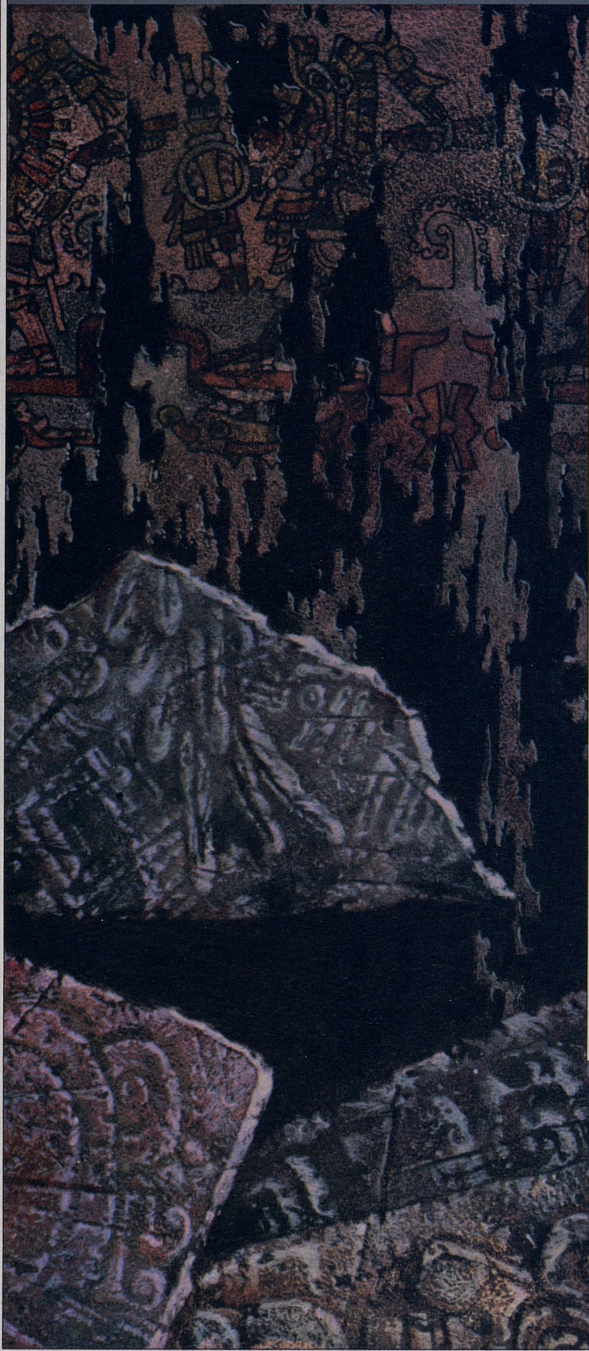


DIGGING INTO THE BOOK

OUR CHANGING UNDERSTANDING OF ANCIENT AMERICA AND ITS SCRIPTURE



PART 2

This is the second of two articles pointing out how developments in scholarship and science in the past half-century have produced information that seems to support and may actually help clarify the Book of Mormon. During the same period, increasingly careful study of the Book of Mormon by Latter-day Saints has placed it in new light as an ancient American document.

In this article we will consider another major area of ancient American life and several smaller topics which illustrate this convergence.

WRITING

The prevailing opinion among the few experts around 1935 about the development of writing in the New World is summarized by Dr. Sylvanus G. Morley, then the dean of Mayan scholars:

"Maya writing represents one of the earliest stages in the development of graphic systems extant today. . . . It may well represent the earliest stage of a formal graphic system that has come down to us.

"The Maya inscriptions treat primarily of chronology, astronomy—perhaps one might better say astrology—and religious matters. They are in no sense records of personal glorification and self-laudation like the inscriptions of Egypt, Assyria, and Babylonia. They tell no story of kingly conquests, recount no deeds of imperial achievement; they neither praise nor exalt, glorify nor aggrandize, indeed they are so utterly impersonal . . . that it is even probable that the name-glyphs of specific men and women

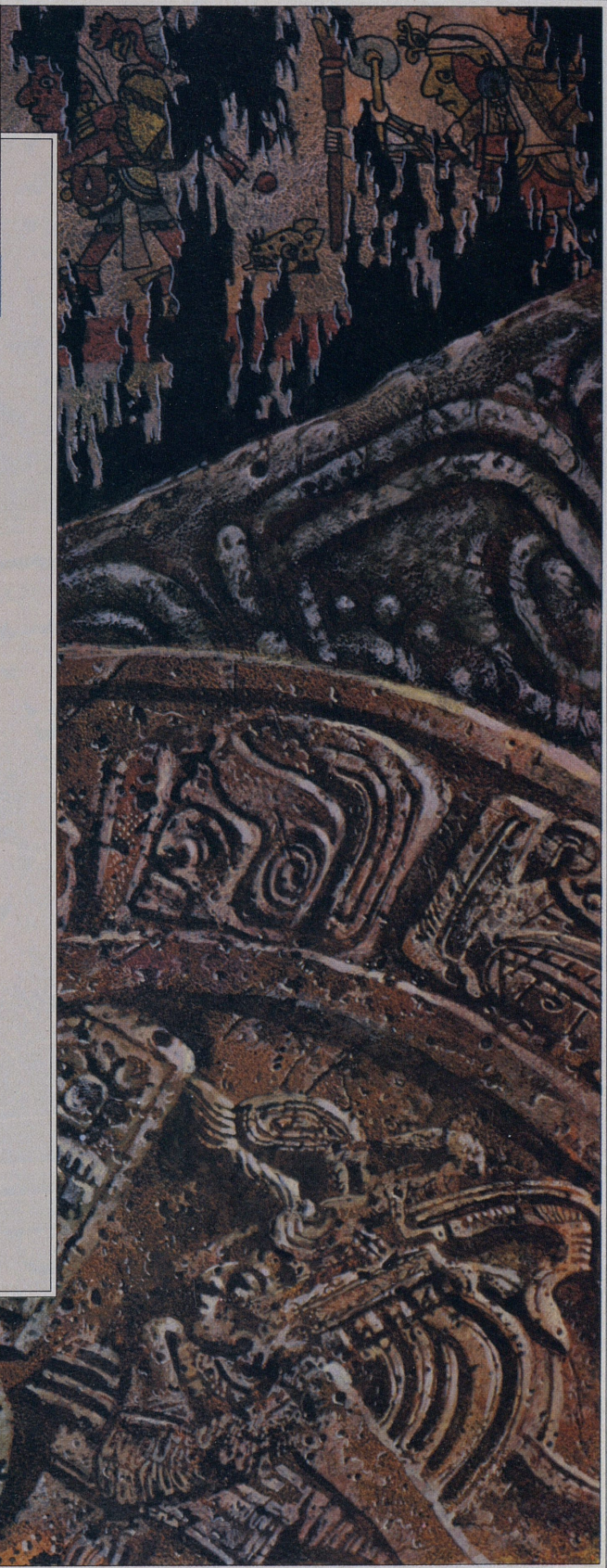
K OF MORMON

By John L. Sorenson

were never recorded upon the Maya monuments.¹ That surely doesn't sound anything like what we have in the Book of Mormon.

By the 1970s, however, a great change in scholarly opinion had taken place. Michael Coe now refers scathingly to the "very odd notion" which had been standard in Morley's time that the Mayan inscriptions were little more than "chronological hocus-pocus." The shift began in 1958 with the work of Heinrich Berlin, who showed, as Coe puts it, that "Maya reliefs and the texts which accompany them are historical records having to do not with occult, theocratic matters, but with the everyday, hurly-burly politics of primitive states with warlike rulers hellbent on including other Maya states within their sphere of influence."² The new view makes the Maya "sound very much like other early civilizations in the world, with their stories of conquests, humbling of captives, royal marriages, and royal descent."³ It also makes them sound much more like the Nephites and Lamanites.

To scholars, the scripture looked dubious for a while on another point as well. Moroni claimed that "the characters which are called among us the reformed Egyptian" had been "handed down and altered by us, according to our manner of speech." (See Morm. 9:32.) Those "characters" must, then, have had a phonetic element—they represented sounds to an extent. Yet leading experts like Morley, Thompson, and Barthel were insisting that only trivial phonetic features were built into the Mayan glyphs.⁴ Soviet scholar, Yuri Knorosov led the way to correcting that error.⁵ Today it is generally acknowledged that "the Maya system had a strong phonetic-syllabic component," much like Moroni's description of the Nephite system.⁶



To scholars, the Book of Mormon looked dubious for a while on an important point. Moroni claimed that "the characters which are called among us the reformed Egyptian" had been "handed down and altered by us, according to our manner of speech." Those "characters" must, then, have had a phonetic element. Yet experts insisted that only trivial phonetic features were built into the Mayan glyphs. Today it is generally acknowledged that "the Maya system had a strong phonetic-syllabic component," much like Moroni's description of the Nephite system.





(Opposite) Magnificent sarcophagus cover from the tomb of Pacal, king of Palenque, in the foothill country of northern Chiapas, Mexico, on the southwest frontier of ancient Maya culture. Carved in shallow relief, this solid limestone block measuring more than 12 feet long and 7 feet wide depicts the deceased ruler's descent into the underworld, from which he will be reborn as a god.

(Above) These three glyphs from the edge of the sarcophagus cover record the date of the king's birth: 8 Ahau, 13 Pop (A.D. 603). Pacal's long reign spanned some 68 years, from A.D. 615 to 683. Decipherment of glyphs such as these showed that the old idea that Mayan inscriptions were purely an ideographic system, with no phoneticism, was clearly mistaken.

It remains true, of course, that Mesoamerican writing includes many ideographic signs (standing for entire concepts or words without regard to sounds). A single sign may have several meanings, clarified only by context and experience on the part of the reader. "It is the understanding of these which takes the longest time and greatest patience."⁷ Once more Moroni is echoed, for he bemoaned the fact that Nephite scribes were not "mighty in writing." They could "write but little, because of the awkwardness of their hands." They found themselves to "stumble because of the placing of our words." (See Ether 12:22–25.) Mormon, too, lamented their writing system, saying that "there are many things which, according to our language, we are not able to write." (See 3 Ne. 5:18, fnote 8.) J. E. S. Thompson makes the same point about Mayan writing: "Both space considerations and ritualistic associations militated against precision in writing; . . . the reader had to have a good background of mythology and folklore to comprehend the texts,"⁹ and even then the readings could be ambiguous.

The Mayan hieroglyphic writing is singled out here for two reasons: it is the best known, and it dates to the late Book of Mormon period. The Mayan-speaking inhabitants of the Yucatan Peninsula from about A.D. 300 to 900 carved hundreds of inscribed monuments out of the available limestone, and their descendants carried on enough of the old culture that they were able to communicate useful information to

the Spaniards about the Mayan system of thought and writing. Only the Aztec system survived in comparable detail, but it was a simpler and later kind of writing.¹⁰ All together, at least fourteen glyphic writing systems are known for Mesoamerica.¹¹ For only three—the lowland Mayan, Aztec, and Mixtec—has significant progress been made toward decipherment. Some writing systems are identified only by a single text.¹² Just as with the "Anthon transcript" left to us by Joseph Smith, no progress is likely in understanding those texts until we have more to work with.

We are, however, on safe ground in saying that on the basis of finds so far many Mesoamerican cultures were literate (though others were not) from at least 1000 B.C.¹³ Nowhere else in the Western Hemisphere have we good reason to believe that writing existed prior to European discovery.¹⁴ We know of fragmentary inscriptions here and there in North and South America, but whether they represent ancient and genuine writing is in doubt. It seems interesting, then, that the Book of Mormon tells of a literate people residing for thousands of years in the immediate vicinity of the "narrow neck of land," the same area as isthmian Mesoamerica, which is the only place now known in the New World with a similar tradition of literacy.

Another important point of which earlier scholars were generally not aware is the structural similarity of Mayan and Egyptian hieroglyphics. Linda M. Van

Blerkom of the University of Colorado recently clarified this by listing the six main types of signs both share. In words countering Morley's dated judgment, she says, "Those who would place Maya hieroglyphs at a lower level of evolution than the . . . systems of the Old World civilizations are wrong." In fact, "Maya glyphs were used in the same six ways as those in Egyptian."¹⁵

Another similarity between Egyptian and Mayan writing is that both were deeply involved in, possibly derived from, the sacred aspect of life. Hodge feels that "the magical potency of both speech and graphic representation" helps explain the origin and longevity of glyphic writing among the Egyptians, which they called "the words of the god."¹⁶

Thompson speaks of "the close relationship between Maya hieroglyphic writing and religion, for there is no doubt that many of the forms and perhaps the names of hieroglyphs have religious connotations."¹⁷

Morley and his peers correctly sensed the religion-writing connection but erred in supposing that there was little else involved. The writing system was a vehicle for carrying sacred significance throughout all aspects of civilized life—commerce, rulership, "history," the calendar, astronomy, and such things as warfare, sacrifice, death, health, destiny, and genealogy. They all had religious overtones, and they all involved writing.

Michael Coe, for instance, maintains that the scenes portrayed on the spectacular funerary vases from Mayan tombs come from "a long hymn which could have been sung over the dead or dying person. . . . The ultimate theme is that of the death and resurrection of the lords of the Maya realm." Indeed, "it is not beyond the bounds of possibility that there was a real Book of the Dead for the Classic Maya, akin to the Book of the Dead of the ancient Egyptians."¹⁸ In fact, he says, "There must have been thousands of such books in Classic times." The sacred book of the Quiche Maya of highland Guatemala, the *Popol Vuh*, was a late version of one of those, most likely being a transliteration of a hieroglyphic original.¹⁹ Most Maya were aware of the mythic pattern it represents and the ideas of death, resurrection, creation, and fate communicated by such books. The Mayan version, however, was only the best preserved one. Other Mesoamerican cultures had parallel beliefs and practices. "There was a single, unified body of thought in Mesoamerica . . . which we would call a Mesoamerican religion,"²⁰ Coe asserts.

Mainly the priests had access to that religion in its full sense. Only they had the opportunity to master the complex language necessary to penetrate the religious scheme, and "the Maya writing seems to be imbedded in a sort of priest language." One had to be laboriously instructed regarding "the richness of metaphors and the techniques of paraphrasing and cover names."²¹ A knowledge of this system "was nothing less than a criterion for the right to inherit

one of the positions of leadership," for priests were rulers or vice versa.²²

Complexity of literary style was one of the reasons the hieroglyphic writing systems were so difficult to master. Fifty years ago, of course, nobody understood much about style in Mayan texts. But by 1950, J. Eric Thompson could say:

"There are close parallels in Maya transcriptions of the colonial period, and, I am convinced, in the hieroglyphic texts themselves to the verses of the Psalms, and the poetry of Job."

Both, he noted, "have an antiphonal arrangement in which the second line of a verse answers or repeats a variant of the first." (Examples are in Lamentations 3:3 and Jeremiah 51:38.) The same pattern occurs in the Yucatec-language documents of the sixteenth century including the Chilam Balams of Chumayel and of Tizimin; a prayer by a Lacandon Maya Indian recorded in 1907 shows the same form. Of this language Sir Eric says, "Note the rhythm of the lines, the free use of iambs, and the antiphonal character of every line." This "blank verse of high quality . . . playing on the sounds of words" uses not rhyming but something closer to punning.²³

Munro Edmonson of Tulane University is still more pointed: "The *Popol Vuh* is in poetry, and cannot be accurately understood in prose. It is entirely composed in parallelistic . . . couplets." This form, as well as the nature of roots in the Mayan languages, contributes to the difficulty in getting unambiguous meaning out of the texts. Thus, "Often a dozen or more quite disparate meanings may legitimately be proposed for a particular monosyllabic root."²⁴ Edmonson also comments on the use of Psalm-like parallelism where two successive lines which must share key words were closely linked in meaning and sometimes involved puns or word play not translatable to English.

All this is reminiscent of the Hebrew language's forms, semantics, and textual style. It would be foolhardy to say that what we see in the one language derives directly from the other, but Mayan would have been very congenial to the stylistic concepts and forms which Hebrew speakers in a Mayan context would have wished to use.

These points about style naturally make one think of chiasmus, the striking literary form widely found in the Book of Mormon and in ancient Near Eastern and Mediterranean texts.²⁵ Chiasmus is an inverted type of parallelism. A direct parallelism is such as Proverbs 15:1: "A soft answer turneth away wrath: But grievous words stir up anger." This near one-to-one relationship between concepts in the two lines is turned about in chiasmus so that the second line follows reverse order: "For *my* thoughts are not *your* thoughts, Neither are *your* ways *my* ways, saith the Lord." (Isa. 55:8.) Extremely complex chiasms are known, some in the Book of Mormon which extend throughout texts thousands of words in length and are unrecognizable except upon very detailed

analysis.²⁶ I asked Thompson ten years ago whether chiasmus was to be found in Mayan literature, but he confessed he had never heard of the idea. When I described the form, he expressed interest and suggested that certain short passages in the Chilam Balam texts might indeed be chiasms. Some other potential chiasmic examples in Mesoamerican texts and art deserve further study along with the Yucatec.²⁷

The word play or punning of Mayan (and other Mesoamerican languages) is paralleled in Semitic languages and in Egyptian. Carleton Hodge observes that "the structure of a Semitic language makes possible a kind of pun which can be developed in a peculiar and subtle way." Indo-European and many other languages do not allow this type of word play. He thinks Egyptian hieroglyphics might have developed in part as a result of this tendency.²⁸

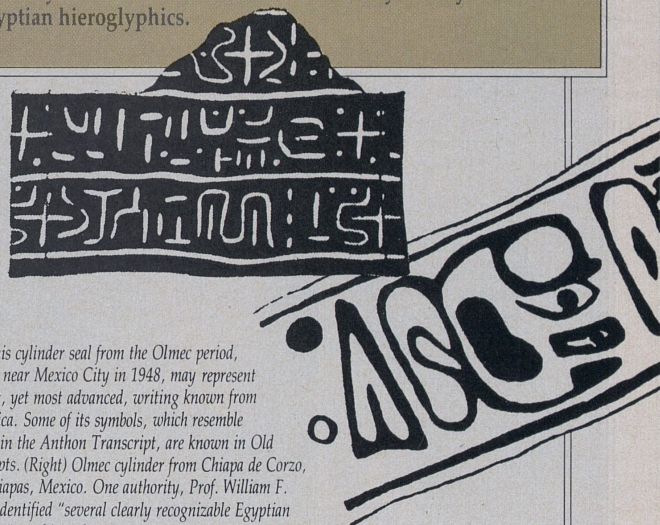
All this resonates remarkably with what the Book of Mormon indicates. King Benjamin "caused that [his sons] should be taught in all the language of his fathers, that thereby they might become men of understanding." (Mosiah 1:2.) The king's concern was that his sons command the esoteric language by which their ancestral records, containing "the mysteries of God" (Mosiah 1:3), could be read.

In Yucatan at the Conquest, knowledge of hieroglyphic writing was a possession only of the priests, the sons of priests, some of "the principal lords," and "the younger sons of the lords."²⁹ Benjamin was doing his duty as a proper royal father in having his sons taught. Note also that Zeniff was so proud of possessing this literacy that he inserted a statement about it at the very beginning of his record in Mosiah 9:1, where it made little sense. This language so laboriously mastered consisted of both the "characters which are called among [the Nephites] the reformed Egyptian" and the semantic equipment to interpret them, that is, "the learning of the Jews." (Morm. 9:32; 1 Ne. 1:2.) The investment of time necessary to control the complex system meant that the well-off, who had the leisure for study, could increase "their chances for learning," while others were "ignorant because of their poverty." (3 Ne. 6:12.)

Another area of agreement between Mesoamerican and Book of Mormon writing is the adaptability of characters to serve more than one language. Although there was a sound-connected element, as pointed out earlier, culturally related peoples could adapt the system either by memorizing the phonetic determinatives or by substituting new ones. Obviously, Egyptian itself over the course of thousands of years of use required modifications to reflect new pronunciations and vocabulary, and the signs used in Mormon and Moroni's day would not have been termed "reformed" Egyptian had those not been further changed from what was considered Egyptian in Nephi's day.

When changed enough, it would be no surprise that, as Moroni said, "none other people knoweth

Early experts felt that Mayan writing, dating from late in the Book of Mormon period, was "one of the earliest stages in the development of graphic systems" in the New World; yet the Book of Mormon tells of literate people residing for thousands of years in the immediate vicinity of the "narrow neck of land." We are now on safe ground in saying that on the basis of finds so far, many Mesoamerican cultures were literate from at least 1000 B.C. Another important point of which earlier scholars were generally not aware is the structural similarity of Mayan and Egyptian hieroglyphics.



(Above) This cylinder seal from the Olmec period, discovered near Mexico City in 1948, may represent the earliest, yet most advanced, writing known from Mesoamerica. Some of its symbols, which resemble characters in the Anthon Transcript, are known in Old World scripts. (Right) Olmec cylinder from Chiapa de Corzo, central Chiapas, Mexico. One authority, Prof. William F. Albright, identified "several clearly recognizable Egyptian hieroglyphs" on this seal.

our language." (Morm. 9:34.) The glyphic system would have been changed in another direction when "the language of Nephi" was "taught among all the people of the Lamanites" in the days of Alma. By learning characters or glyphs, the Lamanites could communicate across local differences in speech, allowing them to "trade one with another." (Mosiah 24:4, 7.) Merchants could then conduct their business through the written *lingua franca* in any area. No other reason seems to explain why learning "the language of Nephi" could have stimulated trade and prosperity. Mayan glyphic writing served in just this manner, being generally readable wherever the score or more languages of the Mayan family were spoken, and perhaps even beyond.

The abundance of records in Book of Mormon times is often mentioned (e.g., Hel. 3:15; 3 Ne. 5:9). Most of them would, naturally, have been on the cheap and convenient material, paper. Those scriptures burned when the believers in Ammonihah were cast into the fire (see Alma 14:8) almost surely were of paper. Most records in Mesoamerica were on bark paper, folded screen fashion to form a book.³⁰ From the Mayan area only three of these codices of certain pre-Columbian date have survived.³¹ Glyphs were placed in vertical columns on the "pages." The Mayan inscriptions had double columns, each character being read with its adjacent neighbor and proceeding by pairs from top to bottom. Before about the time of Christ only single columns were used.

The abundance of records in Book of Mormon times is often mentioned. Most of these records would, naturally, have been on a cheap and convenient material—paper. Most records in Mesoamerica, in fact, were on bark paper, folded screen fashion to form a book.

(Right) A facsimile of the *Codex Borgia*, which was discovered in central Mexico and reports dynastic events and conquests going back as early as A.D. 700. It is a folded deer-skin "book" identical in form to the codices of the Maya, which were written on paper made from the pounded bark of wild fig trees, which was then covered with lime plaster and painted in multicolors with both figures and hieroglyphs.



Note that the "Anthon transcript," made public in 1980 as a copy made by Joseph Smith of characters from the plates of the Book of Mormon, has single columns, in agreement with the older, pre-Christian age of "the language of Nephi" in which the Book of Mormon was kept.³² Not surprisingly, Professor Charles Anthon, to whom Martin Harris showed the Joseph Smith copy in 1828, based on what little information was then available to him, likened what he saw to "the Mexican calendar."³³

More could be written about other aspects of the uses of records, particular characters, scribes, and so on, but it should be evident by now that in recent decades our knowledge of Mesoamerican writing has been revolutionized in many ways. Using this new information, we are able to see new meanings in Book of Mormon statements concerning writing and books. We should expect many more changes, changes which increasingly bring scriptural and scholarly information toward agreement.

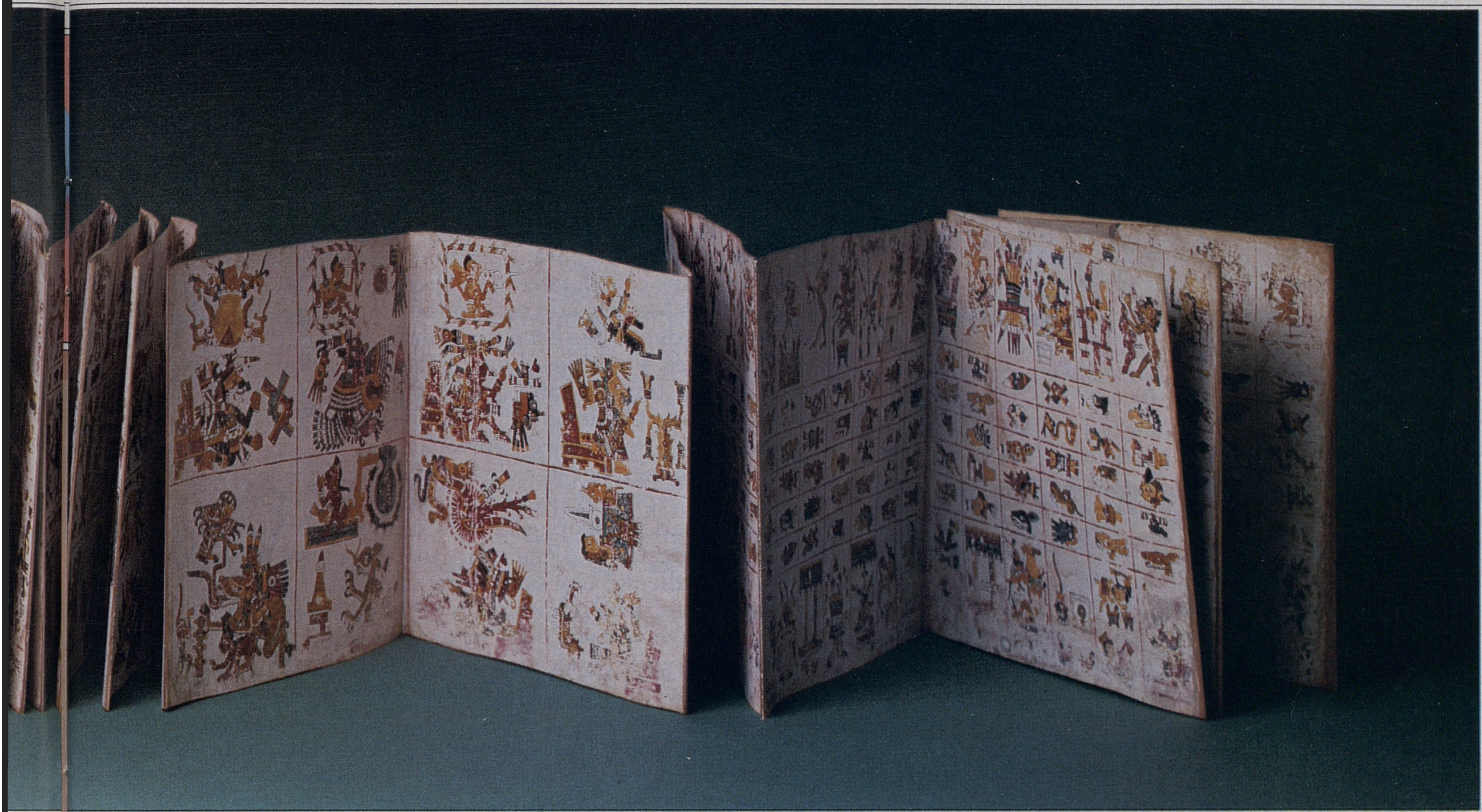
A SIGNIFICANT MISCELLANY

Other major topics—political structure, settlement forms, trade, secret societies—could now occupy our attention, but perhaps more valuable will be a demonstration of the wide range of topics on which new light is being shed

these days. This sampler of new developments will underline the fact that what some people—even famous people—thought they knew about early American civilization in relation to the Book of Mormon wasn't necessarily so.

Latter-day Saint writers have in the past compared the "highways" and "roads" mentioned in 3 Nephi (6:8; 8:13) to the lime-surfaced causeways (*sabes*), on the Yucatan Peninsula. The ones identified as late as twenty years ago were nearly all concentrated in that restricted area and seemed to date well after Book of Mormon days. Recent studies, however, show that road-building has a long history and occurred from one end of Mesoamerica to the other.

The earliest causeway known at this time is in Komchen, in extreme northern Yucatan. E. Willys Andrews V and his colleagues from Tulane University date one of them from around 300 B.C.³⁴ At Cerros in Belize (formerly British Honduras) another was in use between 50 B.C. and A.D. 150.³⁵ Later roads were built at La Quemada in the state of Zacatecas, Mexico, at the extreme northern limit of Mesoamerica.³⁶ Others were at Xochicalco, just south of Mexico City, where three kilometers of paved roads exist,³⁷ and at Monte Alban.³⁸ Many of the reported thoroughfares are modest local affairs, yet in Yucatan there is a single stretch about one hundred kilometers long.³⁹ Clearly, current knowledge about the dates and nature of road building is not inconsistent with



the idea that “level roads” existed which were “spoiled” at the time of Christ’s death. (3 Ne. 8:13.)

Latter-day Saints have long paid special attention to “cement” in ancient America. Presumably some expert once claimed that there was none. However, nobody in the last two generations of scholars would have said that. Throughout Mesoamerica construction using concrete of various compositions was widespread and long-lasting. What is now especially interesting is not the mere presence of the substance but the relative sophistication exhibited in using it. At El Tajin near the Gulf Coast east of Mexico City, for example, roofs were made of single slabs of concrete covering spans up to seventy-five meters square. The composition in this case was ground seashells plus sand with crushed pumice or fragments of pottery mixed in. It was poured into prepared wooden forms. Sometimes the builders filled a room with stones and mud, smoothed the surface on top to receive the concrete, then removed the interior fill when the floor on top had dried.⁴⁰ Although the Tajin remains date after Book of Mormon times, we know genuine concrete was already in use before the time of Christ.⁴¹

Animals referred to in the Book of Mormon present a complex question. For one thing, the names translated in English as horse, cattle, goat, and so forth, do not necessarily refer to the species which spring to our minds upon reading those terms. Animal naming practices among new settlers worldwide

warn us against such oversimplification. For example, the Nephites discovered both “the goat” and the “wild goat” on the land they first settled (1 Ne. 18:25), so “wild” likely does not mean what we at first suppose, for the text indicates that both creatures were found apparently untamed in the forest. Clearly we are unsafe in assuming that the creatures involved in the record here are identical to those animals we think of as goats.

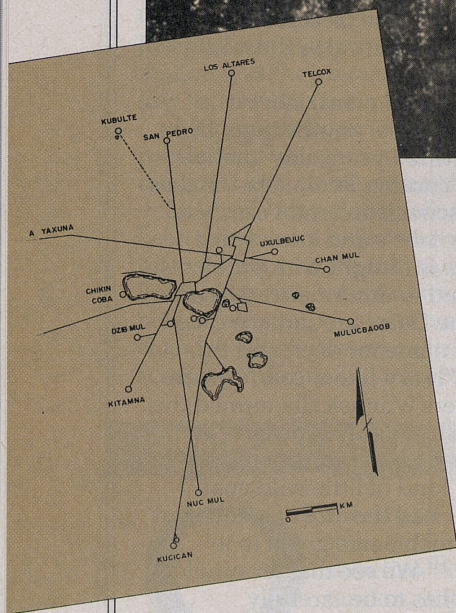
The semantics of animal (and plant) labels is a problem in interpreting all texts of another age. Even a description only four hundred years old—that of Diego de Landa about the Yucatan Peninsula—makes statements which natural scientists cannot clarify today. Transferring linguistic labels and knowledge from one culture to another is fraught with problems. Thus, the Spaniards referred to the American bison (our “buffalo”) as a cow; the Delaware Indians called the European cow by their name for deer; and the Miamis labeled our sheep “looks-like-a-cow.” Meanwhile, the Mayan lowlanders whimsically termed the Spanish sheep *taman*, which roughly translates as “cotton you can eat.” Bishop Landa considered the brocket deer of Yucatan a “kind of little wild goat.” He also noted that the tapir had the size of a mule but a hoof like an ox, yet a Spanish name given to it translates as “once-an-ass!”⁴² We see that terminology is a complex puzzle which has to be carefully unravelled.

Using scientific and historical evidence to

Latter-day Saint writers have in the past compared the "highways" and "roads" mentioned in the Book of Mormon to the lime-surfaced causeways on the Yucatan Peninsula. Yet the ones identified as late as twenty years ago were nearly all concentrated in that restricted area and seemed to date well after Book of Mormon days. Recent studies, however, show that road-building has a long history and occurred from one end of Mesoamerica to the other. In Yucatan there is a single stretch of road about one hundred kilometers long.



(Above) Aerial view of a section of an ancient causeway (sacbe) connecting the sites of Coba and Yaxuna, in northeastern Yucatan, Mexico. This road is 10 meters wide throughout its 100 kilometer length, illustrating the tremendous investment in labor such highways represented. (Left) Map shows an extensive network of stone-paved roads, still visible today, joining the central plaza of Coba with nearby sites.



establish which animals were actually present in pre-Columbian Mesoamerica gives several possibilities for each of the animals mentioned in the Book of Mormon. For example, an animal potentially in the "cattle" category is the deer; observers with Cortez's exploring party observed semi-domesticated herds of deer in Maya country,⁴³ and a tribe in El Salvador was reported to herd them routinely. Other evidence indicates that the alpaca, a South American animal related to the camel, may have been present in southern Mexico, and figurines of llamas bearing pack burdens have been unearthed as far north as Costa Rica. Figurines showing humans riding on animals, one unmistakably a deer, have been found in Mexico and Guatemala.⁴⁴ Perhaps, then, the deer could have been called "horse."

Taken together, the clues available make it difficult to accept the view of conventional experts that Mesoamerican peoples in pre-Columbian times had little interest in and made rare use of animals beyond hunting them.⁴⁵ Not every statement about animals made in the Book of Mormon yet fits scholarly findings, but the two pictures have come much closer in the last couple of decades. More research will probably indicate plausible resolutions of the remaining matters.

Some of the cultivated plants spoken of in the Book of Mormon have been missing in the inventories of pre-Columbian flora, to the dismay of some readers of the scripture (and the glee of critics). However, our knowledge of ancient cultivated crops is still incomplete because of how little archaeology has actually been done. (It would be optimistic to suppose that our sample of excavated material has reached .001 percent of what could be dug up, and much of the work has been of doubtful quality.) Just last year "domesticated barley, the first ever found in the New World," came out of digging in southern Arizona.⁴⁶ This is particularly interesting since the Book of Mormon refers to barley in relation to Nephite money standards as though it was in common use. (See Alma 11:7, 15.) This example should communicate a message of caution to the intelligent reader and expert alike: both "facts" and interpretations change; what is absent today in the historical/archaeological record may be supplied by tomorrow's research.

That same message was recently sent by two other archaeologists working in South America who discovered plants that were "not supposed to be there." Terence Grieder and Alberto Bueno Mendoza reported finding remains of mango fruit and banana leaves in a pre-Columbian site in Peru. Another archaeologist asserted in print that they "couldn't have found" such materials, for those plants did not reach the New World until the Europeans brought them. The excavators' response confirmed their findings and noted with a bit of exasperation, "If we can only find what is already known, we can avoid the bother of excavating."⁴⁷ One wonders what new materials

we might find if the sample of excavated materials rose to even double what it now is.

It is not just more digging which produces significant new information. Linda Schele has been a leader in recent work toward deciphering more of the Maya glyphs, with special concern for the inscriptions at spectacular Palenque in southern Mexico. Dramatic new information has been produced:

One thing Schele has worked out is the probable periods of reign for Palenque's rulers. The one in power from around A.D. 600 to 670 seems to have been named Pacal the Great; Chan-Bahlum followed for a thirty-year reign; and later, Kuk was in charge for forty years. Schele asserts that "in fact, long-lived rulers seem to be the rule rather than the exception in Maya dynastic records."⁴⁸ Those durations seem unrealistically long to some people. Physical anthropologists who have examined bones recovered from the "royal" tombs at the site (which are notably Egyptian-like, by the way⁴⁹) believe they are from younger men.

So a paradox results—the facts from the bones differ from the facts in the writings. We can't settle the matter yet. Similarly, some critics of the Book of Mormon have found the ages and lengths of reign attributed to the Jaredite rulers incredible. The Book of Mormon, then, joins the Mayan inscriptions in giving information on which science and history have not yet reached a verdict. The important thing is that the Jaredite account is made more believable because it is similar to other ancient writings.

When we delve into the data on a host of other topics, we discover point after point at which the Book of Mormon increasingly agrees with what is now known by the experts on Mesoamerica, not only in the broad picture but even, occasionally, in neat little details. "Sheum," the untranslated name of some crop among the people of Zeniff (Mosiah 9:9) has finally been recognized, after 140 years of obscurity, as an Akkadian (Babylonian) word for barley, *se'um* (interestingly, in this form it belongs in the third millennium B.C. when the Jaredites departed from Mesopotamia, rather than in any later era).⁵⁰ A Mayan word for gold, *naab*, echoes Egyptian *noub* with the same meaning; Zoquean *hamatin*, copper, is suggestive of Egyptian *hmty*, copper. Alma and Samuel prophesy of critical events at the end of cyclical periods, including a four hundred "year" period, as did prophets among the Maya.⁵¹ And on and on it goes.

REPRISE

I have said repeatedly that the correspondences in geography, history, and cultural patterns—large scale or micro-scale—between Mesoamerican cultures and the Book of Mormon peoples do not "prove" anything conclusively. Still, *the fact that large numbers*

of such correspondences exist ought to register in the minds of truth-loving people. With this in mind, it is clearly misleading for a scholar—one of our own—to imply that there is no "important archaeological evidence" to support the Book of Mormon story "of Indian origins,"⁵² or for another to find it amusing to think that anyone would seriously try to compare the Book of Mormon with objective facts of historical importance.⁵³

Up-to-date, informed people ought not to make such out-dated statements. Nor should archaeologists unprepared in the appropriate materials editorialize off the tops of their heads about the historicity of the Book of Mormon. The demonstrated congruence of Book of Mormon patterns with a vast amount of data on Mesoamerica, even without considering its agreement with Old World patterns, really ought to silence would-be commentators until they have carefully investigated what is now a complex body of information. And those who do investigate and discuss the subject should only do so when they follow sound methodology.

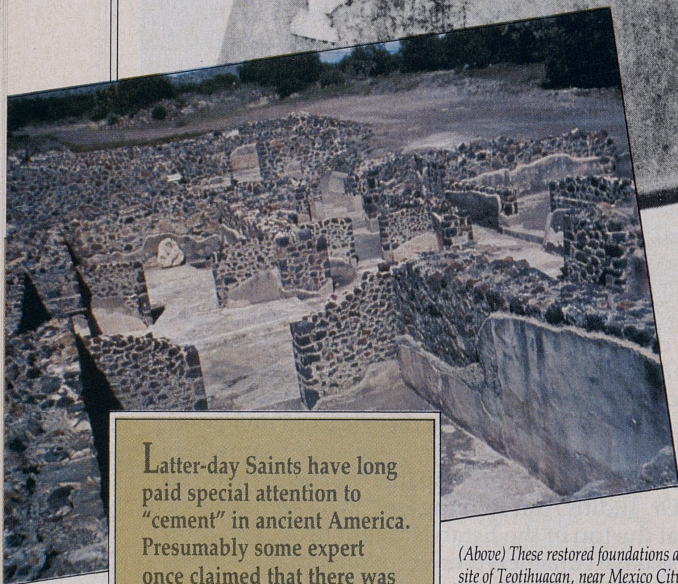
Carefully compared with the facts from external sources, the Book of Mormon is impressive, in my view, though most of the task still remains to be done. Yet the book itself stands above and independent of whatever academic studies of it may show. Neither critics nor apologists change history; they can only provide commentary on a reality more profoundly influential than anything they may say about it.

That the Mesoamerican experts in the first third of this century should have been poorly informed and seriously mistaken about civilization in the area need not surprise us. They did the best they could with the information available to them, but it was limited. Today, too, the best informed scholars are bound to be mistaken, in the long run, on important topics about ancient America. The best defense against this disability is an open mind.

Mesoamerican archaeologists were recently taken to task by one of their number for "a determined and often defiant adherence to assumptions that were no longer tenable. . . . New discoveries . . . wreak havoc with old hypotheses. Nonetheless, the hypotheses were presented as theories and defended fiercely, to the detriment of . . . scientific knowledge of the inhabitants of prehispanic Mesoamerica." So says Dr. Judith Ann Remington.⁵⁴ The archaeologists now at the top of the Establishment heap, she complains, have considered novel explanations—ideas at variance with their own orthodoxy—as "speculations . . . dangerously close to talking about the mystical properties of pyramids, the advent of alien cosmonauts, or the search for the lost tribes of Israel."⁵⁵ She believes a new generation of Mesoamerican specialists is coming on the scene less hidebound and less worried that unconventional ideas might "disrupt the entire field of Mesoamerican research," as one of the famous men put it, and more concerned with simply finding truth. We Latter-day

Evidence from pre-Columbian Mesoamerica suggests several possibilities for each of the animals mentioned in the Book of Mormon. For example, Cortez's exploring party observed semi-domesticated herds of deer in Maya country, and a tribe in El Salvador was reported to herd them routinely. Figurines showing humans riding on animals, one unmistakably a deer, have been found in Mexico and Guatemala. Perhaps, then, the deer could have been called "horse."

(Below) This figurine of a man riding a deer adorns the cover of an incense burner, total height 26.5 cm. Antlers of the deer and the central element of the man's headdress are missing. From Poptun, Guatemala.



Latter-day Saints have long paid special attention to "cement" in ancient America. Presumably some expert once claimed that there was none. However, throughout Mesoamerica, construction using concrete of various compositions was widespread and long-lasting. We know genuine concrete was in use before the time of Christ.

(Above) These restored foundations at the site of Teotihuacan, near Mexico City, clearly illustrate sophistication in the use of cement in ancient Mesoamerica. (Photography courtesy of V. Garth Norman.)

Saints can hope that the new generation will seriously consider the Book of Mormon in relation to current archaeological findings.⁵⁶

Yet we need not feel self-righteous when the scholars are taken to task for their narrowness. Our people have exhibited a decided tendency to substitute comfortable "folk understanding" for facts on certain subjects, particularly having to do with archaeology. We must expect new facts and new interpretations about the ancient Nephites and Jaredites, for they are bound to come. Elder B. H. Roberts taught us wisely about this openness:

"And let me here say a word in relation to new discoveries in our knowledge of the Book of Mormon, and for matter of that in relation to all subjects connected with the work of the Lord in the earth. We need not follow our researches in any spirit of fear and trembling. We desire only to ascertain the truth; nothing but the truth will endure; and the ascertainment of the truth and the proclamation of the truth in any given case, or upon any subject, will do no harm to the work of the Lord which is itself truth. Nor need we be surprised if now and then we find our predecessors, many of whom bear honored names and deserve our respect and gratitude for what they achieved in making clear the truth, as they conceived it to be—we need not be surprised if we sometimes find them mistaken in their conceptions and deductions; just as the generations who succeed us in unfolding in a larger way some of the yet unlearned truths of the Gospel, will find that we have had some misconceptions and made some wrong deductions in our day and time . . ." ⁵⁷ All which is submitted, especially to the membership of the Church, that they may be prepared to find and receive new truths both in the Book of Mormon itself and about it. □

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NOTES

1. Sylvanus G. Morley, *The Ancient Maya*, 2d ed. (Stanford: Stanford University Press, 1947), pp. 260–61. The quoted statement was written in 1935; see page 259.
2. Michael D. Coe, "Ancient Maya Writing and Calligraphy," *Visible Language* 5 (1971), p. 259.
3. *Ibid.*, p. 298.
4. J. Eric Thompson, "Maya Hieroglyphic Writing," in Gordon R. Willey, ed., *Handbook of Middle American Indians*, vol. 3 (Austin: University of Texas Press, 1965), pp. 652–53; Thomas S. Barthel, "Writing Systems," in Thomas A. Sebeok, ed., *Native Languages of the Americas*, vol. 2 (New York: Plenum Press, 1977), p. 37.
5. Coe, 1971, p. 301; David H. Kelley, *Deciphering the Maya Script* (Austin: University of Texas Press, 1976).
6. Coe, "Ancient Maya Writing and Calligraphy," p. 301; Coe, *The Maya Scribe and His World* (New York: Grolier Club, 1973), p. 11.
7. Coe, 1971, p. 301.
8. It is apparent that Mormon did not mean literally that their writing system did not permit addressing whole subjects, considering how many topics are in fact treated in the Book of Mormon. Ether 12:25 no doubt clarifies his meaning; Moroni there makes the point that they stumble "because of the placing of our words." That was "the imperfection" they suffered in their writing. (See

Morm. 9:31.) Ambiguities imposed by using a glyphic system instead of an alphabetic system would account for the difficulty. (Compare Morm. 9:33.)

9. Thompson, p. 646.

10. Barthel, p. 35; George C. Vaillant, *The Aztecs of Mexico* (Harmondsworth, England: Pelican Books, 1950), pp. 201–4; Frances F. Berdan, *The Aztecs of Central Mexico: An Imperial Society*. (New York: Holt, Rinehart and Winston, 1982), pp. 150–51.

11. Coe, "Early Steps in the Evolution of Maya Writing," in H. B. Nicholson, ed., *Origins of Religious Art and Iconography in Preclassic Mesoamerica* (Los Angeles: UCLA Latin American Center and Ethnic Arts Council of Los Angeles, 1976), pp. 110ff. Coe lists thirteen, but omits the Olmec signs which may prove to be glyphs and the unique Tlatilco seal, on which is a totally different system than any other. Interesting similarities between it and the "Anthon Transcript" are shown in Carl Hugh Jones, "The 'Anthon Transcript' and Two Mesoamerican Cylinder Seals," *Newsletter and Proceedings, Society for Early Historic Archaeology* 122 (September 1970), pp. 1–8, drawing on David H. Kelley, "A Cylinder Seal from Tlatilco," *American Antiquity* 31 (1966), pp. 744–46.

12. The Tlatilco stamp mentioned in Note 11 and Kaminaljuyu Stela 10; see Coe, 1976, p. 115.

13. Joyce Marcus, "The Origins of Mesoamerican Writing," *Annual Review of Anthropology* 5 (1976), p. 44; although her date is now perhaps a century late. In any case, the glyphs shown on this monument (Monument 3, San Jose Mogote, Oaxaca) are too conventionalized not to have had a developmental history of centuries behind them.

14. Barthel, op. cit.

15. Linda Miller Van Blerkom, "A Comparison of Maya and Egyptian Hieroglyphics," *Katunob* 11 (August 1979), pp. 1–8.

16. Carleton F. Hodge, "Ritual in Writing: An Inquiry into the Origin of Egyptian Script," in M. Dale Kinkade et al., eds., *Linguistics and Anthropology: In Honor of C. F. Voegelin* (Lisse, Belgium: The Peter de Ridder Press, 1975), pp. 333–34, 344.

17. J. Eric S. Thompson, *Maya Hieroglyphic Writing: An Introduction* (Norman: University of Oklahoma Press, 1960), p. 9.

18. Coe, 1971, pp. 305–6; 1973, p. 18ff.

19. Coe, 1971, p. 305. Compare Alfred M. Tozzer, ed., "Landa's Relacion de las Cosas de Yucatan: A Translation," *Harvard University, Peabody Museum of American Archaeology and Ethnology, Papers*, vol. 18, 1941, p. 169.

20. Coe, 1973, p. 8; David H. Kelley, "Astronomical Identities of Mesoamerican Gods," *Archaeoastronomy* (Supplement to *Journal of the History of Astronomy*) 11 (1980), pp. S1–S54.

21. Barthel, p. 45.

22. Ibid. Compare Thompson, 1970, p. 7; Tozzer, p. 28.

23. Thompson, 1960, pp. 61–62.

24. Munro S. Edmonson, "The Book of Counsel: The Popol Vuh of the Quiche Maya of Guatemala," *Tulane University, Middle American Research Institute, Publication* 35 (1971), pp. xi–xii.

25. John W. Welch, "Chiasmus in the Book of Mormon," in Noel B. Reynolds, ed., *Book of Mormon Authorship: New Light on Ancient Origins*, (Provo: Brigham Young University, Religious Studies Center, 1982), pp. 33–52. Conveniently accessible in Welch's 1969 article in *BYU Studies*, "Chiasmus in the Book of Mormon," which may be obtained in reprint form from the Foundation for Ancient Research and Mormon Studies, P.O. Box 7113 University Station, Provo, Ut. 84602.

26. Welch, 1982, pp. 49–50.

27. For example, Margaret McClear, *Popol Vuh: Structure and Meaning* (Madrid, New York: Plaza Mayor, 1972), pp. 55, 67–90; Marvin Cohodas, "The Iconography of the Panels of the Sun, Cross, and Foliated Cross at Palenque: Part I," in Sociedad Mexicana de Antropología, *XIII Mesa Redonda, Xalapa, 1973* (Mexico, 1975), pp. 75–101.

28. Hodge, p. 344.

29. Tozzer, p. 29.

30. Ibid., p. 28.

31. Thompson, 1960, pp. 23–26.

32. Daniel W. Bachman, "Sealed in a Book: Preliminary Observations on the Newly Found 'Anthon Transcript,'" *Brigham Young University Studies* 20 (1980), pp. 321–45; available separately as

Reprint BAC-80, FARMS; see note 25.

33. B. H. Roberts, *New Witnesses for God*, vol. 2, part 2, "The Book of Mormon" (Salt Lake City: Deseret Book, 1926), pp. 95–100. See the discussion on the matter in John Sorensen's "The Book of Mormon as a Mesoamerican Codex," *Newsletter and Proceedings, Society for Early Historic Archaeology* 139 (1976), p. 2; now available as a reprint from FARMS; see note 25.

34. E. Wyllys Andrews V et al., "Komchen: An Early Maya Community in Northwest Yucatan." Paper given at 1981 meeting of the Sociedad Mexicana de Antropología, San Cristobal, Chiapas, p. 15.

35. Andrews, "Dzibilchaltun," in J. A. Sabloff, vol. ed., *Supplement to the Handbook of Middle American Indians*, vol. 1, *Archaeology* (Austin: University of Texas Press, 1981), p. 322.

36. Pedro Armillas, "Investigaciones Arqueológicas en el Estado de Zacatecas," *Boletín INAH* 14 (Dic. 1963), pp. 16–17.

37. "Current Research," *American Antiquity* 45 (1980), p. 623.

38. Richard E. Blanton and Stephen A. Kowalewski, "Monte Alban and After in the Valley of Oaxaca," in J. A. Sabloff, op cit., p. 106.

39. Antonio Bustillos Carrillo, *El Sacbe de los Mayas: Los Caminos Blancos de los Mayas, Base de su Vida Social y Religión*, 2d ed. (Mexico: B. Costa-Amic Editorial, 1974), p. 23.

40. Instituto Nacional de Antropología e Historia, *El Tajín: Official Guide* (Mexico: INAH, 1976).

41. David S. Hyman, *Pre-Columbian Cements: A Study of Calcareous Cements in Prehispanic Mesoamerican Building Construction*. (Baltimore: Johns Hopkins University Department of Geography and Environmental Engineering, 1970), p. ii. Maurice Daumas, ed. *Histoire Generale des Techniques*, Tome 1 (Paris: Presses Universitaires de France, 1962), p. 403.

42. John L. Sorenson, *An Ancient American Setting for the Book of Mormon*, (Provo: FARMS, in press). Chapter 7 provides extensive documentation.

43. Dennis Puleston, "The Role of Semi-domesticated Animal Resources in Middle American Subsistence," paper read at the 37th Annual Meeting, Society for American Archaeology, 1972.

44. A. V. Kidder, "Miscellaneous Specimens from Mesoamerica," *Carnegie Institution of Washington, Notes on Middle American Archaeology and Ethnology*, no. 117 (Mar. 1954), p. 20, Fig. 4e. Related documentation is given in John Sorensen's "Wheeled Figurines in the Ancient World," *Foundation for Ancient Research and Mormon Studies, Preliminary Report* (Provo, 1981), p. 14.

45. Eugene Hunn, "Did the Aztecs Lack Potential Animal Domesticates?" *American Ethnologist* 9 (1982), pp. 578–88.

46. Daniel B. Adams, "Last Ditch Archaeology," *Science* 83 (December 1983), p. 32.

47. "Letters to the Editor," *Archaeology* 34 (May–June, 1981), p. 7.

48. Linda Schele, "Sacred Site and World-View at Palenque," in E. P. Benson, ed., *Mesoamerican Sites and World-Views* (Washington: Dumbarton Oaks, 1981), pp. 112, 116–17.

49. Alberto Ruz L., *Costumbres Funerarias de los Antiguos Mayas* (Mexico: UNAM, Seminario de Cultura Maya, 1968); Alberto Ruz L., *Palenque: Official Guide* (Mexico: INAH, 1960), p. 46.

50. Robert F. Smith, "Some 'Neologisms' from the Mormon Canon," in *Conference on the Language of the Mormons, 1973* (Provo: Brigham Young University, Language Research Center, 1973), p. 66.

51. John Sorenson, *An Ancient American Setting*, Ch. 6, pp. 28–33 of the ms.

52. Marvin Hill, "Review of *The Mormon Experience*," *American Historical Review* 84–85 (December 1979), p. 1488.

53. "7EP Interviews Sterling M. McMurrin," *Seventh East Press*, January 11, 1983, p. 5.

54. Judith Ann Remington, "Mesoamerican Archaeoastronomy: Parallax, Perspective, and Focus," in Ray A. Williamson, ed., *Archaeoastronomy in the Americas*, Ballena Press Anthropological Papers, No. 22 (Los Altos, Calif.: Ballena Press, 1981), pp. 200–2.

55. Ibid., p. 202.

56. *An Ancient American Setting for the Book of Mormon* constitutes the beginning of such a presentation. See note 46.

57. B. H. Roberts, *New Witnesses for God*, II, *The Book of Mormon*, in three volumes, Vol. III (Salt Lake City: Deseret News, 1951 [1909], pp. 503–4.