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Kelly Partin

Mary Cronin

Jibin Jacob

Patricia J. Campos

Katy N. Lee

See next page for additional authors

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Presenter Information Kelly Partin, Mary Cronin, Jibin Jacob, Patricia J. Campos, Katy N. Lee, Batoul C. Zalkout, and Janelle Clark

## Ebene:

Psychedelic Snuff of the Yanomami

Kelly Partin

Collin College

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Ebene: Psychedelic Snuff of the Yanomami

Throughout history, humans have utilized plants not only as a source of food but also in parts of ritual practice and healing. While we know relatively well our race has been sustained by roughly a dozen or so domesticated species of food plants, and now, through scientific study, their contribution to human evolution and biology, there is much less appreciation for the myriad of psychoactive plants used by cultures both past and present that may have had profound influences on cultural ideologies and the concepts of the sacred and supernatural. The use of psychoactives is likely as old if not older than civilization itself, whether as a hedonistic pastime, a means to bond with others, or to commune with another realm of existence. With the spread of Christianity and western colonialism, use of psychoactive drugs has suffered extreme and sometimes violent suppression. Medical and cultural interest in psychoactive plants experienced a brief heyday in the mid-20<sup>th</sup> Century, resulting in a backlash that exacerbated an existing stigma and bias. With the continued development of the discipline of Anthropology, ethnobiographies of a vast array of cultures emerged into the scholastic and public sphere, presenting us again with descriptions of what might be considered by the unfamiliar or the ethnocentrist as deviant or exotic drug use by far-away people living in modern-day antiquity. One of the most controversial Anthropological endeavors in the history of the discipline, Napoleon Chagnon's study of the Yanomami of South America described a bellicose group of people who consistently employed one such curious substance: hallucinogenic snuff. The Amazon is the most biologically diverse region in the world; to simply observe the use of psychoactive snuff by indigenous peoples belies its remarkable discovery, history, cultural importance.

According to historical accounts, and archaeological investigation conducted to date, we know that in various regions of South America and the Caribbean, the insufflation of hallucinogenic snuff powder obtained from plants has been practiced for a long period of time (Richardlin, Lavier, Horta, Figueroa, & Lira, 2015). The earliest report of psychoactive snuff use dates from Christopher Columbus's second voyage in 1496 to the Caribbean (Schultes, 1969) in which Columbus commented on a "powder" which the Taíno of the West Indies would "snuff up" that caused them to "lose consciousness and become like drunken men" (Page & Singer, 2014). The first undisputed direct observation-based account of this practice was written by Columbus and Friar Ramon Pané, the man assigned by Columbus to record native customs. Pané conversed with the Taíno Indians in 1496 and described their experience of taking *cohoba*, which was eventually determined to be a hallucinogenic extract from the bean of the Anadenanthera peregrina tree (Schultes, Holmstedt, Lindgren, & Rivier, 1977, as cited in Page & Singer, 2014). This practice of consuming psychoactive snuff and the use of associated paraphernalia, such as snuff trays and tubes, spoons, stone and wood mortars, pouches to hold seeds, and cane and wooden recipients, has been referred to as the "hallucinogenic complex" in specialized literature. South America, particularly the Orinoco River region which is home to many Yanomami, is the cultural and botanical epicenter of the psychoactive snuff hallucinogenic complex.

The prevailing climatic conditions of the Amazon Basin are not conducive to the preservation of preceramic organic snuffing implements. However, material evidence of narcotic snuff can be found throughout South America. Several representations of this practice can be seen in ritual deer-hunting scenes of Moche pottery (ca. A.D. 100-800) (Donnan, 1976, as cited by Torres et al., 1991). The grave goods of hundreds of tombs dating from the Late Formative

period in the Atacama region of Chile, which has a uniquely low humidity, yielded a variety of snuff paraphernalia, including wooden snuff trays, which were established by radiocarbon dating to originate from AD 125 to AD 1299 (Richardlin et al., 2015). Stone receptacles in the shape of birds or fish found in southern Brazil and eastern Paraguay, tentatively dated to ca. 3000 B.C., represent the earliest probable evidence yet found of hallucinogenic complex in the Americas (Torres et al., 1991).

Nearly every indigenous group currently inhabiting the mid-upper Orinoco River Basin use or have used hallucinogenic snuff. Among these indigenous groups, use of the drug by the Yanomami has been extensively documented by various authors. The Yanomami Indians were known from early descriptions of explorers of the headwaters of the Orinoco but were more recently studied by such anthropologists as Chagnon, who documented his first encounter with snuff-intoxicated Yanomami:

I looked up and gasped when I saw a dozen burly, naked, sweaty, hideous men staring at us down the shafts of their drawn arrows! Immense wads of green tobacco were stuck between their lower teeth and lips making them look even more hideous, and strands of dark-green slime dripped or hung from their nostrils—strands so long that they clung to their pectoral muscles or drizzled down their chins. We arrived in the village while the men were blowing a hallucinogenic drug up their noses. One of the side effects of the drug is a runny nose. The mucus is always saturated with the green powder and they usually let it run freely from their nostrils (Chagnon, 1983, p. 10).

Initially, the sources of narcotic snuffs used by South American natives were uncertain and treated vaguely, without extensive research into botanical identifications or preparations, and

were thought to be wholly from tobacco or from the seeds of the widely used leguminous trees, *A. peregrina* or *A. colubrina* (Schultes, 1990), commonly referred to as 'yopo'.

It is now known that other plant sources may be employed in the preparation of narcotic snuffs. These include various species of *Virola, Elizabetha princeps*, and *Justicia pecoralis* var. *stenophylla* (Brewer-Carias & Steyermark, 1976) any of which may be used in combination, in addition to, or to the exclusion of *A. peregrina*, which to be effective as snuff requires an admixture of calcium, typically derived from ground-up snail shells (Grossman, 1957). The varied combinations of the above plants are due largely to availability. Chagnon stated, in reference to *A. peregrina* and *Virola*, "Several other plants are used to make hallucinogens. The Yanomami cultivate a variety of small bushes of the genus *Justicia* and snuff these, but they are less potent and less desirable than the other two" (1983). These plant ingredients are not uniformly available throughout the region; *Justicia* is not so potent as *Virola* or *Anandenanthera* (Schultes, 1990),

The terms for these plants vary from village to village within the Yanomami, but the term *epena* or *ebene* is used generally to describe all hallucinogenic snuff regardless of its contents (Schultes, 1990). The psychoactive content, as well as the source and preparation of these ingredients varies; some may contain no psychoactive tryptamines at all. This is especially notable when considering *Elizabetha princeps*. *Elizabetha*, called ama-amasita by the Yanomami, is commonly used as an additive to the snuff and is considered by some Indians as having no real hallucinogenic effect but is valued for its "strengthening properties," and to add bulk to the very fine powders of the *Virola*, *Justicia*, or *Anandathera*. The bark of the *Elizabetha* tree is harvested and placed in the sun or near a fire to dry until it is needed. Then, the bark is

burnt alone without the addition of any other wood, and its ashes are collected to be mixed with the *ebene* (Brewer-Carias & Stevermark, 1976).

Justicia pecoralis, called *mashihiri* by the Yanomami, is a dense, ground-covering plant with long, slender lance-shaped leaves. The leaves are slightly fragrant, and women often gather them in bunches resembling green puff-balls to insert into their pierced earlobes for personal adornment. When intended for use in snuff, the leaves are gathered and dried, then toasted to make the leaves crisp, crumbled between the palms of the hands, and pulverized by means of a pestle until a fine powder is yielded (Schultes, 1990).

The tree *Virola elongata*, called *yakoana* by the Yanomami, is so common and frequently used as a source of *ebene* (or *epena*) that the name is often extended to the *yakoana* tree itself (Chagnon, Le Quesne, & Cook, 1971). *Yakoana* is prepared by scraping the newly exposed interior portion of its rough bark, which is collected in the field or brought fresh and scraped when needed. It is dried to a crisp over a fire, where it may be mixed with *Elizabetha* ashes to help it dry, and the bark strands are then ground into a fine powder (Schultes, 1990).

Yopo, known as *hisioma*, is prepared in a similar fashion, but instead of being harvested from the leaves or bark of a plant, it is a product of the seeds of *A. peregrina*. Yopo, like *ebene* or *epena*. Likewise, yopo can refer to hallucinogenic snuffs that may or may not contain it, depending on the region in which snuff use is observed, and may also be referred to as *ebene* or *epena* indiscriminately (Chagnon, Le Quisne, & Cook, 1971). Yopo seeds come to maturity during the dry season (Rodd & Sumabila, 2011), when it is also much easier to harvest. The seeds are collected and dried, and may be stored whole until needed in a pouch or a makeshift container such as a plastic soft drink bottle (Rodd & Sumabila, 2011). The dried seeds may then

be toasted, fermented, or ground immediately after drying prior to use. The yopo berry alone contains at least five psychoactive alkaloids (Grossman, 1957).

Chagnon, Le Quisne, and Cook stated that only careful questioning will reveal the botanical contend of prepared *ebene*, which may vary widely in composition to include any number of barks, seeds, leaves, and resins of different plants (1971). The Yanomami often mix several different pre-prepared powders, or essentially whatever is on hand at any given time, and still call the resulting mixture *ebene*, irrespective of its contents. Thus, there is no specific recipe for *ebene*, and the alkaloidal content of the final preparation can vary considerably (Chagnon et al., 1971). The snuffs taken by the Yanomami can contain up to eight tryptamine alkaloids, in addition to other psychoactive or phytomimetic alkaloidal substances (Rifkin, 1994). Through chemical analysis, the various hallucinogenic components of South American hallucinogenic plants have been found to contain an assortment of alkaloids and tryptamines, including but not limited to, dimethyltryptamine (DMT), harmine, 5-methoxy-dimethyltyptamine (5-MeO-DMT), tetrahydrocharmine (THH), n-methyltetrahydroharmine (NMT), monomethyltryptamine, and 6-methoxy-1,2-dimethyl 1,2,3,4-tetrahydrobeacarboline (6-MeO-THbetaC) (Torres et al., 1991).

Though the botanical constituents of *ebene* preparations may vary from region to region or indeed from instance to instance, the method of use is largely the same among different Yanomami groups. The brownish-green powder is introduced into a hollow bamboo tube which can be up to or exceeding a meter in length. The powder is then scattered along the length of the tube by tapping it with a finger. This ensures smooth delivery as, while both persons are in a squatting position, one end of the tube is placed into one of the nostrils of the person receiving the drug, while the assistant blows a strong draft of air into the other end of the bamboo tube with his mouth (Brewer-Carias & Steyermark, 1976). The air, filled with powder, travels up the

nostril of the person receiving the *ebene*, and strikes the nasal cavity; the receiver of the *ebene* flinches in momentary pain. It is assumed, that as with many other substances that are taken intranasally, the active tryptamines contained in *ebene* preparations reach the brain via absorption from the vascular nasal mucosa into the bloodstream (Farmsworth, 1968). The person receiving the drug often coughs, lacrimates, and sometimes vomits until the drug takes effect. In response to the extreme irritation to which they have been subjected, the person's mucous membranes produce copious mucus which, loaded with the psychoactive mixture, runs from the nose of the user.

There is a good deal of variation reported in the literature for different Yanomami villages in the frequency and intensity of the use of *ebene*. In some groups, the cultivation, preparation, and consumption of *ebene* may be restricted to shamans and their apprentices, while in others, community members, including women, consume *ebene* regularly. Regardless of variation among Yanomami groups, it is abundantly clear that *ebene* is quintessential to Yanomami ritual, religion, and cultural identity. Carmelina, a Yanomami Cuiva from Barranco Yopal explains, "It came from our ancestors. They have left it to us. It is one of the most important things that they left us." (Rodd & Sumabila, 2011).

Ebene, when consumed by both laymen and shamans, is used during the performance of songs, retelling of myths, and performance of ritual curing. It is also used during endocannibalistic ritual of consuming the cremated remains of dead relatives (Chagnon, 1983). Machagua, another Cuiva Yanomami, states that "Yopo is part of our memories, our songs, and our ancestors." (Rodd & Sumabila, 2011). Ebene use helps Yanomami navigate a complex celestial and terrestrial cosmos.

The universe as understood by the Yanomami is an intricate system of interactions between various beings, including man, that occupy the five separate but interconnected celestial and terrestrial layers. Each layer is its own world, limited by the boundaries of the layer above or below it. They layer the Yanomami inhabit, 'this layer,' or *he kä misi*, was created when a chunk of the layer above it, *hedu*, broke off and fell downward. The layer below 'this layer,' was created when another piece of *hedu* fell downwards, knocking a hole in *he kä misi*, and carried the village and garden of a people called the *Amahiri-teri* downward, but not their jungle, leaving them nowhere to hunt. For this reason, the *Amahiri-teri* send their souls upward, to the layer of the Yanomami, to capture and eat the souls of children (Chagnon, 1983). Shamans employ *ebene* to allow them to engage the *Amahiri-teri* in an attempt to thwart their cannibalistic intentions.

Among the Yanomami, only men can become shamans, but any man, regardless of status, can become one if he chooses. In some villages a large percentage of men are shamans.

Becoming a shaman does, however, require a long period of training, which entails fasting, sexual continence, inhaling *ebene*, and learning the various characteristics, songs, and fancies of the spirits from one or more older men. Davi Kapenawa (2013), a Yanomami shaman, illustrates one of *ebene's* crucial roles in Yanomami myth and religion:

When you are young and want to drink the yakoana powder for the first time, we do not know anything about the *xapiri* yet. The elders just tell us: "Come squat in front of me! The spirits will come to you; they will perform their presentation dance!" Then they blow the yakoana they have prepared into our nostrils... Then the elders call the *xapiri* for us and while we are knocked senseless by the *yakoana's* power, with our eyes fixed on the heights, our thought suddenly opens. We start to hear the spirits' songs, then they reveal their images to our eyes. (p. 105)

He continues to assert that, "ordinary people fear the *yakoana's* power and cannot see the *xapiri* work." (p. 107)

Perhaps the most impactful spirits of 'this layer,' are the *hekura*, or *xapiri*: miniscule, humanoid beings which novice shamans attempt to draw into their chests, where during shamanistic initiation a construction of an internal replica of the Yanomami cosmos, constructed piecemeal by acquiring various bodily attributes of *hekura*, and the building of a 'spirit house' (Jokić, 2014). There are perhaps thousands of *hekura*. Some are named after animals, others were created as a result of a mythical event. Some are "hot," and some are "meat-hungry." Some are both, and these are the ones that the *shapori* send to devour enemy souls, particularly those of children. The Yanomami describe all of the *hekura* as intensely beautiful. *Hekura* reside in the mountains, trees, under rocks, or within the chest of a human (Chagnon, 1983). Kopenawa (2013), describes the relationship between the *hekura* and the shaman's corporeal microcosm:

When you die under the effect of the *yakoana* for the first time, the *xapiri* who come to dance for you do not yet have a home in which to settle. After having sung and danced for a long time, they remain standing or squat and think: "*Hou!* If this place stays empty, if there is no house for us, we won't stay here! (p. 97)

The process culminates in an experience of death and rebirth, after which the embodied *hekura* spirits continue to live within the shaman. Each shaman, or *shapori*, has a personal set of embodied *hekura*, and the *shapori* assumes a dual mode of existence. At once he contains the *hekura* within himself, and is the perishable, human embodiment of the immortal *hekura*. The shaman's body represents their home, and the *shapori* affect one another and their communities through overlapping and interconnected planes of existence, enabled by their embodied *hekura* and the consumption of hallucinogenic snuffs. Thus, the *shapori* and *hekura* enter a symbiotic

alliance. The *shapori* chant and sing to the *hekura*, house them within their bodies, and the men call upon their *hekura* to heal their sick and destroy their enemies. *Ebene* experiences are integral to Yanomami understanding of the cosmos, creation, causation, even sickness and death.

The Yanomami cosmos is a dangerous place, and *shapori* are constantly engaged in a titfor-tat struggle for health and prosperity, which are under attack by malevolent spirits and *hekura* sent by other, ill-wishing *shapori*. The *shapori* are always performing protective acts
within their village, and hold the responsibility as *hekura*, an extension of the name of the spirits,
to call on them to heal the sick. *Shapori* have to take *ebene* to contact the spirits (Chagnon,
1983). After consuming *ebene*, shamans can get advice from the dead to help restore the health
of the living, and with the power of the *hekura*, is able to see inside the body to locate any
possible cause of illness and enter into battle with the evil spirits, employing chants,
gesticulations, sucking and vomiting to remove the ethereal poisonous projectiles that are
embedded in the spiritual body of the suffering patient. For the Yanomami, incidences of illness
and injury are not perceived as a random occurrence or the result of bad luck, but are considered
to be the outcome of an offensive act perpetrated by *hekura*. Only the *shapori* has the power to
hopefully restore balance.

As soon as those of our house are sick, I drink the *yakoana* to chase away their illness. I attack the evil beings who attempt to devour them, I extract the arrow points from their animal double, and push back the *xawara* epidemic fumes that burn them. (Kapenawa & Albert, 2013, p. 110)

The image of a nude man, wide-eyed, dark-green mucous dripping down his face as described in Napoleon Chagnon's *Yanomami: The Fierce People*, is an enthralling figure, one that invites at least curiosity, at times unease. To the Western mind, the use of a hallucinogen to

convene with spirits is an unfamiliar concept. To the Yanomami, *ebene* is paradigmatic to the understanding of time, of spirituality, of relationships, and cultural identity. *Ebene* is quintessential to the maintenance of a healthy community, to unity between kin, maintenance of guest-host relations, and the passing on of intergenerational knowledge. The Yanomami's shamanistic religion is, perhaps more than most, highly experiential, and *ebene* is extensively interwoven into their cultural and social fabric. Davi Kapenawa (2013) puts it thus:

The *xapiri* would not come to do their presentation dance without the *yakoana*. This is why the shaman elders want to make young people inhale its powder. This is why they give them their breath of life and their spirits' path so that they can see and call them in their turn. Then then the *xapiri* continue to come down to them in the same way they did for our ancestors since the beginning of time. Nothing has changed. (p. 420)

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