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## **Visions, Mushrooms, Fungi, Cacti, and Toads: Joseph Smith's Reported Use of Entheogens**

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# VISIONS, MUSHROOMS, FUNGI, CACTI, AND TOADS: JOSEPH SMITH'S REPORTED USE OF ENTHEOGENS

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Brian C. Hales

**Abstract:** *An article recently published in an online journal entitled “The Entheogenic Origins of Mormonism: A Working Hypothesis” posits that Joseph Smith used naturally occurring chemicals, called “entheogens,” to facilitate visionary experiences among his early followers. The entheogenic substances were reportedly derived from two mushrooms, a fungus, three plants (including one cactus), and the secretions from the parotid glands of the Sonoran Desert toad. Although it is an intriguing theory, the authors consistently fail to connect important dots regarding chemical and historical cause-and-effect issues. Documentation of entheogen acquisition and consumption by the early Saints is not provided, but consistently speculated. Equally, the visionary experiences recounted by early Latter-day Saints are highly dissimilar from the predictable psychedelic effects arising from entheogen ingestion. The likelihood that Joseph Smith would have condemned entheogenic influences as intoxication is unaddressed in the article.*

In 2019, retired emergency department physician Robert Beckstead, Naked Mormonism podcaster Bryce Blankenagel, independent researcher Cody Noconi, and retired Arizona State University Professor Michael Winkelman published “The Entheogenic Origins of Mormonism: A Working Hypothesis” in the online *Journal of Psychedelic Studies*.<sup>1</sup> Their lengthy article, richly illustrated with 41 color figures and more than 300 references in the bibliography, attributes many of

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1. Robert Beckstead, et al., “The Entheogenic Origins of Mormonism: A Working Hypothesis,” *Journal of Psychedelic Studies* 3, no. 2 (2019): 212–60. Hereafter referred to as “EOMWH.”

Joseph Smith's visionary experiences and those of other early Latter-day Saints to the use of "entheogens," or psychedelic chemical substances available in the environment.<sup>2</sup> The authors state:

[N]o single explanation has to date successfully accounted for the number and quality of visions in early Mormonism. Nor can these modalities explain the "on-demand" visions that were neither spontaneous nor the result of prolonged austerities. To date, Joseph Smith's and early Mormon converts' visionary experience are neither easily defined nor understood. Against this background, we present compelling evidence suggesting that many early Mormon visionary experiences were facilitated by entheogenic substances. ... We propose that the entheogenic context of early Mormon involved sacraments, ordinances, and endowments feeding these seekers' hunger for primary religious experience. (212–13)

The primary thesis promoted throughout EOMWH assumes that "[h]erbs were a physical means to profound religious experience, experiences that rarely occur without using entheogens" (214).

All human experience and insight emerge in the chemistry of the brain. ... To explore how brain chemistry was involved in Joseph Smith's religious experiences and those of other early Mormon believers and whether entheogens facilitated those experiences is not to question the spiritual validity and power of those experiences but to illuminate how such compelling experiences were accessed then and draw implications for how they may be accessed now (213).

For support, EOMWH presents "six straightforward phenomena reported or observed during the life of Joseph Smith" (214):

1. Entheogens were found in every area the Smith family resided, and produce visions, and spiritual ecstasies.
2. Joseph Smith was mentored by individuals with experience in esoteric fields of knowledge.

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2. The term "entheogen" was coined by R. Gordon Wasson and Robert Graves for a 1958 article to describe "substances that would soon come to be known as 'psychedelics.'" (Antonio Ceraso, "Entheogens and the Public Mystery: The Rhetoric of R. Gordon Wasson," *Configurations* 16, no. 2 [Spring 2008]: 217.)

3. Visionary experience in early Mormonism was frequently “on-demand” rather than spontaneous.
4. Joseph Smith devised a method to facilitate dramatic religious experience among his followers.
5. There was an association between early Mormon visionary experience and participation in Mormon ordinances where bread and wine were served, and oil anointings were received.
6. Visionary experiences of the magnitude experienced during Joseph Smith’s life ceased at his death. (214)

With these and many other observations, EOMWH advances a new theory that affirms that historical accounts from Joseph Smith and other followers of visions, dreams, visitations, sensations, voices, or other communications that they attributed exclusively to God were actually facilitated by previously ingesting psychedelic chemicals.

Rather than systematically addressing the specific assertions and conclusions mentioned in EOMWH, this article is divided into three sections. The first establishes the primary claims from the article that connect early visionary experiences to specific entheogenic substances. The second section examines those chemicals in greater detail regarding their usage, preparation, ingestion, potential psychedelic effects, as well as possible dangers associated with consumption. The final section critiques EOMWH’s primary thesis and methodology.

### **Hypothesizing Entheogen Usage**

A consistent strength reflected throughout EOMWH involves the authors’ willingness to identify specific chemical substances as potentially responsible for historical events that religious participants described as visionary and extra-worldly. EOMWH creates a tension by providing a natural explanation for experiences that Joseph Smith and early converts considered to be supernatural in origin.

The responsible entheogens, according to EOMWH, are derived from two mushrooms (*Psilocybe ovoideocystidiata* and *Amanita muscaria*), a fungus (*Claviceps purpurea*), three plants (*Datura stramonium*, *Hyoscyamus niger*, and the cactus *Lophophora williamsii*), and secretions from the parotid glands of the Sonoran Desert toad (*Incilius alvarius*) (224–30).

Name	Source	Active Ingredient	Common Name
<i>Psilocybe ovoideocystidiata</i>	Mushroom (fungus)	Psilocybin, psilocin, and baeocystin	Magic mushrooms, shrooms, mushies, psillys, pixie caps, Welsh friends, or Welsh tea
<i>Amanita muscaria</i>		Ibotenic acid, muscimol	Fly agaric, bug agaric
<i>Claviceps purpurea</i>	Ergot (fungus)	Multiple, including an LSD precursor	Ergot
<i>Datura stramonium</i>	Plants	Atropine, hyoscyamine, scopolomine	Jimson weed, thornapple, loco weed, Jamestown weed, Angel's Trumpet, and Devil's Trumpet
<i>Hyoscyamus niger</i>			Black henbane, stinking nightshade
<i>Lophophora williamsii</i>	Cactus (plant)	Mescaline	Peyote
<i>Incilius alvarius</i>	Sonoran desert toad secretions	5-MeO-DMT	Bufo alvuius, Colorado River Toad

The authors explain, “The availability of entheogenic material to the Smith family and their ability to process and utilize it are foundational to our thesis of an entheogenic early Mormonism” (224). EOMWH affirms that “[b]y following this entheogenic protocol, Joseph Smith facilitated an unprecedented number of ‘on demand’ religious visions and ecstasies” (237). By June 1831, “It is likely that Joseph Smith, had considerable experience with entheogens” (239).

Reports of entheogen-induced experiences by Joseph Smith and others are presented throughout the article.

- Lucy Mack Smith’s dream<sup>3</sup> circa “1802–1808” is ascribed to the mushroom *Amanita muscaria* (216).
- Joseph Smith Sr. first dream of eating the contents of a box<sup>4</sup> is connected to *Datura stramonium* (Jimson weed) ingestion (217).

3. Lucy Mack Smith, *Biographical Sketches of Joseph Smith the Prophet and His Progenitors for Many Generations* (Liverpool, UK: S. W. Richards, 1853), 54–55.

4. *Ibid.*, 57.

- Joseph Smith Sr.'s second dream that mentions the tree of life<sup>5</sup> is attributed to *Amanita muscaria* (218) or by smoking parotid gland secretions of the Sonoran Desert toad (*Incilius alvarius*) (229).
- Joseph Smith's mental state at the time of the 1820 First Vision resulted from entheogen intoxication. EOMWH explicates, "Had Joseph been taken to a local physician of the period during the initial phase of intoxication, the diagnosis of poisoning with a member of the *Solanaceae* family, such as Black Henbane (*H. niger*) or *D. stramonium* would have easily been made. Similar clinical features can also present with poisoning by the *A. muscaria* mushroom" (231). "Features of the anticholinergic toxidrome in Joseph's accounts of his first vision include being rendered 'blind as a bat' (mydriasis, blurred vision), 'mad as a hatter' (altered mental status, delusional paranoia, and hallucinations), and 'dry as a bone' (dry mucous membranes), and a duration of intoxication lasting several hours or more. Paralysis associated with *D. stramonium* is also reported" (232).
- An alleged tutor of Joseph Smith named Luman Walters<sup>6</sup> possessed a stuffed toad (230) apparently used in magical pursuits, and Willard Chase, a neighbor of the Smiths in the 1820s, reported that Joseph Smith encountered a spirit that was "something like a toad" (230) prior to receiving the plates from the Hill Cumorah.<sup>7</sup> Based on these two

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5. Ibid., 58–59.

6. EOMWH posits Joseph Smith was tutored by Luman Walters, but there is no direct evidence Joseph Smith ever met Luman Walters, let alone was taught herbology by him. The only possible support is from Abner Cole, editor of the *Palmyra Reflector*, who wrote in June 1830 that in the early 1820s, "the mantle of [Luman] Walters the Magician had fallen upon Joseph" (Abner Cole, "The Book of Pukei, Chapter 2," *The Palmyra Reflector* (July 7, 1830): 60). This statement could represent a direct connection, but as Mark Ashurst-McGee observed, "Cole may have been implying that Joseph succeeded Walters as the seer who led local treasure ventures" (Mark Ashurst-McGee, "A Pathway to Prophethood: Joseph Smith Junior as Rodsman, Village Seer, and Judeo-Christian Prophet," (Master's Thesis, Utah State University, Logan, Utah, 2000), 205).

7. Eber D. Howe, *Mormonism Unveiled: or, A Faithful Account of That Singular Imposition and Delusion, for Its Rise to the Present Time* (Painesville, OH: Author, 1834), 242.

observations, EOMWH concludes, “The twice mentioned ‘toad’ during the production of *The Book of Mormon* suggests the remote possibility that Smith employed a toad [*Incilius alvarius*] entheogen in its writing” (230). The authors add, “Had Joseph Smith known the features of entheogenic toad venom, he would have undoubtedly arranged for its procurement and transport to Nauvoo in the 1840s” (230).

- During the Book of Mormon translation, “Smith used a seer stone to translate, and we hypothesize an entheogen; the use of the latter is suggested by reports of his frequent ‘intoxication’ or ‘altered’ appearance while translating” (223).<sup>8</sup> “Several lines of evidence in *The Book of Mormon* suggest Joseph Smith’s awareness of psychedelics and their effects. *The Book of Mormon* functioned as sacred scripture and acted as a psychopomp for early Mormon converts seeking direct and personal experience with God under the influence of entheogenic material” (234).
- According to EOMWH, prior to receiving their visions, the Three Witnesses of the Book of Mormon (Oliver Cowdery, David Whitmer, and Martin Harris) partook of unspecified chemicals without “fear and embarrassment secondary to the troublesome entheogen-related physical and emotional symptomology preceding their visionary and ecstatic experience” (237).
- “Smith’s promise that converts would see God and experience visions, dreams, and ecstasies would occur in receiving sacraments and endowments” (237). “Joseph Smith promised converts visions, but only in Mormon ‘ordinances’ and in the presence of Church leaders” (237).
- “With increasing confidence in his entheogenic sacraments, Joseph Smith enabled hundreds to receive visions during

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8. Levi Lewis reported that “he saw him (Smith) intoxicated at three different times while he was composing the Book of Mormon” (quoted in Eber D. Howe, *Mormonism Unveiled* [Painesville, OH: E. D. Howe, 1834], 268). Otherwise, eyewitnesses fail to mention any altered state, intoxication, or drunkenness, while Joseph Smith was dictating the Book of Mormon. See John W. Welch, ed., *Opening the Heavens: Accounts of Divine Manifestations 1820–1844*, 2nd ed. (Provo, UT: BYU Press, 2017), 126–227.



the dedication ceremonies of the Kirtland temple, but only if willing to participate in the Mormon ordinances” (241). “The spiritual outpouring associated with the dedication of the Kirtland Temple in March and April of 1836 was called the Mormon Pentecost, the equivalent to the early Christian Pentecost that was also accused of alcohol intoxication. Visionary experiences during this period are linked, we argue, to the administration of bread and wine sacraments and oil anointings” (241).

- “The Potawatomi [Native Americans] passed through Nauvoo on their way to and from their hunting grounds in Iowa territory and could have served as an early bridge between the Indians of the Southwest (e.g., Comanche-Osage) and Joseph Smith for the delivery of peyote to Illinois for the Nauvoo temple” (242).
- Administering entheogens to large groups of followers was possible due to the help of herbal physician assistants: “The overwhelming logistical constraints of supplying scores or hundreds of Mormons on multiple occasions with various plant medicines could have been satisfied by an experienced Thomsonian Botanical physician like Frederick G. Williams, with his herbarium” (224). “Frederick G. Williams likely had the education and practical training to cultivate, harvest, and prepare the psychoactive materials associated with ergot for the Kirtland temple” (227).
- According to EOMWH, the lack of historical documentation is due to Joseph Smith’s ability to successfully keep entheogenic usage a secret. “Joseph Smith’s surreptitious use of entheogenic material was a closely guarded secret for obvious reasons. Although the ingestion of such substances was not illegal in the 19th century, their use was discouraged by withering ridicule” (240). “What did Smith want to keep secret? Besides Smith’s unusual marriage practice and his kingdom building ambitions, we argue it was to keep secret administration of an entheogen in the endowment” (223).

The claims made throughout EOMWH describe the early days of the Church as largely resulting from humanly initiated processes employing entheogenic chemicals rather than being initiated by divine influences.

## Examining the Seven Entheogens

The following sections examine each substance, specifically *geographic distributions*, *dosing* of chemicals, *onset and duration*, predicted *hallucinogenic effects*, and *side effects and potential dangers* associated with each one. Joseph Smith would have needed this information for each entheogen in order to obtain the results described in EOMWH. Many of these chemical substances are referred to as “psychedelics” in scientific literature, although *entheogen* is gaining wider usage.

### 1. *Psilocybe Ovoideocystidiata*

Perhaps the most ubiquitous source of environmental psychedelics is the *Psilocybe* genus of wild mushrooms, which produces psychotropic chemicals of psilocybin, psilocin, and baeocystin.<sup>9</sup>



*Psilocybe* genus of psychedelic mushrooms. (Getty images; used by permission.)

*Geographic distribution:* *Psilocybe* mushrooms are found throughout the world in a variety of habitats, including that of New England. “There are in the United States around 60 species of *Psilocybe*, of which approximately 25 are hallucinogenic, and of which around 10 are from

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9. Ning-Ning Yang et al., “Chemical Study of the Fungus *Psilocybe merdaria*,” *Journal of Asian Natural Products Research* 19, no. 4 (2017): 333.

the eastern United States.”<sup>10</sup> The primary species found in the New England area, *Psilocybe ovoideocystidiata*, was discovered in 2007 by a mycologist who wrote that “this species probably has hallucinogenic properties.”<sup>11</sup>



Harvested *Psilocybe* mushrooms. (Getty images; used by permission.)

*Dosing:* The effects resulting from mushroom ingestion depend upon several variables:

- Whether the mushrooms are eaten fresh, dried, or with food.
- The person’s body weight.
- Psychological make-up.
- Expectations.
- The environment in which the mushrooms are taken.<sup>12</sup>

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10. Gastón Guzmán, Richard V. Gaines, and Florencia Ramírez-Guillén, “New Species of Hallucinogenic *Psilocybe* (Fr.) P. Kumm. (*Agaricomycetidae*) from the Eastern U.S.A.,” *International Journal of Medicinal Mushrooms* 9 (2007): 75.

11. *Ibid.*, 77.

12. Andy Letcher, *Shroom: A Cultural History of the Magic Mushroom* (Chatham, UK: Faber and Faber, 2006), 18.

“An average dose seems to have been three to five mushrooms. As many as eleven might be consumed for the purposes of obtaining visions.”<sup>13</sup> “The mushrooms can be roasted or cooked with other vegetables. Different species are often mixed in the same receptacle.”<sup>14</sup>

*Onset and Duration:* “The psychophysical effects of these mushrooms come on anywhere from fifteen minutes to an hour after consumption, depending on how empty the stomach is, and last between four and five hours.”<sup>15</sup>

*Hallucinogenic Effects:* For centuries, *Psilocybe* mushrooms have been used by shamans throughout the world to facilitate their religious practices. Modern users may seek purely psychedelic effects independent of any religious concerns. In the 1950s before governmental policies were placed to regulate access, two researchers, Gaston Guzman and R. Gordon Wasson, visited Mexico to participate in mushroom induced rituals.

### **Gaston Guzman’s Experience**

During a traditional “Indian ceremony in an Indian house in 1958,” Mexican mycologist and anthropologist, Gaston Guzman related his experience in third person:

Following Indian counsel, he ate 12 fresh fruit bodies of *Psilocybe cubensis* gathered by him that morning. The ingestion was an interesting Indian nocturnal ceremony conducted by an old Mazatec woman ... he decided to go to his straw sleeping mat, which was in a corner of the room where the ceremony had taken place. While he was on his straw sleeping mat, he suddenly saw a caricature of a gigantic, colored castle with two human faces. The castle was his gasoline-lamp mushroom dryer at an opposite corner of the room. The castle smiled and said to him: “Come, come to me, don’t be afraid.” The author was greatly surprised and frightened, and he reached for his eyeglasses to see his mushroom dryer. Then the castle laughed loudly. He decided to turn his back on it and sleep, but sleep was impossible, because he began to see many attractive, bright colors wherever he turned, regardless of whether his eyes were open or closed. These colors gradually transformed

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13. Ibid.,135.

14. Roger R Heim and R. Gordon Wasson. “The ‘Mushroom Madness’ Of The Kuma,” *Botanical Museum Leaflets* [Harvard University] 21, no. 1 (1965) : 17.

15. Letcher, *Shroom*, 17.

into gigantic black men, who danced around him, singing. In that moment the author felt very comfortable and asked the castle to please keep silent, because he was busy and happy looking at the spectacle. ... These gigantic men were really a little, dark dog chasing a cat. After the above visions, he saw many others, spectacularly colored things and persons, and experimented many other cases, but the castle was there all night, saying to him, “come, come to me.” Finally he fell into a normal sleep after almost 6 hours of neurotropic effects.”<sup>16</sup>

### R. Gordon Wasson’s Experiences

On two occasions while supervised by the local shaman, author and ethnomycologist Robert Gordon Wasson and a co-investigator consumed at bedtime six pairs of the mushrooms from the genus *Psilocybe*.



**“Wasson takes them from cup holding his night’s quota as the curandera [female shaman] prays at the household altar. He chewed them slowly, as is the custom, and his six pair took about a half hour to eat.”<sup>17</sup>**

16. Gaston Guzman, “The Hallucinogenic Mushrooms: Diversity, Traditions, Use and Abuse with Special Reference to the Genus *Psilocybe*,” in *Fungi from Different Environments*, eds. J. K. Misra and S. K. Deshmukh (Enfield, NH: Science Publishers, 2009), 272–73.

17. R. Gordon Wasson, “Seeking the Magic Mushroom,” *Life* 42, no. 19 (May 13, 1957): 103, <https://books.google.com/books?id=Jj8EAAAAMBAJ&lpg=PP1&pg=PA100#v=onepage&q&f=false>.

After about an hour, he noted visions of colorful geometric patterns, palaces, and architectural vistas.

The visions had started. They reached a plateau of intensity deep in the night, and they continued at that level until about 4 o'clock. We felt slightly unsteady on our feet and in the beginning were nauseated. We lay down on the mat that had been spread for us. . . . We were never more wide awake, and the visions came whether our eyes were opened or closed. They emerged from the center of the field of vision, opening up as they came, now rushing, now slowly, at the pace that our will chose. They were in vivid color, always harmonious. They began with art motifs, angular such as might decorate carpets or textiles or wallpaper or the drawing board of an architect. Then they evolved into palaces with courts, arcades, gardens — resplendent palaces all laid over with semiprecious stones. Then I saw a mythological beast drawing a regal chariot. Later it was as though the walls of our house had dissolved, and my spirit had flown forth, and I was suspended in mid-air viewing landscapes of mountains, with camel caravans advancing slowly across the slopes, the mountains rising tier above tier to the very heavens.<sup>18</sup>

Three days later, Wasson repeated the experiment:

Instead of mountains I saw river estuaries, pellucid water flowing through an endless expanse of reeds down to a measureless sea, all by the pastel light of a horizontal sun. This time a human figure appeared, a woman in primitive costume, standing and staring across the water, enigmatic, beautiful, like a sculpture except that she breathed and was wearing woven colored garments. It seemed as though I was viewing a world of which I was not a part and with which I could not hope to establish contact. There I was, poised in space, a disembodied eye, invisible, incorporeal, seeing but not seen.<sup>19</sup>

Regarding the hallucinations, Wasson clarified:

The visions were not blurred or uncertain. They were sharply focused, the lines and colors being so sharp that they seemed

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18. *Ibid.*, 102.

19. *Ibid.*

more real to me than anything I had ever seen with my own eyes. I felt that I was now seeing plain, whereas ordinary vision gives us an imperfect view; I was seeing the archetypes, the Platonic ideas, that underlie the imperfect images of everyday life.”<sup>20</sup>

Wasson’s experiences were published in the May 13, 1957, edition of *Life* magazine as the article “Seeking the Magic Mushroom.”



*Life* May 13, 1957, cover headline: “Great Adventures in the Discovery of Mushrooms that Cause Strange Visions”

### Side Effects and Dangers

“Experienced users know that mushroom trips can turn nasty,” reports Andy Letcher, author of *Shroom: A Cultural History of the Magic Mushroom*, “The visions can become hellish, the gnostic insights can be

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20. Ibid., 109.

too much to take in, the fear of dying or going mad or of permanently losing one's identity can become overbearing."<sup>21</sup>

Another important danger posed by "magic mushrooms" stems from the potential for amateur seekers to find themselves consuming something different and far more dangerous. Many deadly mushrooms may be mistaken for hallucinogenic species. An 1879 weekly newspaper reported the following conversation: "[An] ignorant young men [speaking] to Professor Tyndall- 'Professor, how is a man to tell a mushroom from a toadstool?'--Professor: 'By eating it. If you live it is a mushroom; if you die it is a toadstool.'"<sup>22</sup>

One professional mushroom forager spent the day with his wife collecting mushrooms for their evening meal. As they sautéed their fungal feast, they noticed a death cap mushroom cooking in the mix. "The smell was so tantalizing. We wanted to eat it desperately.' After all, he says, laughing, 'you can eat anything--once."<sup>23</sup>

"There is no certain test, like the 'silver spoon test,' which will enable one to tell the poisonous mushroom from the edible ones" explains George F. Atkinson, author of *Studies in American Fungi: Mushrooms, Edible, Poisonous, etc.* "For the beginner, however, there are certain general rules, which, if carefully followed, will enable him to avoid the poisonous ones, while at the same time necessarily excluding many edible ones."<sup>24</sup>

1st. — Reject all fungi which have begun to decay, or which are infested with larva.

2nd. — Reject all fungi in the button stage, since the characters are not yet shown which enable one to distinguish the genera and species. Buttons in pasture lands which are at the surface of the ground and not deep-seated in the soil, would very likely not belong to any of the very poisonous kinds.

3d. — Reject all fungi which have a cup or sac-like envelope at the base of the stem, or which have a scaly or closely fitting

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21. Letcher, *Shroom*, 121.

22. [Editor], "The Recess," *The Educational Weekly* [Chicago] 131 (October 2, 1879): 137

23. Jane Black, "Mushroom Madness; Wild Things," *Boston Magazine* 43, no. 9 (Sep 2005): 211.

24. George F. Atkinson, *Studies in American Fungi: Mushrooms, Edible, Poisonous, etc.* (New York: Henry Holt, 1911), 229.



layer at the base of the stem, and rather loose warts on the pileus, especially if the gills are white ...

4th. — Reject all fungi with a milky juice unless the juice is reddish. Several species with copious white milk, sweet or mild to the taste, are edible ...

5th. — Reject very brittle fungi with gills nearly all of equal length, where the flesh of the cap is thin, especially those with bright caps.

6th. — Reject all Boleti in which the flesh changes color where bruised or cut, or those in which the tubes have reddish mouths, also those the taste of which is bitter ...

7th. — Reject fungi which have a cobwebby veil or ring when young, and those with slimy caps and clay-colored spores.”<sup>25</sup>

Besides distinguishing between edible and deadly mushrooms, foragers would need to also discern from among the edibles, which, if any, could produce psychedelic changes in consciousness.

## 2. *Amanita Muscaria*

*Amanita muscaria* is another mushroom commonly called, “fly agaric,” apparently due to an incorrect belief that it is poisonous to flies and other insects. It exists as a large white-gilled, white-spotted, usually red-topped mushroom, and is commonly recognized in popular culture.

*Geographic distribution:* “The fly agaric is one of the well-known poisonous species and is very widely distributed in this country as well as in other parts of the world.”<sup>26</sup>

*Preparation and Dosing:* “In most cases as little as one cap, a cup of sautéed mushrooms, is a sufficient for psychotropic effects.”<sup>27</sup>

*Onset and Duration:* Effects appear within 30 minutes to 2 hours after ingestion and last for several hours.

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25. Ibid., 229–30.

26. Ibid., 54–55.

27. Didier Michelot and Leda Maria Melendez-Howell, “*Amanita muscaria*: Chemistry, Biology, Toxicology, and Ethnomycology,” *Mycological Research* 107, no. 2 (2003): 132; references removed from text.



*Amanita muscaria.* (Getty images; used by permission.)

*Hallucinogenic Effects:* Consumption of *Amanita muscaria* induces an “unsteady set of symptoms: nausea, dizziness, a flushed countenance, twitchiness, increased stamina, euphoria, deep coma-like sleep, hallucinatory dreams and, occasionally, nothing but a headache the next day.”<sup>28</sup> Other effects include, “A state of confusion, dizziness, and tiredness, visual and auditory aesthesia (hypersensitivity), space distortion, and unawareness of time.”<sup>29</sup> Clark Heinrich, author of *Magic Mushrooms in Religion and Alchemy*,<sup>30</sup> experienced the hallucinogenic effects of *Amanita muscaria*:

Heinrich found himself ascending through ever-increasing levels of bliss, each more magnificent than the last, until he achieved union with the clear white light, the source, the Godhead. Understandably excited, he attempted to repeat this experience a few days later, but this time the experience was hellish. Losing all sense of time, space, and identity, he struggled to remember who he was. Coming to, and remembering his name (at last!), he saw grotesque rope-like

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28. Letcher, *Shroom*, 12.

29. Michelot and Melendez-Howell, “*Amanita muscaria*: Chemistry, Biology, Toxicology, and Ethnomycology,” 132.

30. Clark Heinrich, *Magic Mushrooms in Religion and Alchemy* (Paris, ME: Park Street Press, 2002).

columns stretching upwards to the sky — which turned out to be threads on the handkerchief upon which he was slumped — and promptly vomited. The whole cycle, loss of identity, coming to, and being sick, was repeated again and again for what seemed like an eternity, until the effects eventually wore off.”<sup>31</sup>

*Side Effects and Dangers:* The entheogenic potential of *Amanita muscaria* is less consistent and predictable than for *Psilocybe* mushrooms. According to Andy Letcher, “For every fly-agaric enthusiast, then, there are twenty, or perhaps fifty or more, who read these accounts and politely decline, preferring the more trustworthy psilocybin experience.”<sup>32</sup> While it may be used for recreational and even shamanistic purposes, “[t]he fly agaric is not a true object of religious and ritual veneration.”<sup>33</sup>

In their 2003 review article on *Amantia muscaria*, Didier Michelot and Leda Maria Melendez-Howell conclude:

*Amanita muscaria* occupies a unique position amongst all mushrooms. Its emblematic aspect merges with the psychotropic effects and the chemical load. As far as toxic effects are concerned, consumption of *A. muscaria* ... does not induce any critical organ damage. Thus, in the case of such a poisoning, the victims are not considered endangered, but intensive care is recommended ... *A. muscaria* is not yet the object of any drug-traffic, an aspect reflected in the lack of awareness amongst possible consumers or applicants for recreational purposes. Considering the effects so far reported, *A. muscaria* has a low psychotropic action, but still a toxic one.<sup>34</sup>

### 3. *Claviceps Purpurea*

All mushrooms are fungi, but not all fungi are mushrooms. Other fungi include rusts, smuts, yeasts, molds, mildews, and the ergot *Claviceps*

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31. Clark Heinrich quoted in Letcher, *Shroom*, 173.

32. Letcher, *Shroom*, 173.

33. Michelot and Melendez-Howell, “*Amanita muscaria*: Chemistry, Biology, Toxicology, and Ethnomycology,” 139–41.

34. Michelot and Melendez-Howell, “*Amanita muscaria*: Chemistry, Biology, Toxicology, and Ethnomycology,” 142.

*purpurea*. Ergot has been used medicinally for centuries, primarily to enhance labor and possibly as an abortion agent.<sup>35</sup>

*Geographic distribution:* *Claviceps purpurea* may infect rye, but also wheat or barley. Cooler moist spring weather conditions may enhance growth wherever these grains are raised.



***Claviceps purpurea* attached to an ear of rye. (Getty images; used by permission.)**

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35. Ergot is likely the medication John C. Bennett referred to as he assured the women he seduced that if they should become pregnant, he could induce an abortion. On August 28, 1842, Mrs. Zeruah Goddard affirmed, “Mrs. [Sarah] Pratt stated to me that Dr. Bennett told her, that he could cause abortion with perfect safety to the mother, at any stage of pregnancy.” (“Testimony of Mrs. Zeruah Goddard,” the seventh affidavit published in *Affidavits and Certificates, Disproving the Statements and Affidavits Contained in John C. Bennett’s Letters* [Nauvoo, IL, August 31, 1842.])

*Preparation and Dosing:* *Claviceps purpurea* (ergot) is very different from all mushroom psychedelics. “Ergot is a chemical factory containing everything from the simplest of compounds such as amines and aminoacids to the most complex polycyclic alkaloids. At the last count, there were more than 200 clearly identified chemical compounds in a simple extract of the fungus. ... [It is] a glorious chemical mess.”<sup>36</sup> Among the compounds that can be isolated from the ergot fungus are chemicals that range in their effects from causing convulsions or intense vasoconstriction to basic compounds used to synthesize LSD. Prior to the 1900s, the ability of researchers to segregate specific chemicals from the mix was greatly limited. “The chemical techniques of the nineteenth century were, to put it bluntly, simply not good enough to isolate the active substances reproducibly.”<sup>37</sup> What this means is that *Claviceps purpurea* was always ingested whole, which infused the recipient with a veritable cocktail of chemicals, some with psychotropic properties mixed with others that could kill.

*Hallucinogenic Effects:* Since the chemicals in *Claviceps purpurea*, when taken together, have little or no psychedelic potential, ergot has not been sought after as a hallucinogen. Hallucinations are mentioned among its effects, but they are generally not recalled after the event, only suspected by observers as they watch the behaviors of those affected.

Incidents of ergot poisoning were common in the Middle Ages, likely resulting from ergot-contaminated foods like rye bread. “St. Anthony’s fire,” a condition of intensely painful burning sensations in the extremities, arose from the vasoconstrictive properties of ergot chemicals when repeatedly consumed. Some historians believe the peculiar behaviors of women accused in the Salem witch hunt of 1692 were caused by ergot that had infested rye-containing foods.<sup>38</sup>

One of the chemicals in ergot is a molecular building-block that can be synthesized into lysergic acid diethylamide or LSD. But when left within the mixture of chemicals inside the ergot, it does not induce psychedelic effects. In other words, consuming ergot will never simulate the ingestion of LSD.

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36. Michael R. Lee, “The History of Ergot of Rye (*Claviceps purpurea*) I: From antiquity to 1900,” *The Journal of the Royal College of Physicians of Edinburgh* 39, no. 2 (June 2009): 183; sentence order reversed.

37. *Ibid.*, 184.

38. Linnda R Caporael, “Ergotism: The Satan Loose in Salem” *Science* 192, no. 4234 (April 1976): 21–26.

*Side Effects and Dangers:* Historically, with little or no psychedelic activity, ergot alone has little or no abuse potential, and its primary usages have been medicinal.<sup>39</sup> “The best-documented effects include high fever, angina, gangrene, convulsions, stupor, vivid hallucinations, and delirium. ... Ergotism often causes permanent disabilities, including blindness, amputation of fingers, hands, feet, legs or arms; it may also result in death.”<sup>40</sup>

#### 4. *Datura Stramonium*

*Datura stramonium*, more commonly called “Jimson weed,” is well known in folklore as a medicinal herb. It contains neuroactive compounds atropine, hyoscyamine, and scopolamine.



*Datura stramonium* plant and flower. (Photo by Joozwa. CC-BY-SA-3.0; used by permission.)

39. See Adam Neale, *Researches Respecting the Natural History, Chemical Analysis, and Medicinal Virtues of the Spur, or Ergot of Rye* (London: Horatio Phillips, 1828), 80; T. H. Wardleworth, *An Essay on the Chemical, Botanical, Physical, and Parturient Properties of Secale Cornutum [Ergot]*, (London: Simkin, Marshall, & Co., 1840), 26–27.

40. Alessandro Tarsia, “The Devil in the Sheaves: Ergotism in Southern Italy,” *Semiotica*, 195 (2013): 358.



*Datura stramonium* fruit with seeds. (Photo by Joozwa. CC-BY-SA-3.0; used by permission.)

*Geographic distribution:* *Datura stramonium* is a cosmopolitan weed found throughout the warmer regions of the world. It may invade a wide variety of locales including roadsides, railways, crops, managed pastures, drainage ditches, woodland edges, gullies, and even dry riverbeds.

*Preparation and Dosing:* “The dried plant material should be finely ground to ensure an even distribution of the alkaloids. If an initially small dose is ineffective, a slightly higher dose can be taken a couple of weeks later, and so on until the desired effects are reached. Because of the high variability between and often within plants, this process should be repeated for each new batch even if it’s from the same plant.”<sup>41</sup>

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41. “The Ultimate Guide to Datura,” The Third Wave (website), <https://thethirdwave.co/psychedelics/datura/>.

“Even small amounts of leaves or seeds can be fatal” if inappropriately prepared.<sup>42</sup> All parts of the plant contain neurogenic substances, which can be eaten, smoked, or applied to the skin as an ointment. Onset of effects occurs within 30 minutes, with peak effects lasting 12–24 hours, but may persist for several days.

*Hallucinogenic Effects:* Unlike the psychedelics, *Datura* is better defined as a delirogen because of the close relationship between delirium and any hallucinations that occur. The effects of *Datura* have been described as “a living dream: the patient loses and regains consciousness and converses with imaginary or absent people. The effects can last for days. Very few other substances produce the same effects as tropane alkaloids, i.e. very vivid hallucinations and an inability to distinguish between real and unreal stimuli.”<sup>43</sup> A United States Department of Justice publication warns, “The high experienced by users often includes delirium, delusions, hallucinations, disorientation, and incoherent speech. Often users do not recall the experience.”<sup>44</sup>

*Side Effects and Dangers:* Side effects from ingesting *Datura stramonium* include dry mouth, blurred vision, photophobia, and may be followed by hyperthermia, confusion, agitation, hallucination, and aggressive behavior. In severe toxicity, it can cause “seizures, coma, and even death.”<sup>45</sup> An online warning explains, “The *Datura* plant is not to be taken lightly. It is absolutely essential to have a sober sitter present when experimenting with *Datura* — not only to keep you safe from accidental injuries but also to monitor your body’s response to the plant.”<sup>46</sup>

While serving as a medical intern in a Spokane, Washington, emergency department in 1986, I was assigned a patient with Jimson weed toxicity. My questions to him brought nonsensical answers. It was obvious he was experiencing repeated hallucinations, talking to imaginary people, smoking imaginary cigarettes, trying to leave a room through an imaginary door. I reported my findings to the attending physician who seemed unsurprised and unconcerned; he had treated such pathologies before. The patient was admitted to the floor with supervision. I visited him the next day and he was lucid and responding

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42. Marlene Julyan, “*Datura Stramonium* L. — Narcotic, Anodyne or Poison?” *International Journal of Humanities and Social Science* 4, no.2 (January 2014): 181.

43. *Ibid.*, 182.

44. National Drug Intelligence Center, *Jimsonweed* (*Datura stramonium*) (Washington: U.S. Department of Justice, September 1998), 1.

45. *Ibid.*, iii.

46. “The Ultimate Guide to *Datura*.”



appropriately. I asked if he could recall any of his activities as I recounted them to him; he remembered nothing.

As a recreational drug, *Datura* is less popular. “Heightened awareness of the ‘bad high’ and potentially deadly consequences of jimsonweed use is key to curbing the appeal of this plant.”<sup>47</sup> “Most people who post information on various other Internet sites about personal experiences with the plant do not recommend its use, because it is such a ‘bad trip.’”<sup>48</sup>

## 5. *Hyoscyamus Niger*

*Hyoscyamus niger* is more commonly called black henbane, or “hen killer,” possibly due to that fact that when hens eat it, they become paralyzed and die.<sup>49</sup> It possesses the same neuroactive compounds as *Datura stramonium*: atropine, hyoscyamine, and scopolamine.



*Hyoscyamus niger* drawing. (Public domain.)

47. National Drug Intelligence Center, iii.

48. Ibid., 2.

49. Anahita Alizadeh, et al., “Black Henbane and Its Toxicity - a Descriptive Review,” *Avicenna journal of phytomedicine* 4, no. 5 (2014): 298.



*Hyoscyamus niger*. (Getty images; used by permission.)

*Geographic distribution:* Originally native to Europe, *Hyoscyamus niger* is found throughout New England and the Northeast, the Midwest, and much of the West.

*Preparation and Dosing:* Possessing little abuse potential, “the chopped, dried herbage can be used as an ingredient in incense and smoking blends, for brewing beer, to spice wine, and as a tea.”<sup>50</sup> Dosages must be assessed carefully no matter what type of preparation is being considered.

*Hallucinogenic Effects:* *Hyoscyamus niger* is well known for its psychoactive properties, but it is not classed with the psychedelics. Visual hallucinations, including sensations of floating or flying, are reported, but results from ingestion are usually quite disagreeable. A 34-year-old woman drank *Hyoscyamus niger* tincture:

She suffered a burning sensation in her limbs that followed by losing their power through ten minutes after ingestion.

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50. Christian Rätsch, *The Encyclopedia of Psychoactive Plants: Ethnopharmacology and its Applications* (Rochester, Vermont: Park Street Press, 2005), 692.

She also presented giddiness and intense thirst. The swollen purple rash especially on her face and neck also presented. She was numbed and unable to speak with a swollen tongue and dry mouth. Her pupils were dilated and at 7th hour after ingestion, her vision was limited and limb paresis was observed. After six days, she had been able to move her limbs although she lost her short-term memory and she could not remember what had happened.<sup>51</sup>

Henbane is best classed as a delirogen rather than hallucinogen, nor does it consistently produce positive memorable experiences in those who ingest it.

*Side Effects and Dangers:* Clinical manifestations of acute *Hyoscyamus niger* poisoning include a long list of untoward effects: “Mydriasis, tachycardia, arrhythmia, agitation, convulsion and coma, dry mouth, thirst, slurred speech, difficulty speaking, dysphagia, warm flushed skin, pyrexia, nausea, vomiting, headache, blurred vision and photophobia, urinary retention, distension of the bladder, drowsiness, hyper reflexia, auditory, visual or tactile hallucinations, confusion, disorientation, delirium, aggressiveness, and combative behavior.”<sup>52</sup> One researcher noted that, historically, “Henbane’s toxic properties became a mainstay for professional poisoners.”<sup>53</sup>

## 6. *Lophophora Williamsii*

*Lophophora williamsii*, better known as peyote, contains the psychedelic drug mescaline, used for centuries in Native American religious ceremonies. According to Comanche Chief Quanah Parker, because of those effects, “[t]he white man goes into his church house and talks about Jesus but the Indian goes into his tipi and talks to Jesus.”<sup>54</sup>

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51. Alizadeh, et al., “Black Henbane and Its Toxicity - a Descriptive Review,” 303.

52. *Ibid.*, 297.

53. Larry W. Mitich, “Black Henbane,” *Weed Technology* 6, no. 2 (April-June 1992): 490.

54. William T. Hagan, *Quanah Parker, Comanche Chief* (Norman: University of Oklahoma Press, 1993), 57.



**Lophophora williamsii (peyote) cacti. (Getty images; used by permission.)**

*Geographic distribution:* *L. williamsii* is primarily found in Mexico with just 20 percent of its distribution in southern Texas. It does not naturally grow in any other state in the United States (see map below).<sup>55</sup>

*Preparation and Dosing:* Peyote grows as a small cactus, typically one to two inches in diameter, about the size of a large button. It is ingested according to the number of buttons, which is defined as the head of the cactus cut off above the root. “The buttons can be either eaten fresh or dried and then chopped or powdered for later use. The fresh or dried buttons can be boiled or decocted in water. ... Dosages vary

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55. James S. Slotkin, “Peyotism, 1527–1891,” *American Anthropologist* 57, no. 2 (1955): 207; Martin Terry, et al., “Limitations to Natural Production of *Lophophora Williamsii* (Cactaceae) I. Regrowth And Survivorship Two Years Post Harvest in a South Texas Population,” *Journal of the Botanical Research Institute of Texas* 5, no. 2 (December 7, 2011): 665.

considerably, both between individuals and in rituals. Dosages ranging from four to thirty buttons may be ingested.”<sup>56</sup> The psychedelic effects usually begin within one to two hours after ingestion, lasting from six to nine hours.



Harvested *Lophophora williamsii* cacti called “peyote buttons.”  
(Photo by Gary Parker; used by permission.)

*Hallucinogenic Effects:* Peyote and mescaline predictably create visual hallucinations (that may be experienced with eyes open or closed), altered and dream-like states of consciousness, euphoria and laughter,

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56. Rättsch, *The Encyclopedia of Psychoactive Plants*, 825.

a perceived slowing of time, and a mixing of the senses where sound is seen and colors are heard. The following three accounts illustrate some of these qualities. After consuming seven peyote cactus buttons, one subject related:

He closed his eyes and was enveloped by visions which he described to the doctors as they unfolded: “a host of little tubes of shining light” down which red and green balls were rolling, then shaping themselves into letters, then revolving rapidly, the spaces between them filling with shifting seas of green. The patterns evolved “through rich arabesques, Syrian carpet patterns, and plain geometric figures, and with each form came a new flash of color.”

From this point, however, his experience took a disagreeable turn. He had an intermittent, highly discomfiting feeling of “double personality — to be outside of himself looking at himself.” He became acutely aware of his “mental inferiority” towards the doctors surrounding him, and evinced “a feeling of great distrust and resentment.” His supervisors recorded that he “firmly believed that we were secretly laughing at his condition. He believed that we intended to kill him, and for this reason he refused to take the eighth button.” In the intervals between these “paroxysms” his hostile feelings disappeared entirely and he apologized for his outbursts. In a later interview he maintained that the drug had made him “perfectly ‘insane,’” and he “would have attempted violence had it not seemed to him too much trouble in his lazy and depressed condition.”<sup>57</sup>

A second report:

The first time one puts the peyote into one’s mouth, one feels it going down into the stomach. It feels very cold, like ice. And the inside of one’s mouth becomes dry, very dry. And then it becomes wet, very wet. One has much saliva then. And then, a while later one feels as if one were fainting. The body begins to feel weak. It begins to feel faint. And one begins to yawn, to feel very tired. And after a while one feels very light. The whole body begins to feel light, without sleep, without anything.

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57. Mike Jay, *Mescaline: A Global History of the First Psychedelic* (New Haven, CT: Yale University Press, 2019), 80–81.

And then, when one takes enough of this, one looks upward and what does one see? One sees darkness. Only darkness. It is very dark, very black. And one feels drunk with the peyote. And when one looks up again it is total darkness except for a little bit of light, a tiny bit of light, brilliant yellow. It comes there, a brilliant yellow. And one looks into the fire. One sits there, looking into the fire which is Tatewarl [the god of fire in Huichol folklore]. One sees the fire in colors, very many colors, five colors, different colors. The flames divide — it is all brilliant, very brilliant and very beautiful. The beauty is very great, very great. It is a beauty such as one never sees without the peyote. The flames come up, they shoot up, and each flame divides into those colors and each color is multicolored — blue, green, yellow, all those colors. The yellow appears on the tip of the flames as the flame shoots upward. And on the tips you can see little sparks in many colors coming out. And the smoke which rises from the fire, it also looks more and more yellow, more and more brilliant.

Then one sees the fire, very bright, one sees the offerings there, many arrows with feathers and they are full of color, shimmering, shimmering. That is what one sees.<sup>58</sup>

Another related:

As darkness fell, honeycombs of green and violet threaded across my vision. The cactus still sat queasily in my stomach. ... I walked over to the wall of the roof terrace, chest-high and surmounted with pots of cactus cuttings. ... The panorama was mesmerising, and as I watched it took on the granular, hypnotic quality of a mescaline vision. The crowd [below] seemed composed entirely of young couples, gazing off the bridge or strolling arm in arm; the bridges and railings became an Escher puzzle in which all were simultaneously ascending and descending. The streetlights against the tropical night made the scene into a rich chiaroscuro, balanced on the cusp between figurative and abstract. ...

Until this vision absorbed me, I had been entirely immersed in the strange alterations in my sensorium. Now I was nowhere

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58. Barbara Myerhoff, *Peyote Hunt: The Sacred Journey of the Huichol Indians* (Ithaca, NY: Cornell University, 1974), 219.

in the scene, no more conscious of myself than when caught up in a movie. The scene in front of me might have been endless, or it might have been a short repeating loop; I had, in another familiar refrain of mescaline's subjects, stepped outside of time.<sup>59</sup>

While mescaline visions are classified as psychedelic, they are quite different from those caused by psilocybin.

*Side Effects and Dangers:* Peyote side effects include nausea, vomiting, anxiety, tachycardia (increased heart rate), dizziness, weakness, sweating, tremors, and amnesia. More severe symptoms like seizures, psychosis, panic, and paranoia are also reported.



Map showing the habitat and distribution of the Sonoran Desert toad and peyote cacti.<sup>60</sup>

## 7. *Incilius Alvarius* (*Bufo Alvarius*)

Perhaps the most interesting of these seven entheogens is derived from *Incilius alvarius*, or the *Bufo alvarius* species of toad, also referred to

59. Jay, *Mescaline*, 28–29.

60. Modified from James S. Slotkin, "Peyotism, 1527–1891," *American Anthropologist* 57, no. 2 (1955): 207; Terry et al., "Limitations to Natural Production of *Lophophora Williamsii* (Cactaceae) I. Regrowth And Survivorship Two Years Post Harvest in a South Texas Population," 665.



as the Sonoran Desert toad and Colorado River toad. The entheogen, sometimes called “toad venom,” is chemically 5-MeO-DMT, and is found in the parotid and coxal glands, as well within its skin.<sup>61</sup> There are rumors of people getting high simply from “toad licking,” but actual cases are difficult to verify and oral consumption (verses smoking dried secretions) of the psychedelic chemical is far less effective.<sup>62</sup>



**Incilius alvarius (Bufo alvarius) or Sonoran Desert toad. The parotid glands are bulging just posterior to the eye and ear orifice. (Getty images; used by permission.)**

*Geographic distribution:* “5-MeO-DMT is present in only one of the more than 200 types of *Bufo* toads,” the *Bufo alvarius*.<sup>63</sup> “It is a semi-aquatic amphibian found only in the Sonoran Desert, an area of approximately 120,000 square miles that reaches from southeastern California across the southern half of Arizona and south approximately 400 miles into

61. V. Erspermer, “5-Methoxy- and 5-hydroxyindoles in the Skin of *Bufo Alvarius*,” *Biochemical Pharmacology* 16 (1967): 1149–64.

62. See discussion in T. Lyttle et al., “*Bufo* toads and bufotenine: Fact and fiction surrounding an alleged psychedelic” *Journal of Psychoactive Drugs* 28, no. 3 (September 1996): 267–79.

63. *Ibid.*, 274.

Mexico. It is indigenous to southern Arizona and Northwestern Mexico and is not found in New England or the Midwest of the United States.”<sup>64</sup>

*Preparation and Dosing:* The parotid glands are located on the back of the toad, medial to the eyes. They are *milke*d by squeezing them and preserving the secretions, usually on a glass plate, where they are allowed to dry. One “milking session” can yield sufficient 5-MeO-DMT to allow several psychoactive doses. The process does not harm the toad, which can then be released. Alternatively, the skin can be dried and prepared for smoking, but that requires sacrificing the toad. “A single inhalation of vaporized dried toad secretion produces a psychedelic experience within 15 seconds and may last up to 20–40 minutes.”<sup>65</sup>

*Hallucinogenic Effects:* “A single dose of vapor from dried toad secretion containing 5-MeO-DMT can bring about changes in affect and cognition that last for a prolonged period of time.”<sup>66</sup> One user related her experience: “Your ego structure is dissolving, which allows your small consciousness to reunite with the big consciousness. ... It doesn’t have to do with form and content. ... 5-MeO-DMT is more about going into this tunnel of iridescent light and it is incredibly gorgeous and I would consider it much more of a sematic, meaning a body-based and heart experience, than it is a cognitive experience. ... What happened to me is I really very quickly was able to surrender to the dissolving of my ego and then was just enveloped by this sense of infinite love and compassion.”<sup>67</sup>

*Side Effects and Dangers:* 5-MeO-DMT is an amino acid derivative that occurs naturally in the body, so it does not carry the toxicities found with other entheogens. However, mistakenly consuming the secretions of another species of *Bufo* toad could be dangerous. “There are two main areas of the [human] body that *Bufo* toad [not *Bufo alvaria*] venom attacks as it poisons: the heart and blood vessels, and the peripheral vascular and nervous systems.”<sup>68</sup> One user milked the venom of the *Bufo marinus* toad in order “to experience hallucinogenic effects from the

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64. Andrew T. Weil and Wade Davis, “*Bufo alvarius*: a Potent Hallucinogen of Animal Origin,” *Journal of Ethnopharmacology* 41 (1994): 4.

65. M. V. Uthaug et al, “A single inhalation of vapor from dried toad secretion containing 5-methoxy-N,N-dimethyltryptamine (5-MeO-DMT) in a naturalistic setting is related to sustained enhancement of satisfaction with life, mindfulness-related capacities, and a decrement of psychopathological symptoms,” *Psychopharmacology* 236 (April 2019): 2654.

66. *Ibid.*, 2662.

67. Ashley Booth, “How to Build a Psychedelic Community,” The Third Wave Podcast, 17:40, <https://thethirdwave.co/podcast/episode-17-ashley-booth/>

68. Lyttle et al., “*Bufo* toads and bufotenine,” 277.

venom,” and it “resulted in seizures. He had taken the venom orally by touching the glands and then licking his fingers. It is likely that ingesting a straight maceration of the parotid glands would have caused death by cardiac failure or respiratory arrest.”<sup>69</sup>

### **Weaknesses of the Entheogen Hypothesis**

This brief review of the seven entheogens discussed in EOMWH demonstrates some of the challenges Joseph Smith would have faced using them to generate psychedelic experiences among his followers. Despite the assertions and suggestions outlined by the authors, several weaknesses are identified:

- Inaccurate chemical cause-and-effect claims.
- Inaccurate historical cause-and-effect claims.
- Joseph Smith’s “peyote stone”?
- Joseph Smith’s teachings about herbs and intoxication.
- Did visionary experiences largely cease at Joseph Smith’s death?

Latter-day Saints will also wonder if the God that is described in their doctrines and scriptures would ever work through chemicals like exogenous entheogens.

### **Inaccurate Chemical Cause-and-Effect Claims**

A primary problem throughout EOMWH involves assumptions about chemical causes-and-effects. EOMWH explains the visionary experiences in the lives of early Church leaders with wide waves of the hand towards entheogens without attempting to show that, in other settings, those entheogens have generated similar experiences for users.

### **Early Latter-day Saint Visionary Experiences**

In a recent book chapter, Alexander L. Baugh sought to “compile and analyze all of the known visions, visitations, or visual revelations experienced by the Prophet Joseph Smith.”<sup>70</sup> In all, Baugh identifies seventy-six visionary occurrences of various sorts:

Visions can take various forms. Personal visitations or appearances of deity, angels, or even Satan and his emissaries

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69. Weil and Davis, “*Bufo alvarius*,” 3.

70. Alexander L. Baugh, “Seventy-six Accounts of Joseph Smith’s Visionary Experiences,” in *Opening the Heavens*, 282.

certainly come under the heading of visions. Visions can also include seeing vivid images where the veil is lifted from an individual's mind in order to see and comprehend the things of God. Certain dreams could be considered visions, particularly when heavenly or spiritual messages are conveyed. Finally, certain revelations received through the Urim and Thummim mediums such as the Nephite interpreters and the seer stone may also be classified, in the ancient sense, as visions.<sup>71</sup>

Other early Church members left similar visionary reports. Milton Backman summarized some of the accounts from the dedication of the Kirtland Temple:

During a fifteen-week period, extending from January 21 to May 1, 1836, probably more Latter-day Saints beheld visions and witnessed other unusual spiritual manifestations than during any other era in the history of the Church. There were reports of Saints' beholding heavenly beings at ten different meetings held during that time. At eight of these meetings, many reported seeing angels, and at five of the services, individuals testified that Jesus, the Savior, appeared. While the Saints were thus communing with heavenly hosts, many prophesied, some spoke in tongues, and others received the gift of interpretation of tongues.<sup>72</sup>

Further analysis of early Latter-day Saint supernatural manifestations is beyond the scope of this article, but those experiences were described as faith-sustaining, usually communicating specific understanding. None were limited to a series of unfocused sensations or hallucinations that failed to convey religious themes.

### **Reported Entheogenic Psychedelic Experiences**

Each of the seven sections above includes a subheading called "hallucinogenic effects" with anecdotal accounts from users that describe a wide variety of psychedelic experiences. Participants were unable to *dial up* a specific encounter; they were always at the mercy of multiple variables, like the type of entheogenic chemicals consumed, the form of the preparations, the ingestion techniques, the dosages, the individual's physiology, and the surroundings. In 1966, Pahnke and Richards

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71. Ibid., 271.

72. Milton V. Backman, Jr., *The Heavens Resound: A History of the Latter-day Saints in Ohio* (Salt Lake City: Deseret Book, 1983), 285.

compiled “examples of the psychological phenomena being reported” by people taking psychedelic chemical substances, specifically psilocybin (mushrooms), mescaline (peyote) and LSD. In a lengthy summary, they identified nine typical sensations experienced by users:

1. *Unity*. Experience of an undifferentiated unity, we suggest, is the hallmark of mystical consciousness.
2. *Objectivity and reality*. Insightful knowledge or illumination about being or existence in general that is felt at an intuitive, nonrational level and gained by direct experience, and the authoritativeness or the certainty for the experiencer that such knowledge is truly or ultimately real.
3. *Transcendence of space and time*. He suddenly feels as though he is outside of time, in eternity or infinity, beyond both past and future.
4. *Sense of sacredness*. Sacredness is here defined as a nonrational, intuitive, hushed, palpitant response in the presence of inspiring realities
5. *Deeply felt positive mood*. This category focuses upon the feelings of joy, love, blessedness, and peace inherent in mystical consciousness.
6. *Paradoxicality*. This category reflects the manner in which significant aspects of mystical consciousness are felt by the experiencer to be true in spite of the fact that they violate the laws of Aristotelian logic.
7. *Alleged ineffability*. When a subject attempts to communicate mystical consciousness verbally to another person, he usually claims that the available linguistic symbols — if not the structure of language itself — are inadequate to contain or even accurately reflect such experience.
8. *Transiency*. This category refers to the temporary duration of mystical consciousness in contrast to the relative permanence of the level of usual experience.
9. *Positive changes in attitude and/or behavior*. Changes in attitudes (1) toward themselves, (2) toward others, (3) toward life, and (4) toward mystical consciousness itself.<sup>73</sup>

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73. Walter N. Pahnke and William A. Richards, “Implications of LSD and Experimental Mysticism,” *Journal of Religion and Health* 5, no. 3 (July 1966): 176–83.

When these characteristics and other details reported in the psychedelic “trips” are compared to early Latter-day Saint visionaries’ descriptions, stark contrasts are apparent. Overall, the hallucinations from entheogens seem qualitatively different in significant ways. It appears that more dissimilarities than parallels are identified, which EOMWH fails to address.

### **Inaccurate Historical Cause-and-Effect Claims**

EOMWH mentions many chronological occurrences in the life of Joseph Smith including his family’s involvement with magic (216, 221), Joseph Smith’s childhood operation (230), the Indian mission (224), the Egyptian papyri (243), freemasonry (221), and even polygamy (241). Despite so many references, another important weakness in EOMWH is the lack of correlation between the reported visionary experiences and the identification of historical details showing an association with the ingestion of entheogens.

### **Spiked Sacrament Wine and Infested Bread?**

The most popular connection, mentioned dozens of times in EOMWH, is “sacrament” bread or wine contaminated with a hallucinogenic substance. “Symptomology associated with Mormon visionary experience likely results in charges of medicating or doctoring the wine” (238). “Sacramental wine was not the only possible carrier for an entheogen enhancing early Mormon sacramental experience. We have noted the entheogenic potential of ergo infected rye, possibly mixed with the sacramental bread” (239).

With such claims, EOMWH might have sought to identify historical references to the administration of the sacrament and chronologically link them to supernatural experiences reported by early Church members. Showing a sequential connection within the historical record would have strengthened the overall thesis, but no such data is provided, possibly because it does not exist.

The six volumes of *History of the Church* covering Joseph Smith’s lifetime refer to the administration of the sacrament thirty-three times.<sup>74</sup> Only three of those include a subsequent reference to spiritual phenomena.

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74. See Joseph Smith et al. *History of the Church of Jesus Christ of Latter-day Saints*. 7 vols. edited by B. H. Roberts, ed. rev. (Salt Lake City: Deseret Book, 1960), 1: 108, 109, 115; 2: 54, 65, 69, 204, 223, 299, 304, 312, 330, 345, 363, 376, 395, 430; 3: 112, 116, 123, 129, 131; 4: 5, 6, 104, 4: 135, 139, 238, 440; 5: 419, 435; and 6: 153, 401.

[March 30, 1836, in the Kirtland Temple.] “We partook of the bread and wine. The Holy Spirit rested down upon us, and we continued in the Lord’s House all night, prophesying and giving glory to God.”<sup>75</sup>

[July 22, 1838, Rush Creek, Ohio.] “Attended to offering our sacraments to the Most High, breaking bread for the first time on our journey. . . . At our meeting in the afternoon the Lord blessed us by the outpouring of His Spirit, our hearts were comforted and most of the camp felt thankful for the blessings conferred upon us by our heavenly Father.”<sup>76</sup>

[August 26, 1838, near Dayton, Ohio] “As usual a public meeting was held in the forenoon and a sacrament meeting in the afternoon. The Spirit of the Lord was poured out on the assembly and some were convinced of the truth of what was declared unto them.”<sup>77</sup>

Likewise, Joseph Smith journals contain thirteen references to the sacrament, and with the exception of the Kirtland Temple dedication in March-April of 1836, no remarkable visionary experiences are reported in conjunction with partaking of the Lord’s Supper.<sup>78</sup> The

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75. *Ibid.*, 2: 430.

76. *Ibid.*, 3: 112.

77. *Ibid.*, 3: 131.

78. See Joseph Smith’s journals for 1835: Nov. 1, 8, 15; Dec. 13, 27. 1836: Jan. 10; Feb. 14; Mar. 29, 30. 1839: Jul 28; Aug 4, 11. 1843: Dec. 31. “Journal, 1832–1834,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-1832-1834/1>; “Journal, 1835–1836,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-1835-1836/1>; “Journal, March–September 1838,” p. 15, The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-march-september-1838/1>; “Journal, September–October 1838,” p. [3], The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-september-october-1838/1>; “Journal, 1839,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-1839/1>; “Journal, December 1841–December 1842,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-december-1841-december-1842/1>; “Journal, December 1842–June 1844; Book 1, 21 December 1842–10 March 1843,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-december-1842-june-1844-book-1-21-december-1842-10-march-1843/1>; “Journal, December 1842–June 1844; Book 2, 10 March 1843–14 July 1843,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-december-1842-june-1844-book-2-10-march-1843-14-july-1843/1>; “Journal, December 1842–June 1844; Book 3, 15 July 1843–29 February 1844,”

timelines at the temple where sacrament was sometimes provided do not show a clear correlation to subsequent visionary experiences.<sup>79</sup> No clear cause-and-effect ordering of bread/wine consumption to ensuing visionary or psychedelic phenomena is detectable in the available documents.

One of Joseph Smith's most publicized visions occurred with Sidney Rigdon where both men reported a similar manifestation. Now section 76 of the Doctrine and Covenants, it was received on Thursday, February 16, 1832. EOMWH theorizes, "As was the customary order of the priesthood at that time, Smith and Rigdon likely partook of the sacrament at the beginning of this meeting. After this vision, Sidney appeared pale and exhausted" (235). The problem is that none of the available accounts describe a sacrament meeting or the administration of the sacrament. This added detail is entirely speculative. Joseph and Sidney were translating the Bible and other men were present in the room as the vision was recounted, but it was not a formal meeting.<sup>80</sup> Even if the sacrament had been given, EOMWH fails to explain how two drugged men might receive the same highly detailed hallucination.

### Undeniable Skepticism

The historical record shows that the early Latter-day Saints were just as skeptical as we are today. If Joseph Smith were to openly or stealthily use entheogens, it is highly probable that those affected would have figured out what was going on. Mushrooms and peyote cacti are usually ingested over several minutes, and 5-MeO-DMT must be smoked to be effective.

Before ingesting hallucinogenic substances proper physical and mental preparation is usually needed to experience a positive psychedelic event. Harvard psychiatrist Walter N. Pahnke and therapist William A. Richards stress, "When subjects were given a psychedelic drug without knowing what to expect or how to respond, often being left alone in a dark room or threatened by unfamiliar researchers demanding cooperation in psychological testing, it is easy to understand why many

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The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-december-1842-june-1844-book-3-15-july-1843-29-february-1844/1>; "Journal, December 1842–June 1844; Book 4, 1 March–22 June 1844," The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-december-1842-june-1844-book-4-1-march-22-june-1844/1>.

79. See Steven C. Harper, "The Restoration of Temple Keys and Powers," in *Opening the Heavens*, 351–93.

80. Philo Dibble in "Recollections of the Prophet Joseph Smith," *Juvenile Instructor* 27, no. 10 (May 15, 1892): 303–304.



experiences quickly became psychotic. If nonpsychotic experiences are desired, subjects must be prepared, must feel secure in a friendly environment, and above all must be willing and able to trust reality greater than themselves.”<sup>81</sup>

EOMWH discusses a few events and presents a sufficient number of historical facts to imply a connection to hallucinogens (238–42), but the idiom “the devil is in the details” applies. The simplistic descriptions of the religious behaviors outlined in EOMWH do not explain what would have been a very complex process if those activities were caused by entheogens. While a few accusations of intoxication can be found from critics (223, 238, 241), no historical report from friend or foe includes details that trace the intoxication to any chemical or drug previously consumed, except perhaps ethanol. More importantly, the sensations felt at onset and the durations of potentially many hours, not to mention the variable psychotropic influences the visionaries would have experienced (including bad trips), hardly correlate to the faith-promoting manifestations reported in multiple accounts from believers.

### **Nonspecific Information Recruited to Support Focused Claims**

The methodology employed throughout EOMWH presents nonspecific information to support focused claims. For example, the article references the second edition of D. Michael Quinn’s *Early Mormonism and the Magic World View* twenty-two times. Having read and reviewed Quinn’s book multiple times, I did not recall any discussions that might directly or indirectly corroborate the use of entheogens by early Church members. Ultimately, I emailed the article to Dr. Quinn and asked whether he “had theorized any such connection.” In response, he wrote, “I have NEVER written nor spoken (even privately) in favor of their speculation. You may quote me.”<sup>82</sup> Quinn, one of the foremost experts on Joseph Smith, folk magic, and early Latter-day Saint history, finds no specific support for EOMWH theories.

### **Joseph Smith’s “Peyote Stone?”**

EOMWH alleges that Joseph Smith also used peyote: “We suggest that Joseph Smith may have negotiated with Native Americans for the delivery of peyote to Nauvoo for the Nauvoo temple endowment”

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81. Pahnke and Richards, “Implications of LSD and Experimental Mysticism,” 188.

82. D. Michael Quinn to the author, April 6, 2020; emphasis in original. Used by permission.

(228). “Joseph Smith may have attempted to plant a Mormon–Indian colony in the heart of peyote country, where his colony could harvest thousands of peyote buttons, just what the thousands of Nauvoo saints would need if peyote was the entheogen used in the completed Nauvoo temple” (243–44). To complete this scheme, Joseph apparently needed an accomplice: “When Joseph Smith sent Lyman Wight to Texas to establish Mormon colonies, he would have been in contact with both the source of peyote and Native Americans expert in its use” (228), and “Wight could easily carry 20,000 peyote buttons weighing 60 pounds to Joseph Smith in Nauvoo” (247).

Regarding Lyman Wight’s possible involvement with peyote, I emailed Melvin C. Johnson, the author of *Polygamy on the Pedernales: Lyman Wight’s Mormon Villages in Antebellum Texas, 1845 to 1858*, a book that is referenced several times in the article (243, 247). To my question of whether his research had uncovered any evidence or anecdotal support for Wight’s involvement with peyote, Johnson replied, “As far as Lyman Wight and his confederates, not a breath of implication exists for any such connection of that group of far travelers and any connection to psychedelics.”<sup>83</sup> In summary, detailed research into Lyman Wight’s Texas travels fails to support EOMWH’s speculations regarding peyote use.

Perhaps more intriguing is the unveiling of an artifact allegedly owned by Joseph, which the authors describe as “Joseph Smith’s peyote stone.” EOMWH draws this conclusion by accepting four assumptions:

1. The stone “was handtooled by a Native American familiar with peyote” (246).
2. Joseph Smith acquired it from travelers who transported it to Nauvoo from peyote country in Texas.
3. At Joseph’s demise, the stone passed to Emma Smith, then to Lewis C. Bidamon (1806–1891), whom she married in 1847. Lewis then passed it to his son Charles Bidamon (1864–1944), who delivered it to a half-sister, Mary E. Abercrombie (1859–1942), who passed it to a member of her family (Sarah Luce?), who then sold it to Latter-day Saint collector Wilford Wood in 1943.<sup>84</sup> Throughout these transfers the provenance back to Joseph Smith was not contrived, but accurately retained within the family tradition.

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83. Melvin Johnson, email to the author April 11, 2020; used by permission.

84. D. Michael Quinn, *Early Mormonism and the Magic World View*, 2nd ed. (Salt Lake City: Signature Books, 1998), 246–47.

4. The stone's tooled design resembles a peyote plant: "The stone is smooth in texture with a hole through the center surrounded by eight smaller indentations of alternating sizes where the central flower and tufts of the peyote button have been cored out. It is comparable to [an] eight-lobed peyote button. ... The coin-like ridged circular edge of Smith's stone not seen on the peyote button signifies the visionary nature of peyote."(244–45).



**Stone identified in EOMWH as “Joseph Smith’s peyote stone.”**

Accepting all four of these assumptions with the veracity found in EOMWH seems unjustified.<sup>85</sup> The article refers to “peyote” 141 times and “Joseph Smith’s peyote stone” five times without providing a single historical reference that verifies an actual connection to any Church member, including Joseph. Perhaps the greatest leap of logic is seeing a peyote cactus in the stone’s design. Such cacti may have from 5 to 13

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85. Quinn uses conditional language when tying the stone described in EOMWH as “Joseph Smith’s peyote stone” to Joseph saying that one of the two stones found in Nauvoo “was *probably* used to manufacture” it and that the stone is only “attributed to Smith” rather than solidly documented to be his. (Quinn, *Early Mormonism and the Magic World View*, 246–47; italics added.)

ribs (not strictly eight), and the edges of the plant do not resemble the purposefully sculpted edges of the stone.

### Joseph Smith's Teachings About Herbs and Intoxication

Joseph Smith's belief in the usefulness of herbs to treat illnesses is well documented.<sup>86</sup> EOMWH advocates he also promoted their use as entheogens and that he and other observers would have identified their effects as being spiritual, rather than intoxicating.

### The Word of Wisdom

Three of Joseph Smith's revelations mention the use of herbs:

And whosoever among you are sick, and have not faith to be healed, but believe, shall be nourished with all tenderness, with herbs and mild food, and that not by the hand of an enemy. (D&C 42:43)

Yea, and the herb, and the good things which come of the earth, whether for food or for raiment, or for houses, or for barns, or for orchards, or for gardens, or for vineyards; Yea, all things which come of the earth, in the season thereof, are made for the benefit and the use of man, both to please the eye and to gladden the heart. (D&C 59:17–18)

And again, verily I say unto you, all wholesome herbs God hath ordained for the constitution, nature, and use of man — Every herb in the season thereof, and every fruit in the season thereof; all these to be used with prudence and thanksgiving. (D&C 89:10–11)

The last scripture (D&C 89:10–11) is an excerpt from a longer revelation discussing health issues, called the "Word of Wisdom." It is

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86. See Andrew F. Ehat, and Lyndon W. Cook, eds. *The Words of Joseph Smith: The Contemporary Accounts of the Nauvoo Discourses of the Prophet Joseph Smith* (Provo, UT: BYU Religious Studies Center, 1980), 76; Joseph Smith's journal entries for October 7, 1835 ("Journal, 1835–1836," p. 5, The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-1835-1836/6>); December 14, 1835 ("Journal, 1835–1836," p. 67, The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-1835-1836/68>) and December 15, 1843 ("Journal, December 1842–June 1844; Book 3, 15 July 1843–29 February 1844," p. [198], The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-december-1842-june-1844-book-3-15-july-1843-29-february-1844/204>).

referenced throughout EOMWH (214, 215, 231, 249, 251), each time as evidence that Joseph Smith taught that entheogens were acceptable.

Ironically, nowhere in EOMWH is an earlier verse (D&C 89:7) mentioned: “And, again, strong drinks are not for the belly.” What is a “strong drink”? The *Oxford English Dictionary* defines “strong drink” as “intoxicating liquor, alcoholic liquors generally.” It further defines *strong* medicine, food or drink as being “powerful in operative effect.”<sup>87</sup> Since chronic alcohol consumption can produce hallucinations including auditory illusions, it is similar to entheogens in this regard.<sup>88</sup>

### Consistent Condemnation of Intoxication and Drunkenness

Throughout his life, Joseph Smith consistently condemned intoxication and drunkenness. On March 11, 1836, he prayed, “O my God how long will this monster intemperance find its victims on the earth?”<sup>89</sup> In a letter dated December 16, 1838, he cautioned, “Brethren from henceforth let truth and righteousness prevail and abound in you, and in all things be temperate, abstain from drunkenness.”<sup>90</sup> Three years later Joseph wrote an editorial published in the Church’s newspaper, *Times and Seasons*, saying, “Thank God, that the intoxicating beverage, that bane of humanity in these last days, that [blank space] what shall we call it? devil? is becoming a stranger in Nauvoo.”<sup>91</sup>

In the early nineteenth century, *intemperance* meant “immoderate indulgence in intoxicating drink; addiction to the use of intoxicants.”<sup>92</sup> Likewise, *drunkenness* was defined as “intoxication of the mind or spirit” and *intoxication* as “the action of rendering stupid, insensible, or disordered in intellect, with a drug or alcoholic liquor.”<sup>93</sup> Whether individuals exposed to psychedelics would outwardly appear intoxicated (and worthy of criticism), or simply under the influence of God’s Spirit

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87. *The Compact Edition of the Oxford English Dictionary*, s.v. “Strong Drink” (Oxford, UK: Oxford University Press, 1971), 2:3102–103.

88. Robert S. Porter, ed. *The Merck Manual*, 19th ed. (Whitehouse Station, NJ: Merck Sharp & Dohme, 2011), 1684.

89. Joseph Smith, “Journal, 1835–1836,” The Joseph Smith Papers, <https://www.josephsmithpapers.org/paper-summary/journal-1835-1836/170>.

90. Joseph Smith, “Communications” [Liberty Jail, Missouri, Dec. 16, 1838], *Times and Seasons* 1, no. 6 (April 1840): 86

91. Joseph Smith, ed. “Celebration of the Anniversary of the Church . . .” *Times and Seasons* 2, no. 12 (April 15, 1841): 377.

92. *The Compact Edition of the Oxford English Dictionary*, s.v. “Intemperance,” 1:456.

93. *Ibid.*, s.v. “Drunkenness,” 1:810, 1472.

(and divinely blessed) is an old question. The day of Pentecost when the Spirit induced proselytes to “speak in our tongues the wonderful works of God” brought accusations that “these men are full of new wine” (Acts 2:11, 13). EOMWH documents similar claims against the Latter-day Saints (214, 238).

As discussed above, if early adherents ingested mushrooms or other entheogens as described in EOMWH, their outward behaviors would probably have generated questions of whether the Spirit or intoxication were responsible. “The bemushroomed are famously prone to hysterical fits of the giggles,” explains Andy Letcher. “For ordinary and mundane aspects of life are seen in a new, childlike and very often comic light. One habitué told me how she was once overcome with gales of laughter when the moles and freckles on her arm got up and danced away ... intoxicated people behaved strangely and ridiculously (although it was claimed that this was all at the behest of the mushroom spirits whose orders could not be gainsaid). The bemushroomed might leap about, blather uncontrollably, or even stand stock still pretending to be, well, a mushroom.”<sup>94</sup>

A repeated weakness of EOMWH describes entheogens as causing unique sensations that participants consistently attributed to God. Early members are portrayed as incapable of detecting a chronological association between mind-altering phenomena and the previous partaking of plants or secretions, if even packaged as sacramental wine or bread. The possibility that Joseph Smith and other devotees would have considered entheogen-induced consequences as intoxication or drunkenness is not addressed in EOMWH.

### **Visionary Experiences Ceased at Joseph Smith’s Death?**

One of the supportive evidences presented in EOMWH is that “[v]isionary experiences of the magnitude experienced during Joseph Smith’s life ceased at his death” (214). If Joseph actively implemented entheogens that subsequent leaders, like Brigham Young, did not employ, then the visionary experiences flowing from those chemicals would almost instantly diminish at Joseph’s death.

The historical record supports that the level of Joseph Smith’s personal visions, revelations, translations, and other supernatural phenomena exceeded that of his successors. Joseph’s unique responsibility in these latter-days had been prophesied: “A choice seer will I raise up out of the

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94. Letcher, *Shroom*, 18, 134.

fruit of thy loins; and he shall be esteemed highly among the fruit of thy loins. And unto him will I give commandment that he shall do a work for the fruit of thy loins, his brethren, which shall be of great worth unto them, even to the bringing of them to the knowledge of the covenants which I have made with thy fathers” (2 Nephi 3:7). As this “choice seer,” Joseph Smith Jr. was tasked with responsibilities no other Church president ever expected. He received the keys necessary to “restore all things” (D&C 132:45; see also 40). Once the “keys of the kingdom of God” had been successfully “committed unto man on the earth” (D&C 65:2), subsequent prophets were called to fill a different role, but spiritual gifts continued. Brigham Young, for example, manifested many spiritual blessings. D. Michael Quinn explained:

One of the recurring themes in non-Mormon biographies of President Brigham Young is the idea that he was not a very “spiritual” man. Such interpretations, however, not only misrepresent his character, they also totally disregard the evidence, both published and unpublished, that refutes such a stereotype. For example, throughout his life Brigham Young had personal experience with many of the divine gifts of the Spirit.<sup>95</sup>

Claims that visionary experiences among the Latter-day Saints have diminished since 1844 might reflect the naiveté of the authors. Such sacred experiences continue to occur, but members are under a “strict command” to not publicize them, because “that which cometh from above is sacred, and must be spoken with care” (Alma 12:9; D&C 63:64).

### **Could Entheogens Facilitate Access to the True God?**

Many users of psychedelics relate that, at times, the chemicals induce a feeling of intense love and compassion. One user stated, “Life reduced itself over and over again to the least common denominator. I cannot remember the logic of the experience, but I became poignantly aware that the core of life is love.”<sup>96</sup> Others report a connection with the divine:

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95. D. Michael Quinn, “Brigham Young,” *Ensign* (August 1977), <https://www.churchofjesuschrist.org/study/ensign/1977/08/brigham-young-man-of-the-spirit>.

96. Richard Yensen and Donna Dryer, “Thirty Years of Psychedelic Research: The Spring Grove Experiment and its Sequels” (Conference paper, Conference: European College of Consciousness (ECBS) International Conference: Worlds of Consciousness, Göttingen, Germany, September 1992), 5, [https://www.researchgate.net/publication/309477954\\_Thirty\\_Years\\_of\\_Psychedelic\\_Research\\_The\\_Spring\\_Grove\\_Experiment\\_and\\_Its\\_Sequels](https://www.researchgate.net/publication/309477954_Thirty_Years_of_Psychedelic_Research_The_Spring_Grove_Experiment_and_Its_Sequels).

“I was experiencing directly the ... unbroken and infinite light of God, the light then breaks into forms and lessens in intensity as it passes through descending degrees of reality.”<sup>97</sup> “Archetypal imagery may appear, and one thus finds oneself encountering mythological characters such as angels, demons, dragons, and Grecian gods. On the boundary of mystical consciousness, it is not uncommon for Christians to encounter an image intuitively identified as the Christ.”<sup>98</sup>

### Connecting with the Ultimate Reality

A 2019 study evaluated “[n]aturally occurring and psychedelic drug–occasioned experiences interpreted as personal encounters with God.”<sup>99</sup> It surveyed reports of such “God encounters” through non-drug related experiences presumably by religionists, as well as those obtained among three groups of psychedelic users (psilocybin, LSD, and DMT).<sup>100</sup> An interesting finding is that through their psychedelic-induced experiences, many participants felt a connection, not with a monotheistic God, but with a more transcendent force the researchers called the “ultimate reality,” causing a significant portion to move away from atheism but not necessarily into a belief in God as understood by Jews, Christians, or Muslims.

Items <sup>101</sup>	Non-drug	Psilocybin	LSD	DMT
<b><i>Best descriptor of that which was encountered</i></b>				
God (the God of your understanding)	41%	16%	19%	16%
Ultimate Reality	26%	57%	59%	48%
An aspect or emissary of God (e.g., an angel)	18%	9%	6%	12%
<b><i>Identification as atheist (percentage of group)</i></b>				
Before the experience	3%	21%	22%	25%
After the experience	1%	9%	9%	7%

97. Pahnke and Richards, “Implications of LSD and Experimental Mysticism,” 179.

98. *Ibid.*, 185.

99. Roland R. Griffiths et al., “Survey of subjective “God Encounter Experiences”: Comparisons Among Naturally Occurring Experiences and Those Occasioned by the Classic Psychedelics Psilocybin, LSD, Ayahuasca, or DMT” *PLoS ONE* 14, no. 4 (April 23, 2019), <https://doi.org/10.1371/journal.pone.0214377>.

100. *Ibid.*, 2, 4.

101. Modified from *ibid.*, 13, 18.



Items <sup>101</sup>	Non-drug	Psilocybin	LSD	DMT
<b><i>Identification with major monotheistic tradition</i></b>				
Before the experience	47%	12%	15%	7%
After the experience	41%	8%	9%	5%
<b><i>Identification as Other (not atheist or major monotheistic tradition)</i></b>				
Before the experience	50%	68%	62%	68%
After the experience	59%	84%	82%	88%

## Joseph Smith on Knowing God

Within the context of Joseph Smith's teachings, psychedelic chemicals do not produce visions of the true God or Christ. Interactions with the divine are sacred and occur according to personal worthiness and to God's timetable; they "shall be in his own time, and in his own way, and according to his own will" (D&C 88:68; see also 67:10 and 93:1). They are not under the control of mortals choosing to ingest entheogens.

The sensations and psychotropic experiences that flow from chemical substances, including alcohol (ethanol) or the psychedelics, would likely be labelled intoxication and denounced. Whether the hallucinations arise purely from the physiological effects of the chemicals or give the adversary (and false spirits) enhanced power over the spirit of the user is less clear. Our mortal bodies are naturally "subject to the will of the devil" (D&C 29:40), and Joseph warned that "there are many spirits which are false spirits, which have gone forth in the earth, deceiving the world. And also Satan hath sought to deceive you, that he might overthrow you" (D&C 50:2-3). Outsourcing the control of our minds to any substance might increase Satan's influence over us.

## Conclusion

EOMWH presents an interesting theory that the visionary experiences of Joseph Smith and the early Saints resulted from entheogenic ingestion. Sustaining this view, the authors present general observations and a few selected reports along with many conjectures.

The idea that Joseph Smith was a highly advanced herbalist and mycologist who could correctly distinguish psychedelic mushrooms and from death caps and then appropriately prepare the entheogens to obtain the expected hallucinations is historically unsupported. The learning curve to obtain such expertise for most of the seven entheogens

would be steep and time-consuming. Overall, there is no evidence that mushrooms, cacti, other plants, or toad secretions were sought, harvested, prepared, or consumed by the first generation of believers or any thereafter.

An additional concern is that the psychedelic influences of drugs like psilocybin, mescaline, and 5-MeO-DMT are very different from the extra-worldly experiences mentioned by early Latter-day Saints that were described as faith-promoting and uplifting. It is likely that Joseph Smith would have condemned many of the behaviors arising from entheogen ingestion as intoxication.

A growing trend among secularists is to provide naturalistic explanations for religious phenomena. Claims that exogenous chemicals can duplicate the spiritual experiences described by religionists remain unverifiable, because spiritual sensations are so personal to the individual. However, as a believer and researcher who has read multiple accounts describing entheogen effects, I detect remarkable differences.

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