

Drinking the South American Hallucinogenic Ayahuasca

FRANKLIN AYALA FLORES¹ AND WALTER H. LEWIS²

There are few first-hand reports of drinking ayahuasca by residents of Amazonia, where use is widespread. One of us (F.A.F.), who lives in Iquitos, took ayahuasca 30 times during a three-year period between 1972 and 1974 in an attempt to experience all levels of hallucination. Although unable to achieve the ultimate goal of telepathy and extrasensory perception, this author clearly relates his repeated experiences within the three other levels of hallucination and also correlates these experiences with those of others he observed who drank ayahuasca at the same time.

Ayahuasca (caapi, yaje) is prepared basically from the bark of the liana *Banisteriopsis caapi* or *B. inebrians* (Malpighiaceae) with additives from a number of other species. Most critical for maximum hallucinogenic effect appear to be *Psychotria catharginensis*, *P. viridis* (Rubiaceae), or *Banisteriopsis rusbyana*, all of which contain DMT (*N,N*-dimethyltryptamine). This combined with the β -carbolines, such as harmine, harmaline, and tetrahydroharmine of the basic *Banisteriopsis* component is apparently present in sufficient concentration to exert its effect as monoamine oxidase inhibitor, serving to activate the hallucinogenic properties of the tryptamines when the drink is taken orally (Aguirre, 1968). Other occasional additives include *Malouetia tamaquarina* and *Tabernaemontana* sp. (Apocynaceae) leaves, powdered tobacco and other Solanaceae (*Brunfelsia* sp., *Datura suaveolens*, *Ichroma fuchsoides*, *Juanulloa ochracea*), *Teliostachya lanceolata* var. *crispa* (Acanthaceae), *Calathea veitchiana* (Marantaceae), as well as certain cacti, mints, sedges, and ferns (Schultes & Hofmann, 1973; Lewis & Elvin-Lewis, 1977). In most instances, their biodynamic compounds remain unknown, although the tropane alkaloids found among the

Solanaceae are known to trigger unusual states of consciousness, such as flying.

There are many reasons for using ayahuasca, and the power of the witch doctor or brujo who administers it can be measured by the ceremony he conducts and the type of formulation of ayahuasca he uses. Through ayahuasca, the brujo has developed his powers, including, he believes, telepathy or extrasensory perception, to a high degree and can use them for either evil (Dobkin de Rios, 1970) or good intent. Therefore, it is possible for him to locate a missing object, identify the cause of an allergy, and often ayahuasca may be used by the brujo to treat psychological disorders among his patients. Other individuals also participate in anticipation of contacting spirits of the dead and, through telepathy, of entering minds or communicating with the living. For the initiate, many visits to the brujo are necessary before one achieves this effect.

In Iquitos, it is possible to visit a brujo any Monday, Wednesday, or Friday for the fee of one dollar. A subject is instructed not to eat or drink anything except water for at least six hours prior to partaking of ayahuasca. The ceremony begins at midnight and may last until three or four A.M. On arriving at the brujo's large, partially open, hut, each participant is greeted by the brujo and his assistants and instructed to sit on the floor with legs folded. When everyone has arrived, approximately 125 ml of the brown, somewhat repugnant tasting, ayahuasca is served to all from a

¹Profesor de Botánica, Universidad Nacional de la Amazonía Peruana, Iquitos, Perú.

²Professor of Biology, Washington University, St. Louis, Missouri, and Senior Botanist, Missouri Botanical Garden.

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common cup. The potion is rapidly swallowed, refilled, and passed to another. For those having a health problem, the brujo then conducts an additional ceremony. This act includes whisking all parts of the body with a branch from an unknown plant, while talking and chanting for the purpose of driving away evil spirits. The duration of the exorcism can vary with the seriousness of the illness, but it is often completed in fifteen minutes. Usually by the time the brujo has completed this rite on the last patient, others are beginning to experience the initial effects of the potion. They may stagger, as if intoxicated by alcohol, vomit, or remain inactive with eyes closed, listening in the darkness to the highly dialectic chants of the brujo. If vomiting continues unabated, the brujo will return to the patient and continue the rite of exorcism, using various techniques including blowing tobacco smoke over the entire body while continuing to chant. For each participant, this pre-hallucination state lasts usually up to one hour.

Suddenly the panorama of darkness becomes a vast moving spiral. One is thrust, flying, into this spiral, a terrifying experience in itself, yet those who have sought the brujo for help with emotional problems are faced additionally with continuous retching and tingling throughout their bodies as signs of the departure of evil spirits. This "first level" of hallucination continues five to ten minutes and usually ends the psychoactive experience the first few times ayahuasca is taken.

If the hallucination continues to the "second level," faces of people are often imagined. They appear as blue masked specters, often assuming grotesque forms, though quickly acquiring more life-like appearances while making frightening faces. Simultaneously, other figures appear, such as alarming animals, e.g., a boa constrictor (Dobkin de Rios, 1971). Often, they directly involve the participant, as when a female patient visualized a large boa coming toward her as she sat helplessly on the ground of the hut. She was powerless to move, while the boa coiled around her body. Her screams were terrifying, and although not knowing specifically what was happening to her, all could imagine some horrifying experience. The

brujo presumably knew, however, and he tried to eliminate the snake by chanting, by blowing smoke in her face and over her body, and by whisking with his branch. Eventually, the animal retreated and she became calm. Such were the experiences encountered, some more terrifying than others, but all involving visions of horror lasting for about twenty minutes, depending undoubtedly on the amount of ayahuasca consumed and its concentration, and on the physical and mental condition of the individual.

During this time, hearing often took unusual twists. For example, the voice of a female friend who recently died suddenly and clearly was heard, soft at first but soon building into a high pitched crescendo that seemingly never stopped. In reality, it lasted only a few moments, receded, and then disappeared. Hearing may also become acutely sensitive. An animal howling in the distance is heard loud and clear, as if next door, and conversations between several individuals up to 100 m distance are understood completely, as if only a few meters away. Moreover, the low chants of the brujo sound loud during this period, but the terrifying cries of some patients are simply ignored, for one concentrates on self to the exclusion, whenever possible, of others.

Physical changes always occur during this "second level" of hallucination. One of the most common is the absence of motor coordination. If the patient moves, he will stagger, appearing drunk; if sitting he will sway. Everyone feels very tired, hot (body temperature is obviously elevated), and each sweats profusely. Salivation and spitting are continuous, and one's mouth feels astringent, while teeth chatter uncontrollably. Most patients vomit, and many have diarrhea. These symptoms are particularly intense among individuals whose nature is sincere and genuine (in contrast to those whose basic personality is affronting, who seemingly vomit much less frequently) and also those who failed to take the brujo's advice about abstaining from food and drink for about six hours prior to the session. If sustenance was taken close to midnight, then, for all practical purposes, such individuals forfeit the opportunity of experiencing further hallucina-

tions, and shortly they depart. On some occasions, as many as 30% of the group leave at this stage.

Those patients who have absorbed sufficient psychoactive compounds and who clearly appear emotionally stable more readily proceed to the "third level," which, for the majority, is the final stage. Lasting perhaps ten to thirty minutes, it is characterized by the sensation of flying while observing beautiful and often spectacular sights, a time when exultation sweeps the body, and all physical discomforts are forgotten. Objects and scenes are always vividly colored in bright but natural technicolor. One flies, for instance, from the jungle environment to what is possibly an American city, usually at levels higher than the tallest buildings but still low enough to observe cars along the highways and people walking the sidewalks; but at other times lower, so that a dog or cat is seen readily in a backyard. Scenes appear very distinct, as if the sense of sight, like that of hearing, has been intensified. Proceeding over the city to a river at a height of about 20 m, one sees a spanning bridge and people swimming, while other men, women, and children play ball. Their skin is very white. Beyond the river are open fields covered with grass. Before long, however, powers of concentration diminish, and everything disappears and fades. Suddenly, one is home again, for there are no more colors, no scenes, no flying, as eyes are opened to darkness. Normality returns, although one feels somewhat exhausted from the experience. This level is reached on the average only one time in three, but each

time, as in a recurrent dream, the sequence of events repeats itself with little variation.

Very few ever reach the ultimate in psychoactive experience, i.e., "telepathy" (Weil, 1972). To arrive at this "fourth level" of perception requires serious concentration, while taking ayahuasca over long periods of time. Our brujo, and perhaps a few others of our group who had taken the potion for ten years or longer, realized communications with other members of their families and friends, living or dead, who were far from Iquitos, but these experiences were quite limited.

When the session is over, the Brujo approaches and asks if you are well and, if so, you leave, presumably the curious satisfied in part but for most still desiring the final telepathic stage and the emotionally ill more able to cope.

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BOOK REVIEWS

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been little serious attention given to the problem until about 20 years ago with the appearance of the papers by R. J. Braidwood and collaborators. Cohen's work marks the first book-length treatment, partly, no doubt, because only recently has enough archaeological information accumulated to permit such a treatment. It will be interesting to see how his hypothesis holds up in the face of future archaeological work. Although one may not be in complete agreement

with Cohen, he certainly deserves praise for bringing the scattered literature together. I found his ideas both interesting and intriguing, and his book deserves the wide attention of ethnobotanists. His work should be a stimulus to others, and he himself has raised a number of questions in his last chapter that require answers.

CHARLES B. HEISER, JR.
Indiana University
Bloomington, Indiana

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