Drugs in prehistory

Elisa Guerra Doce

Las drogas en la Prehistoria: Evidencias arqueológicas del consumo de sustancias psicoactivas en Europa

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Doce’s book (translated title Drugs in Prehistory: Archaeological Evidence of the Use of Psychoactive Substances in Europe) has broader considerations going well-beyond Europe. Doce notes that the contemporary societal debates about the use of psychoactive substances can be informed by the wide variety of botanical substances used as psychoactives across human history and prehistory. Doce notes the difficulty in determining whether substances are strictly psychedelic, as opposed to psychoactive, but also argues that the context easily leads to the conclusion that uses were entheogenic.

Doce argues the importance of using these contemporary and recent historical sources of information as a model for interpreting the past in other regions. Consideration of ritual drug use in better-known areas provides an ethnographic analogy for interpreting the artifacts found in the European past and a model for the typical activities of the hunter-gather, agricultural, and high civilization societies.

Chapter 1 addresses ethnographic evidence for psychoactive substance use in the Americas, whereas Chapter 2 addresses evidence from the Near and Middle East, as well as India and China. Chapter 3 reviews evidence for the use of psychoactives in the Classic world of Greece and Rome. This introductory material sets the stage for the next three chapters, which access evidence regarding psychoactive plant use in the Neolithic period, Bronze Age, and Iron age, respectively, constituting the heart of Doce’s book. These are followed by a short “Final Considerations” and botanical catalogue of potential psychoactive plants of the Old World.

The ethnographic analogies from the Americas regarding psychoactive plant use show that they were viewed as a mechanism for enhancing connection with the spiritual realms and are hence entheogens. Diverse Amerindian traditions engaged in the entheogenic use of Lophophora williamsii (peyote), Anadenanthera and Virola snuffs, and Banisteriopsis brews known as ayahuasca, tobacco, and other substances.

Doce provides a detailed ethnohistorical background to some of these principal cultural traditions of entheogen use in the Americas, exemplified in the Tiwanaku. The highly significant artifacts from the prehistoric cultures of the Americas attest to the central role of these practices in religion of these societies. The significant placement of sniff inhalation tools in graves attests to their centrality to conceptions of an afterlife. The abundant deposits of hollow bone tubes, tubes, spatulas, and other implements obtained from birds indicate that such ritual complexes involved standardized paraphernalia, which was also considered sacred.

The predominant model of entheogenic consumption in foraging societies is associated with shamanic practices, where the shaman alone consumes the sacrament to enhance the healer’s spiritual force and divinatory capacity for purposes of healing. These shamanic entheogenic practices take place in a ritual context generally with the attendance of all of the community. This ritual context is used to establish communication with divinities and for a range of objectives from diagnoses for purposes of guiding treatment of disease; contact with the ancestors for advice; seeking advice regarding the future; acquiring diverse forms of information, especially about hunting and family members; and seeking to influence spiritual forces to enhance well-being.

In preparation for these entheogenic ceremonies, Doce notes that there are a variety of common patterns. This includes a form of penance to produce a physical and/or spiritual preparation for the entheogenic encounter. They typically involve fasting, sleep-deprivation, self-torture, and sexual abstinence. This penance makes the individual worthy of spiritual favor revealed in the form of vision. A confession of transgressions prior to the ceremony is another significant feature, another form of purification for the spiritual encounter. These ceremonies are usually held at night, a factor potentiating the visionary experiences.

Doce proposes that the more complex societies have entheogen use restricted to a more exclusive group. Here, we see the further limitation on the consumption of entheogens to the elite class, with such use reinforcing exclusivity and enhancing prestige of leaders.

The centrality of these substances in spiritual life is manifested in their significant roles within the mythology of their culture. These accounts generally place these plant substances as the central means of access to the domains of the Gods – the plants of the Gods. Doce repeats the notion that premodern societies did not approach the use of these substances as a kind of hedonistic activity. On the contrary, the accounts frequently emphasized the unpleasant symptoms, such as nausea, vomiting, and diarrhea, and exemplified in the frequent notion that such plants provided purges as a healing mechanism. This negative profile extends to the visionary content, often conceptualized as a terrifying encounter with varied malevolent spiritual forces that might cause death.
Doce then turns into the major purpose of her volume in Section 2, with a chapter addressing the use of psychoactives in the ancient civilization of the Near and Middle East and another addressing Greece and Rome. Across the ancient civilizations of Eurasia, there is well-documented evidence of the use of ethnoegenic plants. There is widespread evidence in texts of a high degree of development in the understanding of the properties of psychoactive plants, including dosages and more importantly plant combinations. Among the plants, she reviews:

- *Papaver somniferum* (opium)
- *Atropa belladonna* (belladonna)
- *Mandragora officinarum* (mandrake)
- *Hyoscyamus* spp. (henbane)
- *Withania somnifera* (ashwagandha)
- *Cannabis* spp. (marijuana)
- *Solanum dulcamara* (nightshade)
- *Nymphaea caerulea* (blue lotus)
- *Datura metel* (Datura)
- *Amanita muscaria* (fly agaric mushroom)
- *Psilocybe cubensis* (now classified as *Psilocybe* mushrooms)

In the case of the Greeks and Romans, the identity of the psychoactive substances often becomes less apparent, obscured by the deliberate efforts at secrecy (some cults killed members who publicly revealed the substances in the sacraments). There is also the increasingly prevalent practice of combining various substances in wines or other elixers that left the identity of the active ingredients unknown. Nonetheless, there is explicit identification of the inclusion of many of the aforementioned plants of the ancient civilization of Eurasia, and with an increasingly obvious application of many of these substances in the treatment of psychological and physical illness, rather than for strictly spiritual concerns. The reader interested in the details of many historical records of these plant uses will be impressed by Doce’s scholarship.

Section 3 provides three chapters addressing the core of Doce’s concerns, the evidence for psychoactive drug use in Neolithic, Bronze Age, and Iron Age, respectively. Her analyses are organized by reference to direct vegetal evidence of psychoactive plants, analyses of chemical residues, and interpretation of the uses of ritual objects, often with recourse to ethnographic analogy. As direct evidence, Doce considers the presence of psychoactive substances in deposits and artifacts, as well as in skeletal materials and botanical residues deposited in sites, especially pollen.

The presence of pollen from numerous medicinal plants in the grave of Shanidar IV, in Iraq, dating from 60,000 years before present, attests to the consciousness of psychoactive substances shared by even our allegedly less intelligent hominin cousins, the Neanderthal. Doce also reviews the hypotheses of entheogen-inspired rock art, represented in abstract designs that closely correspond to the entoptic phenomena observed in clinical studies of the phenomenal effects of psychedelic substances. Such parallels strengthen the argument for ancient psychedelic use, even though such entoptic experiences can be induced by ritual procedures and stressful conditions, not requiring drugs for their production.

Chapter 4 is a nearly 90-page consideration of the direct and indirect evidence for the presence of psychoactive substance use during the long Neolithic period. Unfortunately, direct evidence of consumption is limited to negligible, but indirect evidence in the Neolithic cultivation of opium poppy and hemp suggests the ritual use as well. The widespread evidence of opium in artifacts found across broad spans of Europe attests to its widespread and common use, although not necessarily as an entheogen. Similar evidence of the widespread use of cannabis also attests more to its practical rather than entheogenic use. Doce provides a review of chemical analysis on pottery and other materials that suggests that the use of some wild collected plants (*Solanium* species and *Hyoscyamus*) with powerful consciousness altering properties.

The indirect evidence is the most abundant, reflected in incense burners and other implements for vaporizing and inhaling substances; vessels for imbibing substances; ceremonial vessels; inhalant tools such as spatulas and tubes; representations of mushrooms and poppy pods on artifacts; representations in architecture, art, and petroglyphs; and diverse representations of entoptic phenomena.

The Bronze Age shows a notable increase in artifacts attesting to the presence of the indispensable use of psychoactives in community rituals. The rise of alcohol consumption in male-bonding rituals takes central stage in this period, although there is also evidence of the inclusion of other psychoactive substances with these beverages.

As in the Neolithic period, the Bronze Age findings attest to a wide variety of objects associated with the ritual use of entheogens; indeed, the volume of such objects suggests activities of considerable importance. The emergence during the Bronze Age of recipients for transporting substances attests to this increasingly important consumption, most specifically opium.

Analysis of Iron Age residues presents evidence of the continued ritual use of the major plant species found in the Neolithic. The Iron Age developments also involve what appears to be a reduction of opium poppy use and evidence for increased use of marijuana for diverse products, as well as in ritual consumption, particularly funerary rites. Evidence for an increased range of entheogenic substances is attested to in literary texts that enhance our knowledge of ritual uses, speaking far more than the artifacts and botanical and chemical residues ever could. Several new substances of this era go outside of entheogenic purposes, for example, using toxic substances to poison water supplies, giving an advantage in warfare.

Incense burners, braziers, and other grave objects that are apparently paraphernalia for drug inhalation attest to the central cultural importance of these practices, although most artifacts lack analyses necessary to determine the actual substances involved. However, contextual evidence suggests the concentration of such practices with the elite rather than with the general populace, features evidenced in the restricted ritual spaces of megalithic structures. Doce notes the progressive restriction of psychoactives to elite members during this period. The restricted use of entheogenic substances is indicated by small reclusive areas for their consumption points to their control by a priestly class that denies their access to the broader populace. Doce discusses
their new roles in enhancing the dynamics of hierarchical social integration through selective access to ritual spaces and experiences. Doce concludes that the previous patterns of European drug consumption continued during the Iron Age, with the ancient patterns of communal consumption continuing in spite of the Romanization of Europe.

Doce concludes that the use of psychoactives as entheogens is found across a range of complexity from hunter-gatherers to advanced civilizations. This constant of human cultures, whether simple or complex, to seek alterations of cultures reflects a human need, a need perhaps as basic as seeking food, companionship, or shelter. Doce proposes that what differentiates premodern and contemporary societies is that people in the past were more effective in channeling the effects of psychoactives toward positive group purposes with beneficial effects, perhaps even serving as part of a strategy for adaptation to the environment and cognitive integration and therapeutic adjustment.

Doce’s book concludes with a consideration of the wide range of psychoactive species for which the evidence is found in European prehistory, providing a 50-page catalog elaborating the wide range of psychoactive species. This helps to counter the widespread belief that Eurasia was particularly deficient in psychoactive plants, compared to the Americas. She also points to the vast number of relevant artifacts that are still in need of chemical analyses to determine the substances contained within them.

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