

The Soma Question: Interrogating the History of Psychedelics with Sanskrit Mantras¹

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ABSTRACT:

Historical narratives tell us as much about the present as they do about the past—and the grand narrative of psychedelics in the ancient world is no exception. “What is *soma*?”² is a perennial question for historians of psychedelics as they investigate this mysterious psychoactive sacrament of early India. Documented in Sanskrit texts starting in the late Bronze Age, it is reputed to be among the oldest and most venerable psychedelics—yet the material substance of *soma* remains unidentified. Although *soma*’s fame in modernity arises from scholarly engagement with Sanskrit texts,³ the resulting narrative of psychedelic history reveals more about the twentieth-century discourse on plants and drugs than it does about the original Indian sources. This essay interrogates the history of psychedelics through the historiography of the *soma* question.

What is *soma*?

James McHugh, a historian of alcohol and drugs, distills the *soma* debate in his recent book on alcohol and drink in South Asia, where he disproves the notion that *soma* was some kind of alcoholic concoction.⁴ McHugh doubts that *soma* was a psychedelic on the grounds that material evidence is lacking to conclusively link it with a *bona fide* psychedelic substance—or with *any* substance, for that matter. Paraphrasing a scholar of Stonehenge about that site’s shifting meanings over time, McHugh wryly notes: “Every generation has the *soma* it

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² The Sanskrit term *soma* should not be confused with the etymologically unrelated Greek *soma*, meaning “body,” as used in medical parlance.

³ A prime example: Huxley took inspiration from Sanskrit literature in conceiving the drug Soma in *Brave New World*.

⁴ James McHugh, “*Soma*, Ancient Drugs, and Modern Scholars.” In *An Unboly Brew: Alcohol in Indian History and Religions* (Oxford University Press, 2021), 289-95.

deserves—or desires.”⁵ This observation contains the kernel of a trenchant historiographic critique: over the past hundred years, every decade has elevated a material candidate for *soma* that aligns with the defining drug of its era. *Soma* was alcohol up through the swinging 1920s, cannabis leading into the reefer madness of the 1950s, then various magic mushrooms in the trippy 1960s and ‘70s, the stimulant ephedra in the speedy 1980s, and finally ayahuasca analogues from the 1990s forward, when the so-called “psychedelic renaissance” took flight in the Global North.⁶ This psychoactive role call tracks with increasing openness towards drugs in Europe and North America, the expansion of scientific knowledge, and trends in pharmacology and culture.

This critique interrogates not only *soma* scholarship but also the viability of “psychedelic” as a category of historical inquiry. A Greek neologism coined by psychiatrist Humphry Osmond in correspondence with Aldous Huxley, often glossed as “mind-manifesting,” the term has attained global currency thanks to evangelists ranging from Timothy Leary to Michael Pollan. “Psychedelic” remains the most widely accepted moniker for the fuzzy grouping of hallucinogenic and psychoactive drugs, from LSD to magic mushrooms to ayahuasca, popularized in Euro-American counterculture—and now celebrated as spiritual (and often, medical) panaceas. With reservations, I use the term psychedelic here to probe the limitations of the analytic category itself when applied to early India. I propose that we use the Indigenous categories of mantra and ritual to reframe the *soma* question rather than botanical speculations shaped by our own times. Instead of asking, “What is *soma*,” I ask: how was *soma* used in Vedic rituals? How did *soma* transform the ritual practitioner’s sensory experience? And what can this tell us about *soma*’s place in the history of psychedelics?

Vedic *soma*

The Sanskrit *Vedas*, founding texts of Hinduism, were orally composed from the late second millennium to the early first millennium BCE, passed down in oral traditions of the Brahmin priesthood, and later preserved in manuscripts and printed books. Vedic texts describe the sacramental use of *soma*, a ritual drink pressed from a plant of the same name, said to confer power, inspiration, immortality, and access to altered states and divine visions. Despite ample textual description of its myth and ritual, there is no academic consensus as to what Vedic *soma* was as a substance.

The mystery of *soma* has animated Western investigations of psychoactive plants and fungi since the nineteenth century. Psychonauts, ethnobotanists, philosophers, and historians have sought out *soma*’s botanical identity, although, as Wendy Doniger O’Flaherty presciently observed in 1968, “the effort to identify the Soma plant...[has] resulted in considerably more confusion than clarification.”⁷ The shifting candidates proposed for the authentic *soma* of Vedic India have neatly paralleled the drug zeitgeist of the twentieth century. The *soma* of the ancient past is thoroughly entangled with science and culture in the present.

In Vedic traditions, *soma* is at once a male god, a plant, and a ritual beverage. Known by the epithet *amṛta*, meaning ‘immortal’ or ‘immortality,’ it is a divine elixir, comparable to

⁵ McHugh, “*Soma*, Ancient Drugs, and Modern Scholars,” 289.

⁶ Michael Pollan, *How to Change Your Mind: What the New Science of Psychedelics Teaches Us About Consciousness, Dying, Addiction, Depression, and Transcendence* (Penguin Press, 2018); for a critique of the renaissance framing, see Keith Williams, et al. “Indigenous Philosophies and the ‘Psychedelic Renaissance.’” *Anthropology of Consciousness*, 33, no. 2 (2022): 506–27.

⁷ The classic study on the *soma* question remains Wendy Doniger O’Flaherty, “The Post-Vedic History of the Soma Plant,” part two in R. Gordon Wasson, *Soma: Divine Mushroom of Immortality* (Mouton, 1968).

the cognate *ambrosia* in ancient Greece.⁸ Vedic gods were not immortal in the beginning; they had to earn their immortality by sacrificing with *soma* as the sacrament. The word *soma*, derived from the verb ‘to press,’ refers to this ritual preparation. Humans undertook their own sacrifices, pounded *soma*, soaked it overnight, pressed it with stones, strained its juice through sheep wool, and mixed it with milk, honey, or barley. Brahmin priests drank the beverage in rounds interspersed by mantra chanting and fire offerings.

The *R̥gveda*, the oldest religious poetry of India (“Knowledge of Verse,” ca. 1200 BCE), contains many hymns about *soma*. But these do not document *soma* botanically beyond referring to its stalks, stems, and knots, its yellowish-red hue, and the bitter taste of its juice.⁹ Mythologically, the god Soma is all-powerful, the source of strength and inspiration. He defends against hatred, evil, and misfortune. He is a panacea, curing the sick and healing the lame.¹⁰ But Vedic *soma* is best known to modernity for its invigorating, ecstatic, and even visionary effects. Here, the poetic testimony is compelling but scanty—only a few hymns address how it makes you feel. Its effects are compared to flying, seeing long distances, becoming immortal, reaching the light, and finding the gods.

Versions of the Vedic *soma* sacrifice are still performed by the Brahmin priesthood in parts of India today. As ancient Brahmins migrated from the Vedic heartland to other regions, they substituted other plants in *soma* preparations. The *soma* beverage today is prepared with ritual techniques based on those from the past, but neither its ingredients nor its effects are the same as in antiquity.¹¹ *Soma* substitutes today—plants in the *sarcostemma* or *cynanchum* genera—are used variously in Indian medicine but may be narcotic and mildly toxic.¹²

***Soma* in modern scholarship**

The academic debate about *soma*’s botanical identification has continued on a low boil throughout the twentieth century, flaring up every decade or so. One survey tallies more than a hundred botanical candidates.¹³ Some, like *ephedra* or *amanita muscaria*, have led the field for many years. Others, like mead, are no longer seriously considered. Drawing on the exhaustive surveys of Wendy Doniger and Matthew Clark,¹⁴ I consider below the most prominent of these candidates, including the psychoactive constituents in play.

In the late nineteenth century, *soma* was presented as an Indian substitute for mead, an alcoholic drink made from fermented honey, evoking the Indo-European past.¹⁵ This same

⁸ J. P. Mallory and Douglas Q. Adams, “Sacred Drink,” *Encyclopedia of Indo-European Culture* (Fitzroy Dearborn, 1997), 494-96.

⁹ Wasson, *Soma: Divine Mushroom* collects the passages from the *R̥gveda* containing possible botanical evidence.

¹⁰ The scholarly literature on the myth and ritual of *soma* is prodigious and amply documented in numerous publications. See, e.g., Doniger, “Post-Vedic History of the Soma Plant;” David Stophlet Flattery and Martin Schwartz, *Haoma and Harmaline: the Botanical Identity of the Indo-Iranian Sacred Hallucinogen “soma” and Its Legacy in Religion, Language, and Middle-Eastern Folklore* (University of California Press, 1989); Jan E. M. Houben, “The Soma-Haoma Problem: Introductory Overview and Observations on the Discussion,” *Electronic Journal of Vedic Studies* 9, no. 1 (2003); and Matthew Clark, *The Tawny One: Soma, Haoma, and Ayabhuasca* (Muswell Hill Press, 2017).

¹¹ Frits Staal, et al., *Agni, the Vedic Ritual of the Fire Altar* (Asian Humanities Press, 1983), 105-13.

¹² On *soma* in modern Vedic sacrifice, see Houben, “Soma-Haoma Problem;” on *soma* in classical Ayurveda, see Dominik Wujastyk, *The Roots of Ayurveda: Selections from Sanskrit Medical Writings* (Penguin Books, 2003), 76-77, 125ff.

¹³ Harri Nyberg, “The Problem of the Aryans and Soma: the Botanical Evidence,” in *The Indo-Aryans of Ancient South Asia: Language, Material Culture and Ethnicity*, edited by George Erdosy (Walter de Gruyter, 1995), 382-406.

¹⁴ Doniger, “Post-Vedic History of the Soma Plant” and Clark, *The Tawny One*.

¹⁵ On mead in South Asia, see McHugh, *An Unholy Brew*.

period saw advances in the study of Zoroastrian traditions, the leading pre-Islamic religion of early Iran, which emerged from the same Indo-Iranian background as Vedic traditions. Zoroastrian *haoma* is a ritual beverage whose name in the Avestan language is cognate with Vedic *soma*. Ethnographic evidence in Iran suggested *ephedra dystachia* as the true *soma*.

New candidates were proposed throughout the early twentieth century. Familiar alcoholic drinks were suggested: beer from dates or barley and wine from grapes. Cannabis gained attention, especially *bhanga*, a preparation of milk and parts of the cannabis plant, consumed even today by Hindu ascetics in India. By the 1950s, several plants in the *ephedra* genus came back on the radar. These contain psychoactive alkaloids, including the stimulants ephedrine and pseudoephedrine. Ephedra has long been the favored candidate of many leading historians of early India, championed most persuasively by Harry Falk.¹⁶

In the 1960s, in the wake of his vaunted “discovery” of psilocybin mushrooms in Mexico, R. Gordon Wasson put forward the *amanita muscaria* mushroom as the true *soma*. Commonly known as the fly agaric, this red-and-white spotted mushroom often depicted in fairy tales contains muscimol and ibotenic acid. Wasson rejected psilocybin mushrooms as *soma* because he doubted they grew in India, but mycologists today have identified numerous varieties on the subcontinent. *Soma* was linked to psilocybin-containing mushrooms starting in the 1970s; however, when Terence McKenna argued for the *psilocybe cubensis*, citing its visionary quality.¹⁷

In the 1980s, David Flattery and Martin Schwartz argued that the Syrian rue plant, *peganum harmala*, was widely used in premodern Iran in *haoma* rituals. Rue contains the alkaloids harmine and harmaline, psychoactive substances in their own right that also metabolize dimethyl terephthalate, popularly known as DMT.¹⁸ When combined with DMT-containing plants in a manner analogous to the preparation of Amazonian ayahuasca, rue could make a potent psychedelic brew. The notion that *soma* was not a single substance but several started to take hold in the decades following. In the 2010s, scholars argued that an ayahuasca analogue could have been made from Indian flora; Matthew Clark has recently argued that such a preparation might have been *soma*. Another plant combination suggested in the 1990s was opium poppy, cannabis, and ephedra, traces of which have been reported on altars of the late-Bronze Age Bactriana-Margiana Archeological Complex in Central Asia. Given that material evidence for Vedic and Indo-Iranian traditions is sparse, this is a potentially significant—though highly contested—discovery.¹⁹ Other candidates for *soma* debated during the past century include intoxicating mint, rhubarb, lotus root, ginseng, and more.

***Soma* as the ur-psychedelic**

The more we learn, the less sure we become about what *soma* was or might be. As McHugh points out, every generation fixates on a different candidate influenced by the contemporary scientific and cultural zeitgeist. *Soma* has become a floating signifier of the ur-psychedelic. The plants and fungi linked to *soma* have different constituents and divergent cultural histories. They are all psychoactive, but their biochemistry and effects on human consciousness differ. Societies have interpreted these substances using distinctive hermeneutics and cultural logics. Apart from their role in academic debates about *soma*, in other words, little binds these plants and fungi together or warrants their collective grouping as psychedelics.

The idea that *soma* was a psychedelic is entangled with attempts to place today’s psychedelic renaissance on an ancient foundation. Vedic sacrifice furnishes the category of

¹⁶ Harry Falk, “Soma I and II,” *Bulletin of the School of Oriental and African Studies* 52, no. 1 (1989): 77–90.

¹⁷ McKenna, *Food of the Gods* (Bantam Books, 1992), 158–91.

¹⁸ Flattery & Schwartz, *Haoma and Harmaline*, 105–140.

¹⁹ Victor Sarianidi, *Margiana and Proto-Zoroastrianism* (Kapon Editions, 1998); see also Houben, “The Soma-Haoma Problem,” 26–27.

psychedelics with a venerable pedigree in much the same way that the Eleusinian mysteries of ancient Greek religion do...²⁰ All of this tends to affirm the value of psychedelic substances for today's users and practitioners. Yet it distracts from the critical investigation of how *soma* was deployed, experienced, and interpreted in Vedic India—thereby clouding our best chance of understanding what *soma* actually was.

Soma and *mantras* in Vedic sacrifice

Soma, more than a plant or mushroom, was the central sacrament in India's oldest and most elaborate tradition of sacrifice. Although the long search for *soma*'s botanical identity has been inconclusive, there are other avenues to explore. I now outline a path of study leading back to *soma*'s primary domain: ritual.²¹ Recall that the word *soma* is indicative of its being pressed for use in Vedic sacrifice. Alongside the *soma* sacrament, a defining feature of such rituals is the chanting of *mantras*, sacred utterances, and incantations believed to transform reality. Drawing on Vedic texts, we can reconstruct the soundscapes produced by *mantras* during the pressing and drinking of *soma*. I propose that we examine the aesthetics of sacrifice more closely as crucial evidence in considering the *soma* question.

The liturgies of the *soma* sequence consist of two kinds of *mantra*, the verses of the *R̥gveda* and the melodies of the *Sāmaveda* (“Knowledge of Melody,” ca. 1000 BCE). As the oldest Vedic text, the *R̥gveda* has been exhaustively mined for its poetic descriptions of the *soma* plant, the drink, and its effects on consciousness. By contrast, the *Sāmaveda* has been virtually ignored. This is strange because while *R̥gvedic* mantras are chanted in many different Vedic rites, *Sāmavedic* mantras occur almost exclusively during the pressing and drinking of *soma*. In ritual terms, therefore, *soma* and *Sāmaveda* have an intrinsic connection.

Aesthetically, Sāmaveda always privileges sound over sense. Some Sāmavedic chants derive their lyrics by breaking up, extending, repeating, and distorting Ṛgvedic verses, thus transforming meaningful poetry into non-verbal sequences of vocal sound. Some chants do not use Ṛgvedic material at all; rather, their lyrics consist of “praise syllables” (*stobhas*). These are phonemes and utterances with no semantic meaning—what linguists and musicologists would call “non-lexical vocables.”²² In Sāmavedic parlance, such syllables are deemed “unexpressed” (*anirukta*) because their semantic content is hidden. Consider this example, prefaced by the sacred syllable *om̐* and the keyword *vāc* (“speech”):

om speech, *bhaḥbhubhaḥbhibhabhebbhabhabhḥbhaḥbhabhabhabhabhabhabh*

Another chant, sung while facing the rising sun contains no meaningful words at all:

²⁰ Wasson et al, *Persephone's Quest: Entheogens and the Origins of Religion* (Yale University Press, 1986); Clark, *The Tawny One*.

²¹ The best point of departure for studying the *soma* sacrifice based on Vedic ritual texts is Willem Caland and Victor Henry, *L'agniṣṭoma: description complète de la forme normale du sacrifice de soma dans le culte védique* (E. Leroux, 1907). On the *soma* ritual according to the *R̥gveda*, see the introductory remarks to the *soma* hymns in Karl Geldner, *Der Rig-Veda: aus dem Sanskrit ins Deutsche übersetzt und mit einem laufenden Kommentar versehen* (Dept. of Sanskrit and Indian Studies, Harvard University, [1951] 2003); and in Stephanie Jamison and Joel Brereton, trans. *The R̥gveda: The Earliest Religious Poetry of India* (Oxford University Press, 2017).

²² See, e.g., Christine Knox Chambers, "Non-Lexical Vocables in Scottish Traditional Music" (PhD dissertation, University of Edinburgh, 1980).

*o vā o vā o vā bum bhā o vā*²³

We do not know why priests chanted sequences like these during *soma* sessions but did not chant them at any other time during the multiday sacrifice. There must be a connection between nonsemantic sound and the sensory experience of *soma* consumption. The *sāmans* were sung while the priests were drinking *soma* and, presumably, feeling its effects. It stands to reason that the chants served to cultivate this altered state of consciousness; they may even have been composed by priests under *soma*'s influence.

A noted Vedic aphorism on ritual speech says: “Gods love the hidden.”²⁴ In other words, the gods prefer esoteric speech that defies linguistic conventions or lacks lexical meanings entirely. Divine language is unintelligible to most humans, save sages and initiated practitioners. In Vedic discourse, obscurity is a marker of potency and transcendence. Chanting *sāmans* while drinking *soma* may have been a strategy for communing with the gods through the arcane soundscapes of sacrifice.

Sāmavedic aesthetics and psychedelic soundscapes

Sāmavedic aesthetics can be compared cross-culturally with other vocal chants inspired by psychoactive substances, where analogous soundscapes are in evidence.²⁵ Beyond Vedic India, the sound of language—as opposed to its semantic meaning—is crucial to rituals using psychoactive plants and fungi. As in traditions of magic and sorcery around the world, distorted and non-semantic forms of speech are often privileged in these contexts. In psychedelic soundscapes, practitioners may speak differently, hear speech in arcane forms, or otherwise engage with supernatural entities through sound and listening. Speech different from everyday speech is one of the primary conduits for the knowledge, revelation, and power that psychedelic experiences are often said to afford.

Practitioners of psychedelic rites in the Americas, for instance, frequently incorporate non-semantic syllables into their chants and songs. The peyote songs of the Native American Church are built around non-lexical vocables and performed to accompany the peyote sacrament.²⁶ Traditional ayahuasca practitioners in South America report a high incidence of non-lexical vocables in the speech of the other-than-human entities they encounter during their psychedelic journeys. Non-semantic utterance in Amazonian mestizo shamanism is a special form of communication between practitioners and spirits; it is considered the language of the plant-beings accessed through ayahuasca.²⁷ As Stephan Beyer's ethnographies show, such shamans report the strange utterances of outer-space entities who sound like computers or speak in the non-human languages of plants and animals—all of which may then be embedded in the lyrics of their songs.

Was *soma* a psychedelic? Much more work remains to be done to mount a direct comparison between *soma* chants in India and those of contemporary psychedelic traditions in

²³ The first excerpt is from the “flank praise-song” (*pr̥sthastotra*) in the Kauthuma-Rāṇāyānīya school of *Sāmaveda*; see Caland and Henry, *L'agniśtoma*, 306-9. The second is “unexpressed *gāyatra* melody” (*aniruktagāyatrāsāman*) in the Jaiminīya school. For further discussion, see Finnian Moore Gerety, “This Whole World Is OM: Song, Soteriology, and the Emergence of the Sacred Syllable” (PhD dissertation, Harvard University, 2015), 73-74.

²⁴ *parokṣapriyā hi devāḥ*, *Aitareya Brāhmaṇa* 3.43.1

²⁵ For a cross-cultural comparison between the Vedic *soma* liturgies and the ayahuasca rites of Santo Daime in Brazil, see Clark, *The Tawny One*, 166-70.

²⁶ David McAllester, *Peyote Music* (Viking Fund, 1949); Warren L. D'Azevedo, *Wasbo peyote songs: songs of American Indian Native Church* (Folkways Records, 1972).

²⁷ Stephan Beyer, *Singing to the Plants: A Guide to Mestizo Shamanism in the Upper Amazon* (University of New Mexico Press, 2009).

the Americas. However, strikingly similar patterns of non-semantic speech, repetition, alliteration, and syllables seem to occur. Further research might explore whether such patterns arise as cross-cultural expressions of—or even universal cognitive reactions to—the substances in use. The capacity to modulate voices and hearing in generative ways may be shared by peyote, ayahuasca, and *soma* alike. The aesthetics of Vedic ritual could thus hold the key to unlocking one of humankind’s most enduring psychedelic mysteries.