki. 2003. Tohono O'odham Consonant Clusters.
In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 41-54.
MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Molina, Felipe S., and David Leedom Shaul. 1993. *A Concise Yoeme and English Dictionary*.
Tucson: Tucson Unified School District, 1993.
Molina, Felipe S., Herminia Valenzuela, and David Leedom Shaul. 1999.
Hippocrene Standard Dictionary: *Yoeme-English English-Yoeme, with a Comprehensive Grammar of Yoeme Language.* New York: Hippocrene Books.
Molina, Fray Alonso de. 1975. *Grammar of the Mexican (Nahuatl) Language*. Translation by Kenneth C. Hill, of Molina's *Arte de la Lengua Mexicana y Castellana*. 1571. University of Michigan Papers in Linguistics 1.4.

Molina, Fray Alonso de. 1970. *Vocabulario en Lengua Castellana y Mexicana y Mexicana y Castellana*. Reprint of 1571 edition. Mexico City: Editorial Porrúa.
Moctezuma Zamarron, José Luis. 1998. Yaqui Mayo Language Shift. PhD Dissertation, University of Arizona.
Moctezuma Zamarron, José Luis. 2000. Southwestern Tepehuan Sound Symbolism: Bird and Insect Terms. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 51-56. Hermosillo, Mexico: Universidad de Sonora.
Moctezuma Zamarron, José Luis, and Jane H. Hill, eds. 2001. *Avances y balances de lenguas yutoaztecas*. Colección Científica, Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
Moctezuma Zamarron, José Luis, y Barbara Cifuentes. 2014. Lenguas y numeros: Analisis Censal de lenguas yutoaztecas. In *Lenguas Yutoaztecas: Acercamiento a Su Diversidad Lingüistica*, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 301-320. Mexico, D. F.: Universidad Nacional Autónoma de México.
Monzón, Cristina, and Andrew Roth Seneff. 1984. Notes on the Nahuatl Phonological Change kw > b. *IJAL* 50/4:456-462.
Munro, Pamela. 1973. Proto-Uto-Aztecan *w—One Source for Luiseño ŋ. *IJAL* 39/2: 135-36.
Munro, Pamela. 1977. Towards a reconstruction of Uto-Aztecan stress. Studies in Stress and Accent. Larry M. Hyman, ed. Southern California Occasional Papers in Linguisitcs 4: 303-326. Pasadena: University of Southern California.
Munro, Pamela. 1983. Selected Studies in Uto-Aztecan Phonology. *IJAL* 49/3: 277-98.
Munro, Pamela. 1990. Stress and Vowel Length in Cupan Absolute Nouns. *IJAL* 56/2: 217-50.
Munro, Pamela. 2000. The Gabrielino Enclitic System. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett, eds., 183-201. Hermosillo, Mexico: Universidad de Sonora.
Munro, Pamela, and Peter John Benson. 1973. Reduplication and Rule Ordering in Luiseño. *IJAL* 39/1: 15-21.
Munro, Pamela, Nellie Brown, and Judith G. Crawford. 1992. *A Mojave Dictionary*. UCLA Occasional Papers in Linguistics, no. 10. Linguistics Dept, UCLA.
Munro, Pamela, and William E. Mace. 1995. *A New Tübatulabal Dictionary*. (Revised preliminary version) UCLA.
Natches, Gilbert. 1923. Northern Paiute Verbs. *University of California Publications in American Archaeology and Ethnology* 20:245-259.
Newman, Stanley. 1944. *Yokuts language of California*. New York: Viking Fund Publications in Anthropology 2.
Nichols, Michael J. P. 1974. *Northern Paiute Historical Grammar*. Berkeley: University of California dissertation.
Norris, Evan. 1986. *A Grammatical Sketch and Comparative Study of Eastern Mono*. San Diego: University of Californian dissertation.
Ortega, Jose de. 1732. Vocabulario en lengua castellana y cora. [Reimpreso en el Boletín de la Sociedad Mexicana de Geografía y Estadística, 1a época, 8:561-605, 1860; reimpreso también en Tepic, 1888.] Mexico, D.F.
Pauketat, Timothy R. 2009. Cahokia: Ancient America's Great City on the Mississippi. New York: Penguin Books.
Pennington, Campbell W., ed. 1979. *Vocabulario en la Lengua Nevome: The Pima Bajo of Central Sonora, Mexico*. vol. 2. Salt Lake City: University of Utah Press.
Perry, Edgar, Canyon Z. Quinero, Catherine D. Davenport, and Corrine B. Perry. 1972. *Western Apache Dictionary*. Fort Apache, Arizona: White Mountain Apache Tribe.
Pimentel, Francisco. 1863. Vocabulario manual de la lengua ópata. *La Epoca*, Boletín de la Sociedad Mexicana de Geografía y Estadística 10:287-313.
Pimentel, Francisco. 1874. *Cuadro descriptivo y comparative de las lenguas indígenas de México*. México: Isidoro Epstein.
Pinarte, Alponse. 1878. Vocabulario del dialecto hehue de la lengua ópata interprete por la indita Rosa Tecla, Sinoquipe, rio de Sonora. Ms., Bancroft Library.
Press, Margaret L. 1979. *Chemehuevi: A Grammar and Lexicon*. UCPL 92. Berkeley: University of California Press.
Preuss, Konrad-Theodor. 1932. Grammatik der Cora-Sprache. *IJAL* 7:1-84.
Preuss, Konrad-Theodor. 1935. Wörterbuch Deutsch-Cora. *IJAL* 8:81-102.
Ramon, Dorothy, and Eric Elliot. 2000. Wayta' Yawa': Always Believe. Banning, California: Malki Ballena Press.
Robinson, D. F. 1966. *Aztec Studies II: Sierra Nahuat Word Structure*. Summer Institute of Linguistics Publications in Linguistics, no. 22. Arlington, Texas.

Robinson, Lila Wistrand, and James Armagost. 1990. *Comanche Dictionary and Grammar*. Summer Institute of Linguistics and the University of Texas at Arlington Publications in linguistics, number 92.
Romney, A. Kimball. 1957. The Genetic Model and Uto-Aztecan Time Perspective. *Davidson Journal of Anthropology* 3(2):35-41. Seattle, Washington.
Sapir, Edward. 1913, 1915. Southern Paiute and Nahuatl: a study in Uto-Aztecan, parts 1 and 2. Part 1, 1913 in *Journal de la Société des Américanistes de Paris* 10:379-425. Part 2, 1915 in *American Anthropologist* 17:98-120, 306-328, reprinted 1919 in JSAP 11: 443-88. Parts 1 and 2 reprinted 1990 in *The collected works of Edward Sapir 5: American Indian Languages*, William Bright, ed., 351-444. Berlin: Mouton de Gruyter.
Sapir, Edward. 1930. Southern Paiute, A Shoshonean Language. *Proceedings of theAmerican Academy of Arts and* Sciences, 65: 1-296.
Sapir, Edward. 1931. Southern Paiute dictionary. *Proceedings of the American Academy of Arts and Sciences* 65(3):537-730.
Sauvel, Katherine, and Pamela Munro. 1981. *Chem'ivillu': Let's Speak Cahuilla*. Los Angeles: UCLA American Indian Studies Center.
Saxton, Dean. 1963. Papago Phonemes. *IJAL* 29, 29-35.
Saxton, Dean. 1982. Papago. In *Studies in Uto-Aztecan Grammar, vol. 3: Uto-Aztecan Grammatical Sketches*, ed. Ronald W. Langacker. Arlington: Summer Institute of Linguistics.
Saxton, Dean and Lucille. 1969. *Dictionary: O'odham Milgaan, English Papago/Pima*. Tucson: The University of Arizona Press.
Saxton, Dean, and Lucille Saxton. 1973. *Legends and Lore of the Papago and Pima Indians*. Tucson: University of Arizona Press.
Saxton, Dean, Lucille Saxton, and Susie Enos. 1983. *Dictionary: O'othham Milgaan, English Papago/Pima*. 2nd ed. R.L. Cherry, ed. Tucson: The University of Arizon Press.
Seaman, P. David. 1985. *Hopi Dictionary*. Northern Arizona Anthropological Paper, no. 2. Flagstaff: Northern Arizona University.
Seiler, Hansjakob. 1965. Accent and Morphophonemics in Cahuilla and in Uto-Aztecan. *IJAL* 31:50-59.
Seiler, Hansjakob. 1967. Structure and Reconstruction in some Uto-Aztecan Languages. *IJAL* 33:135-147.
Seiler, Hansjakob. 1970. *Cahuilla Texts with an Introduction*. The Hague: Mouton. Indiana University Publications, Language Science Monographs, 6.
Seiler, Hansjakob. 1977. *Cahuilla Grammar*. Banning, California: Malki Museum Press.
Seiler, Hansjakob, and Kojiro Hioki. 1979. *Cahuilla Dictionary*. Banning, California: Malki Museum Press.
Shaul, David Leedom. 1982. A Grammar of Nevome. PhD dissertation, University of California-Berkeley.
Shaul, David Leedom. 1985. Azteco-Tanoan ***l/r. *IJAL* 51/4:584-86.
Shaul, David Leedam. 1986. *Topics in Nevome Syntax*. Berkeley: University of California Press.
Shaul, David Leedom. 1990. Teguima (Opata) Inflectional Morphology. *IJAL* 56/4: 561-73.
Shaul, David Leedom. 1991. Eudeve Morphosyntax: An Overview. *IJAL* 57/1:70-170.
Shaul, David Leedom. 1994. A Sketch of the Structure of Oob No'ok (Mountain Pima). *Anthropological Linguistics* 36(3), Fall.
Shaul, David Leedom. 2001. The Opatan Languages, plus Jova. In *Avances y balances de lenguas yutoaztecas*. Hermosillo, Sonora: Instituto Nacional de Antropología e Historia.
Shaul, David Leedom. 2003. Proto-Uto-Aztecan partials and Opata. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 21-40. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Shaul, David Leedom. 2000. Comparative Tepiman: Phonological Change and Inflectional Categories. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 319-56. Hermosillo, Mexico: Universidad de Sonora.
Shaul, David Leedom. Comparative Tepiman Grammar. Monograph.
Shaul, David Leedom. *Hopi Grammar*. Monograph.
Shaul, David Leedom, and David Yetman. 2007. *Opata and Eudeve Languages.* Ms.
Shaul, David Leedom. 2014. A Prehistory of Western North America: The Impact of Uto-Aztecan Languages. Albuquerque: University of New Mexico Press.
Shaul, David Leedom, and Jane H. Hill. 1998. Tepimans, Yumans, and other Hohokam. *American Antiquity* 63:375-396.
Silver, Shirley, and Wick R. Miller. 1997. *American Indian Languages: Cultural and Social Contexts*. Tucson: University of Arizona Press.
Simeon, Remi. 1977. *Diccionario de la Lengua Nahuatl or Mexicana*. Mexico City: Siglo Veintiuno, first published in French in Paris: la imprimerie nationale, 1885.

Smith, Buckingham, editor. 1862. *Grammar of the Pima or Névome, a Language of Sonora*, from a Ms of the 18th century. New York: Cramoisy Press, pp. 1-97. [Edicion facsimilar, New York: AMS Press, inc., 1970.]
Snapp, Allen, John Anderson, and Joy Anderson. 1982. Northern Paiute. *Studies in Uto-Aztecan Grammar: Uto-Aztecan Grammatical Sketches*. vol. 3, Ronald W. Langacker, ed., 1-92. Arlington: Summer Institute of Linguistics.
Sparkman, Philip. 1905. Sketch of the Grammar of the Luiseño Language of California. *American Anthropologist* 7:656-62.
Steele, Susan. 1975. Past and Irrealis: Just What Does It All Mean?. *IJAL* 41: 200-217.
Steele, Susan. 1976. A Law of Order: Word Order Change in Classical Aztec. *IJAL* 42: 31-45.
Steele, Susan. 1979. Uto-Aztecan. In *The Languages of North Amercia: Historical and Comparative Assessment,* Lyle Campbell and Marianne Mithun, eds., 444-554. Austin: University of Texas Press.
Steele, Susan. 1988. Lexical Categories and the Luiseño Absolutive: Another Perspective on the Universality of Noun and Verb. *IJAL* 54/1: 1-27.
Stewart, Thomas W. and Nathan Vaillette, eds. 2001. *Language Files*. Columbus: Ohio State University Press.
Stubbs, Brian D. 1981. A Comparative Study of Tubar within Uto-Aztecan. Paper presented at the Friends of Uto-Aztecan Conference. Salt Lake City, Utah.
Stubbs, Brian D. 1994. The Elusive Liquids of Uto-Aztecan. Paper presented at the Friends of Uto-Aztecan Conference. Albuquerque, New Mexico.
Stubbs, Brian D. 1995. The Labial Labyrinth in Uto-Aztecan. *International Journal of American Linguistics (IJAL)* 61/4: 396-422.
Stubbs, Brian D. 1996. *Rio Grande Tewa: An Indexed Vocabulary*. In preparation.
Stubbs, Brian D. 1997. Book review of *Comanche Vocabulary: Trilingual Edition*, by Manuel García Rejón. *IJAL* 63/2: 282-84.
Stubbs, Brian D. 2000a. More Palatable Reconstructions for Uto-Aztecan Palatals. *IJAL* 66/1: 125-37.
Stubbs, Brian D. 2000b. The Comparative Value of Tubar in Uto-Aztecan. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 357-69. Hermosillo, Mexico: Universidad de Sonora.
Stubbs, Brian D. 2001. A Bat Out of Where? In *Avances y balances de lenguas yutoaztecas*, José Luis Moctezuma Zamarrón y Jane H. Hill, eds., 309-312. Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.
Stubbs, Brian D. 2003. New Sets Yield New Perspectives for Uto-Aztecan Reconstructions. In *Studies in Uto-Aztecan*, Luis M. Barragan and Jason D. Haugen, eds., 1-20. MIT Working Papers on Endangered and Less Familiar Languages, no. 5.
Stubbs, Brian D., Mary Jane Yazzie, Aldean Ketchum, and Loretta Posey. 2011. *White Mesa Ute: Dictionary and Lessons*. First preliminary edition. Sponsored and published by the White Mesa Ute Council.
Stubbs, Brian D. 2011. *Uto-Aztecan: A Comparative Vocabulary*. Rocky Mountain Books and Productions, Blanding, Utah, and Shumway Family History Services. Flower Mound, Texas.
Stubbs, Brian D. 2014. The Velar Nasal ŋ of Uto-Aztecan. In *Lenguas Yutoaztecas: Acercamiento a Su Diversidad Lingüistica*, Karen Dakin y José Luis Moctezuma Zamarrón, eds, 177-89. Mexico, D. F.: Universidad Nacional Autónoma de México.
Stubbs, Brian D. 2015a. "The Proto-Uto-Aztecan Lexicon: Distribution of Cognate Sets and Language Family Prehistory." Paper delivered at the annual meeting of the Society for the Study of Indigenous Languages of the Americas, January 6-11, 2015.
Stubbs, Brian D. 2015b. "Language evidence in comparative Uto-Aztecan for a Nahuatl point of contact from and/or into Mesoamerica." Paper delivered at the Second International Conference on Mesoamerican Linguistics, California State University, Los Angeles, March 6 and 7, 2015.
Stubbs, Brian D. 2015c. Book review of *A Prehistory of Western North America: The Impact of Uto-Aztecan Languages*, by David Leedom Shaul. Albuquerque: University of New Mexico Press. In IJAL, July 2015.
Suarez, Yolanda Lastra de. 1986. *Las Áreas Dialectales del Náhuatl Moderno*. Mexico: Universidad Nacional Autónoma de México.
Sullivan, Thelma D. *Compendium of Nahuatl Grammar*. Translated from the Spanish by Thelma D. Sullivan and Neville Stiles; Wick R. Miller and Karen Dakin, eds. Salt Lake City: University of Utah Press, 1988.
Swanson, Earl H., Jr., ed. 1968. Utaztekan Prehistory. Pocatello, Idaho: Occasional Papers of the Idaho State University Museum, no. 22.
Thord-Gray, I. 1955. Tarahumara-English English-Tarahumara Dictionary. Coral Gables, Florida: University of Miami Press.
Thornes, Timothy Jon. 2003. *A Northern Paiute Grammar with Texts*. PhD dissertation, University of Oregon.
Trager, George L. 1939. Cottonwood = Tree: A Southwestern Linguistic Trait. *IJAL* 9:117-18.

Tuggy, David H. 1979. Tetelcingo Nahuatl. In *Studies in Uto-Aztecan Grammar: Modern Aztec Grammatical Sketches*. vol. 2, Ronald W. Langacker, ed., 1-140. Dallas, TX: Summer Institute of Linguistics.
Vazquez Soto, Verónica. 1994. Los Conceptos de Propiedad en Cora: Modificación, predicación, y marcació. In *Investigaciones Lingüisticas en Mesoamerica*, Carolyn J. Mackay and Verónica Vazquez, eds., 53-86. Mexico, D.F.: Universidad Nacional Autonóma de Mexico.
Vazquez Soto, Verónica. 2000. Morphology and Syllabic Weight in Cora: The Case of the Absolutive –ti. In *Uto-Aztecan: Structural, Temporal, and Geographic Perspectives*, Eugene H. Casad and Thomas L. Willett (eds.), 105-24. Hermosillo, Mexico: Universidad de Sonora.
Voegelin, Charles F. 1935a. *Tübatulabal Grammar*. University of California Publications in American Archaeology and Ethnology, 34/2, 55-190. Berkeley: University of California Press.
Voegelin, Charles F. 1935b. *Tübatulabal Texts.* University of California Publications in American Archaeology and Ethnology 34:191-246.
Voegelin, Charles F. 1958. A Working Dictionary of Tübatulabal. *IJAL* 24/3: 221-28.
Voegelin, C. F., and F. M. Voegelin. 1957. *Hopi Domains: A Lexical Approach to the Problem of Selection*. *IJAL* Memoir 14.
Voegelin, C.F., F.M. Voegelin, and Kenneth L. Hale. 1962. *Typological and Comparative Grammar of Uto-Aztecan*. Indiana University Publications in Anthropology and Linguistics: Memoir 17, supplement to *IJAL* 28(1).
Voegelin, C. F., and F. M. Voegelin. 1967. Passive Transformations from Non-Transitive Bases in Hopi. *IJAL* 33:276-81.
Voegelin, C.F., and F.M. Voegelin. 1969. Hopi /?as/. *IJAL* 35: 192-202.
Voegelin, C.F., and F.M. Voegelin. 1975. Hopi /-qa/. *IJAL* 41: 381-398.
Wares, Alan Campbell. 1968. *A Comparative Study of Yuman Consonantism*. Juana Linguarum, Series Practica 57. The Hague: Mouton.
Whorf, Benjamin L. 1935. The Comparative Linguistics of Uto-Aztecan. *American Anthropologist* 37:600-608.
Whorf, Benjamin L., and George L.Trager. 1937a. The Relationship of Uto-Aztecan and Tanoan. *American Anthropologist* 39:609-624.
Whorf, Benjamin L. 1937. The Origin of Aztec TL. *American Anthropologist* 39:265-274.
Whorf, Benjamin L. 1938. Some Verbal Categories of Hopi. *Language* 14:275-86.
Whorf, Benjamin L. 1946. The Hopi Language, Toreva Dialect. In *Linguistic Structures of Native America*, Harry Hoijer, et al, eds. New York: Viking Fund Publications in Anthropology, 6.
Whorf, Benjamin L. 1956. *Language, Thought, and Reality (Selected Writings of Benjamin Lee Whorf*), John B. Carroll, ed. Cambridge, Mass.: MIT Press.
Whorf, Benjamin L. 1993. Pitch Tone and the Saltillo in Modern and Ancient Nahuatl. Edited by Lyle Campbell and Frances Karttunen. *IJAL* 59/2: 165-223.
Wichmann, Soren. *The Relationship Among the Mixe-Zoquean Languages of Mexico*. Salt Lake City: University of Utah Press, 1995.
Willett, Thomas. 1991. *A Reference Grammar of Southeastern Tepehuan*. Arlington, Texas: The Summer Institute of Linguistics and The University of Texas at Arlington.
Willett, Elizabeth R. and Thomas L Willett. 2005. Diccionario Tepehuano de Santa María Ocotán, Durango. (on computer disk)
Wolgemuth, Carl. 1981. *Gramática Náhuatl de Mecayapan*. Mexico: Instituto Lingüístico de Verano.
Woo, Nancy. 1970. Tone in Northern Tepehuan. *IJAL* 36:18-30.
Zepeda, Ofelia. 1983. *A Papago Grammar*. Tucson: University of Arizona Press.
Zigmond, Maurice L. 1981. Kawaiisu Ethnobotany. Salt Lake City: University of Utah.
Zigmond, Maurice L., Curtis G. Booth, and Pamela Munro. 1991. *Kawaiisu: A Grammar and Dictionary with Texts*. UCPL 119. Berkeley: University of California Press.

About the Author

Brian Stubbs became interested in languages after a two-year attempt to learn Navajo, which made all else seem easier. He was first a Semiticist, taking Hebrew, Arabic, and Egyptian courses while earning a B.A. from Brigham Young University. Then he began graduate work in Semitic languages (Hebrew, Arabic, Aramaic) at the University of Utah. A professor recommended that his program include a linguistics course or two, so he took David Iannucci's "Introduction to Linguistics" and found it so fascinating that he switched to linguistics, and completed an M.A. in linguistics. The presence of Iannucci, Mauricio Mixco, Ray Freeze, and Wick Miller made U of U a primary center for Uto-Aztecan studies at the time, which provided Brian a good foundation in comparative Uto-Aztecan. During that time he could not help but notice a few hundred similarities between Uto-Aztecan and Semitic, with sound correspondences, etc. After an M.A. in linguistics, he resumed his studies in Near Eastern languages and completed the coursework and comprehensive exams for a PhD(ABD) in Semitic languages and linguistics, though his primary research interests remained in Uto-Aztecan. After publishing a few articles in the *International Journal of American Linguistics* and elsewhere (see Uto-Aztecan bibliography), he decided that articles are too haphazard a way of scattering one's ideas to the four winds with hopes that subsequent scholars would have the patience to gather them together for a cohesive view of one's thoughts on a matter—too optimistic and not likely. So he focused on finishing a three-decade effort to produce the comparative reference book *Uto-Aztecan: A Comparative Vocabulary*.

Over the years, the number of additional Near-East with Uto-Aztecan similarities that he noticed grew to dimensions difficult to ignore. Yet knowing how unwelcome such would be in the linguistic community and being a peace-loving recluse by nature, he was in no hurry to ignite the controversy. However, such a presentation, if shared at all, must precede one's departure to spheres from whence no traveler returns to finish a book. So this is that book, to whichever successive edition it may morph in his time. As Brian says about all that he writes: "Only when I die do all drafts become final drafts." Brian's UA works preceding this book have been well received by other UA specialists. While the emergence of this Near-East tie with UA may have most wishing to ignore it, a brave few have voiced positive assessments.

Roger William Wescott, first in his Princeton class, PhD in linguistics, Rhodes Scholar at Oxford, President of the Linguistic Association of Canada and the United States, author of 500 articles and 40 books, calls Brian's work "a strong link between the Uto-Aztecan and Afro-Asiatic languages." David H. Kelley, Harvard PhD who published in anthropology, linguistics, Uto-Aztecan, and contributed to the decipherment of the Mayan glyphs, said upon receiving an earlier draft: "The thick thing came in the mail and I did not want to tackle it, but dutifully opened it, intending to look at a page or two. However, I started to read and ended up reading the whole book. It is the most interesting and significant piece of research I have seen in years." Stephen Ricks, Paul Hoskisson, and other Semitists have endorsed Brian's work. Mary Ritchie Key, and two PhD linguists specializing in UA, have all spoken well of it as well. John S. Robertson, a leading Mayanist and Harvard trained PhD in historical linguistics, also speaks highly of the strength of this case.

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