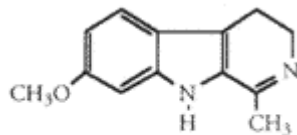


# A Y A H U A S C A

**BANISTERIOPSIS** *Caapi*  
(*Spruce ex Griseb.*) Morton

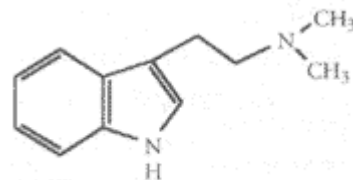


Contains—



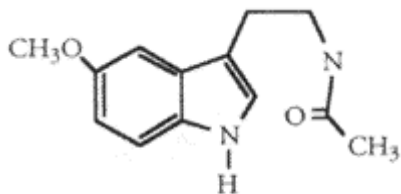
HARMALINE  
from Ayahuasca (*B. caapi*)

Contains—



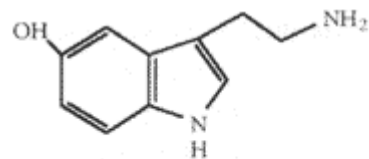
DMT  
(N, N-Dimethyltryptamine)

Resembles—



MELATONIN,  
5-METHOXY-N-ACETYL TRYPTAMINE

Resembles—



SEROTONIN  
(5-Hydroxytryptamine; neurotransmitter)

This brew, commonly called **yagé**, or **yajé** in Colombia, **ayahuasca** in Ecuador and Peru (Inca "vine of the dead, vine of the souls," *aya* means in Quechua "spirit," "ancestor," "dead person," while *huasca* means "vine," "rope"), and **caapi** in Brazil, is prepared from segments of a species of the vine *Banisteriopsis*, a genus belonging to the *Malpighiaceae*.<sup>1</sup>

Sections of vine are boiled with leaves from any of a large number of potential admixture plants (such as *Psychotria viridis*, pictured above) resulting in a tea that contains the powerful hallucinogenic alkaloids harmine, harmaline, d-tetrahydroharmine, and [dimethyltryptamine \(DMT\)](#). Dimethyltryptamine closely resembles [serotonin](#) and has been discovered to be a component of normal mammalian metabolism, an endogenous hallucinogen. These compounds have chemical structures and effects similar, but not identical to LSD, mescaline of the peyote cactus, and psilocybin of the psychotropic Mexican mushroom. This brew has been used in the Amazon for millennia in order to heal, divine, and worship.<sup>2</sup>

With Ayahuasca, an interior sound is commonly heard, which quite often triggers a spontaneous burst of imitative vocalizings, markedly unlike any conventional human speech or facial contortions. The tryptamines can apparently trigger a kind of rippling of facial muscles, which results in the production of a vocally modulated pressure wave. What is more startling is that the sound, which gains in energy the longer it is sustained, can actually become [visible](#)—as if the vibrational wave patterns were shifting into the visible spectrum or inducing a vibrational excitation of the air in such a way as to affect light diffraction. These observations suggest that although the wave is produced with sound, it may possess an electromagnetic component. This peculiar wave phenomenon will continue to be generated out of the mouth and nostrils and will be visible in the surrounding air as long as the vocalizations are continued.<sup>3</sup>

Natives of Amazon have traditionally combined *Banisteriopsis caapi* vine, which contains harmine, harmaline and related beta-carbolines, with DMT-containing plants to make an orally active brew called *ayahuasca*. Other plants containing harmine and/or harmaline can be substituted for *B. caapi*. The usual 'North-American ayahuasca' consists of *Peganum harmala* seeds and *Desmanthus illinoensis* roots, and in Australian 'acaciahuasca' leaves of *Acacia complanata* are combined with material from [DMT-containing acacias](#) (the effectivity of this mixture hasn't been confirmed).<sup>4</sup>

Assembled from material by [1Harner](#), [2Luna](#), [3McKenna](#), and [4Ott](#).

## Ayahuasca, a brew made by sorcerers living along the Amazon River in South America

usenet flotsom



Ayahuasca is made by brewing the stems of a vine called *Banisteriopsis* with parts of at least one

other variety of plant. The spirit of the banisteriopsis plant is supposed to act as a guide for the spirits of the additive plants and potentiate their effects. Different additive plants are used for different purposes: soul travel, telepathy, healing, communicating with spirits, visions, divination, or learning [spirit songs](#) (something in which I am particularly interested - I occasionally hear music in dreams and write it down or play it after I wake up), etc. Some of the main additive plants are [Psychotria](#), [Justicia](#), and [Tetrapteris](#). Strangely enough, all three of these plants contain DMT. The guide plant itself contains a drug called Harmaline.

Normally [DMT](#) is not active when taken orally - it has to be smoked (and there are several other snuffs and smoking mixtures in jungle sorcery that do contain only DMT). But it's been found that [harmaline prevents the breakdown of DMT by the digestive system](#) and allows it to enter the bloodstream when one drinks *Ayahuasca*. Harmaline also extends DMT's visionary effects for up to 6 hours. So it turns out that DMT, which I had always considered to be an exotic laboratory drug, has actually been used by sorcerers in the Amazon for thousands of years.

In Europe and the Middle East, there are also plants which contain harmaline and DMT: Syrian Rue and the [Giant River Reed](#). Though there's no clear evidence that either plant was ever used for sorcery.

Now Syrian Rue itself is quite interesting. Seeds of Syrian Rue are made into a red dye which is used by middle eastern carpet weavers for coloring Persian Rugs. It has been said that the hallucinogenic properties of a brew made from these seeds may be responsible for the legends about flying carpets. Perhaps the red dye doubled as a beverage, and the patterns on the carpets were actually maps into a magical world. These seeds also contain Harmaline.

The Giant River Reed is significant as well; it's considered the best reed to use for musical instruments, and is the reed traditionally used in the construction of Pan Pipes. And it's roots contain DMT.

Another funny thing is that [toad skins](#) (often listed as an ingredient in European witches brews) contain a hallucinogen called bufotenine. I've heard stories of people in Australia actually smoking the skins of roasted Cane Toads as a psychedelic. However, I'm a bit of a vegetarian, so this has limited appeal.

## **The Sound of Rushing Water**

*A hallucinogenic drug gives the Jivaro shaman entrance to the 'real' world and gives him the power to cure or bewitch*

by Michael J. Harner

"And when they went, I heard the noise of their winds, like the noise of great waters, as the voice of the Almighty, the voice of speech, as the noise of a host: when they stood, they let down their wings." Ezekiel 1:24

He had drunk, and now he softly sang. Gradually, faint lines and forms began to appear in the darkness, and the shrill music of the *tsentsak*, the spirit helpers, arose around him. The power of the drink fed them. He called, and they came. First, *pangi*, the anaconda, coiled about his head, transmuted into a crown of gold. Then *wampang*, the giant butterfly, hovered above his shoulder and sang to him with its wings. Snakes, spiders, birds and bats danced in the air above him. On his arms appeared a thousand eyes as his demon helpers emerged to search the night for enemies.

The sound of rushing water filled his ears, and listening to its roar, he knew he possessed the power of *tsungi*, the first shaman. Now he could see. Now he could find the truth. He stared at the stomach of the sick man. Slowly, it became transparent like a shallow mountain stream, and he saw within it, coiling and uncoiling, *makanchi*, the poisonous serpent, who had been sent by the enemy shaman. The real cause of the illness had been found.

The Jivaro Indians of the Ecuadorian Amazon believe that witchcraft is the cause of the vast majority of illnesses and non-violent deaths. The normal waking life, for the Jivaro, is simply 'a lie,' or an illusion, while the true forces that determine daily events are supernatural and can only be seen and manipulated with the aid of hallucinogenic drugs. A reality view of this kind creates a particularly strong demand for specialists, who can cross over into the supernatural world at will to deal with the forces that influence and even determine the events of the waking life.

These specialists, called '[shamans](#)' by anthropologists, are recognized by the Jivaro as being of two types: bewitching shamans and curing shamans. Both kinds take a hallucinogenic drink, whose Jivaro name is *natema*, in order to enter the supernatural world. This brew, commonly called *yagé*, or *yajé*, in Colombia, *ayahuasca* (Inca 'vine of the dead') in Ecuador and Peru, and *caapi* in Brazil, is prepared from segments of a species of the vine *Banisteriopsis*, a genus belonging to the *Malpighiaceae*. The Jivaro boil it with the leaves of a similar vine, which probably is also a species of *Banisteriopsis*, to produce a tea that contains the powerful hallucinogenic alkaloids *harmaline*, *harmine*, *d-tetrahydroharmine*, and quite possibly [dimethyltryptamine DMT](#). These compounds have chemical

structures and effects similar, but not identical to LSD, mescaline of the peyote cactus, and psilocybin of the psychotropic Mexican mushroom.



Washikta, an outstanding Jivaro shaman, quietly listens to a visitor's request for assistance. As is customary when dealing with strangers, he keeps a shotgun in readiness during the consultation.

When I first undertook research among the Jivaro in 1956-57, I did not fully appreciate the psychological impact of the Banisteriopsis drink upon the native view of reality, but in 1961 I had occasion to drink the hallucinogen in the course of field work with another Upper Amazon Basin tribe. For several hours after drinking the brew, I found myself, although awake, in a world literally beyond my wildest dreams. I met bird-headed people, as well as dragon-like creatures who explained that they were the true gods of this world. I enlisted the services of other spirit helpers in attempting to fly through the far reaches of the Galaxy. Transported into a trance where the supernatural seemed natural, I realized that anthropologists, including myself, had profoundly underestimated the importance of the drug in affecting native ideology. Therefore, in 1964 I returned to the Jivaro to give particular attention to the drug's use by the Jivaro shaman.

The use of the hallucinogenic natema drink among the Jivaro makes it possible for almost anyone to achieve the trance state essential for the practice of shamanism. Given the presence of the drug and the felt need to contact the 'real,' or supernatural, world, it is not surprising that approximately one out of every four Jivaro men is a shaman. Any adult, male or female, who desires to become such a practitioner, simply presents a gift to an already practicing shaman, who administers the Banisteriopsis drink and gives some of his own supernatural power - in the form of spirit helpers, or *tsentsak* - to the apprentice. These spirit helpers, or 'darts,' are the main supernatural forces believed to cause illness and death in daily life. To the non-shaman they are normally invisible, and even shamans can perceive them only under the influence of natema.

Shamans send those spirit helpers into the victims' bodies to make them ill or to kill them. At other times, they may suck spirits sent by enemy shamans from the bodies of tribesmen suffering from witchcraft induced illness. The spirit helpers also form shields that protect their shaman masters from attacks. The following account presents the ideology of Jivaro witchcraft from the point of view of the Indians themselves.

To give the novice some *tsentsak*, the practicing shaman regurgitates what appears to be - to those who have taken natema - a brilliant substance in which the spirit helpers are contained. He cuts off part of it off with a machete and gives it to the novice to swallow. The recipient experiences pain upon taking it into his stomach and stays on his bed for ten days, repeatedly drinking natema. The Jivaro believe they can keep magical darts in their stomachs indefinitely and regurgitate them at will. The shaman donating the *tsentsak*, periodically blows and rubs all over the body of the novice, apparently to increase the power of the transfer.

The novice must remain inactive and not engage in sexual intercourse for at least three months. If he fails in self-discipline, as some do, he will not become a successful shaman. At the end of the first month, a *tsentsak* emerges from his mouth. With this magical dart at his disposal, the new shaman experiences a tremendous desire to bewitch. If he casts his *tsentsak* to fulfill this desire, he will become a bewitching shaman. If, on the other hand, the novice can control his impulse and swallow this first *tsentsak*, he will become a curing shaman.

If the shaman who gave the *tsentsak* to the new man was primarily a bewitcher, rather than a curer, the novice likewise will tend to become a bewitcher. This is because a bewitchers magical darts have such a desire to kill that their new owner will be strongly inclined to adopt their attitude. One informant said that the urge to kill felt by bewitching shamans came to them with a strength and frequency similar to that of hunger.

Only if the shaman is able to abstain from sexual intercourse for five months, will he have the power to kill a man (if he is a bewitcher) or cure a victim (if he is a curer). A full year's abstinence is considered necessary to become a really effective bewitcher or curer.

During the period of sexual abstinence, the new shaman collects all kinds of insects, plants, and other objects, which he now has the power to convert into *tsentsak*. Almost any object, including live insects and worms, can become a *tsentsak* if it is small enough to be swallowed by a shaman. Different types of *tsentsak* are used to cause different kinds and degrees of illness. The greater variety of these objects that a shaman has in his body, the greater his ability.

According to Jivaro concepts, each *tsentsak* has a natural and supernatural aspect. The magical dart's natural aspect is that of an ordinary material object as seen without drinking the drug natema. But the supernatural and 'true' aspect of the *tsentsak* is revealed to the shaman by taking natema. When he does this, the magical darts appear in new forms as demons and with new names. In their supernatural aspects, the *tsentsak* are not simply objects but spirit helpers in various forms, such as giant butterflies, jaguars, or monkeys, who actively assist the shaman in his tasks.



Bewitching is carried out against a specific, known individual and thus is almost always done to neighbors or, at the most, fellow tribesmen. Normally, as is the case with intratribal assassination, bewitching is done to avenge a particular offense committed against one's family or friends. Both bewitching and individual assassination contrast with the large-scale headhunting raids for which the Jivaro have become famous, and which were conducted against entire neighborhoods of enemy tribes.

To bewitch, the shaman takes natema and secretly approaches the house of his victim. Just out of sight in the forest, he drinks green tobacco juice, enabling him to regurgitate a *tsentsak*, which he throws at his victim as he comes out of his house. If the *tsentsak* is strong enough and is thrown with sufficient force, it will pass all the way through the victim's body causing death within a period of a few days to several weeks. More often, however, the magical dart simply lodges in the victim's body. If the shaman, in his hiding place, fails to see the intended victim, he may instead bewitch any member of the intended victim's family who appears, usually a wife or child. When the shaman's mission is accomplished, he returns secretly to his own home.

One of the distinguishing characteristics of the bewitching process among the Jivaro is that, as far as I could learn, the victim is given no specific indication that someone is bewitching him. The bewitcher does not want his victim to be aware that he is being supernaturally attacked, lest he take protective measures by immediately procuring the services of a curing shaman. Nonetheless, shamans and laymen alike with whom I talked noted that illness invariably follows the bewitchment, although the degree of the illness can vary considerably.

A special kind of spirit helper, called a *pasuk*, can aid the bewitching shaman by remaining near the victim in the guise of an insect or animal of the forest after the bewitcher has left. This spirit helper has his own objects to shoot into the victim should a curing shaman succeed in



The drawings shown here depict figures seen by the shaman Mashu, while under the influence of the powerful Banisteriopsis drink, natema. At left is the head of a jaguar that appeared in one of Mashu's visions. The shaman, who had never drawn before, used pencil and paper supplied by the author.

sucking out the *tsentsak* sent earlier by the bewitcher who is the owner of the pasuk.

In addition, the bewitcher can enlist the aid of a wakani ('soul,' or 'spirit') bird. Shamans have the power to call these birds and use them as spirit helpers in bewitching victims. The shaman blows on the wakani birds and sends them to the house of the victim to fly around and around the man, frightening him. This is believed to cause fever and insanity, with death resulting shortly thereafter.

After he returns home from bewitching, the shaman may send a wakani bird to perch near the house of the victim. Then if a curing shaman sucks out the intruding object, the bewitching shaman sends the wakani bird more *tsentsak* to throw from its beak into the victim. By continually resupplying the wakani bird with new *tsentsak*, the sorcerer makes it impossible for the curer to rid his patient permanently of the magical darts.



Many times the Christian missionary had told Mashu of the devil feared by white men. But since he had never seen the spirit, Mashu remained skeptical. Some time later, after drinking natema, Mashu was confronted by this figure of the 'white man's devil.' Since that time, Mashu has remained convinced of this spirit's reality.

While the wakani birds are supernatural servants available to anyone who wishes to use them, the pasuk, chief among the spirit helpers, serves only a single shaman. Likewise a shaman possesses only one pasuk. The pasuk, being specialized for the service of bewitching, has a protective shield to guard it from counterattack by the curing shaman. The curing shaman, under the influence of natema, sees the pasuk of the bewitcher in human form and size, but 'covered with iron except for its eyes.' The curing shaman can kill this pasuk only by shooting a *tsentsak* into its eyes, the sole vulnerable area in the pasuk's armor. To the person who has not taken the hallucinogenic drink, the pasuk usually appears to be simply a tarantula.

Shamans also may kill or injure a person by using magical darts, anamuk, to create supernatural animals that attack a victim. If a shaman has a small, pointed armadillo bone *tsentsak*, he can shoot this into a river while the victim is crossing it on

a balsa raft or in a canoe. Under the water, this bone manifests itself in its supernatural aspect as an anaconda, which rises up and overturns the craft, causing the victim to drown. The shaman can similarly use a tooth from a killed snake as a *tsentsak*, creating a poisonous serpent to bite his



victim. In more or less the same manner, shamans can create jaguars and pumas to kill their victims.

About five years after receiving his *tsentsak*, a bewitching shaman undergoes a test to see if he still retains enough *tsentsak* power to continue to kill successfully. This test involves bewitching a tree. The shaman, under the influence of natema, attempts to throw a *tsentsak* through the tree at the point where its two main branches join. If his strength and aim are adequate, the tree appears to split the moment the *tsentsak* is sent into it. The splitting, however, is invisible to an observer who is not under the influence of the hallucinogen. If the shaman fails, he knows that he is incapable of killing a human victim. This means that, as soon as possible, he must go to a strong shaman and purchase a new supply of *tsentsak*. Until he has the goods with which to pay for this new supply, he is in constant danger, in his proved weakened condition, of being seriously bewitched by other shamans. Therefore, each day, he drinks large quantities of natema, tobacco juice, and the extract of yet another drug, piripiri. He also rests on his bed at home to conserve his strength, but tries to conceal his weakened condition from his enemies. When he purchases a new supply of *tsentsak*, he can safely cut down on his consumption of these other substances.

The degree of illness produced in a witchcraft victim is a function of both the force with which the *tsentsak* is shot into the body, and also of the character of the magical dart itself. If a *tsentsak* is shot all the way through the body of a victim, then 'there is nothing for the curing shaman to suck out,' and the patient dies. If the magical dart lodges within the body, however, it is theoreticall possible to cure the victim by sucking. But in actual practice, the sucking is not always considered successful.



The work of the curing shaman is complimentary to that of a bewitcher. When a curing shaman is called in to treat a patient, his first task is to see if the illness is due to witchcraft. The usual diagnosis and treatment begin with the curing shaman drinking natema, tobacco juice, and piripiri in the late afternoon and early evening. These drugs permit him to see into the body of the patient as though it were glass. If the illness is due to sorcery, the curing shaman will see the intruding object within the patient's body clearly enough to determine whether or not he can cure the sickness.

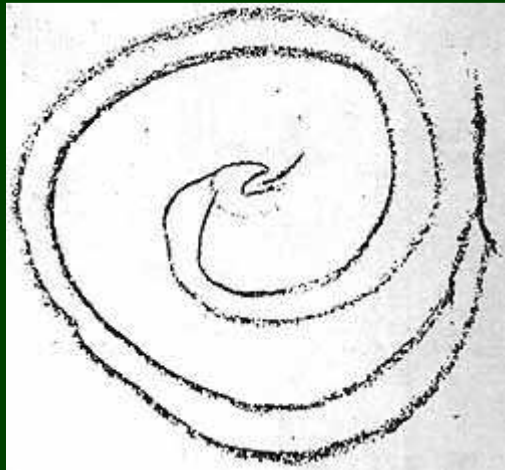
Whenever the shaman is curing or bewitching, his head remains covered by this halo-like crown. The crown can be seen by those drinking natema, but remains hidden from other onlookers.

A shaman sucks magical darts from a patient's body only at night, and in a dark area of the house, for it is only in the dark that he can perceive the drug-induced visions that are the supernatural reality. With the setting of the sun, he alerts his *tsentsak* by whistling the tune of the curing song: after about a quarter of an hour, he starts singing. When he is ready to suck, the shaman regurgitates two *tsentsak* into the sides of his throat and mouth. These must be identical to the one he has seen in the patient's body. He holds one of these in the front of the mouth and the other in the rear. They are expected to catch the supernatural aspect of the magical dart that the shaman sucks out of the patient's body. The *tsentsak* nearest the shaman's lips is supposed to incorporate the sucked-out *tsentsak* essence within itself. If, however, this supernatural essence should get past it, the second magical dart in the mouth blocks the throat so that the intruder cannot enter the interior of the shaman's body. If the curer's two *tsentsak* were to fail to catch the supernatural essence of the *tsentsak*, it would pass down into the shaman's stomach and kill him. Trapped thus within the mouth, this essence is caught by, and incorporated into, the material substance of one of the curing shaman's *tsentsak*. He then 'vomits' out this object and displays it to the patient and his family saying, 'Now I have sucked it out. Here it is.'

The non-shamans think that the material object itself is what has been sucked out, and the shaman does not disillusion them. At the same time, he is not lying, because he knows that the only important thing about a *tsentsak* is its supernatural aspect, or essence, which he sincerely believes he has removed from the patient's body. To explain to the layman that he already had these objects in his mouth would serve no fruitful purpose and would prevent him from displaying such an object as proof that he had effected the cure. Without incontrovertible evidence, he would not be able to convince the patient and his family that he had effected the cure and must be paid.

The ability of the shaman to suck depends largely on the quantity and strength of his own *tsentsak*, of which he may have hundreds. His magical

darts assume their supernatural aspect as spirit helpers when he is under the influence of natema, and he sees them as a variety of zoomorphic forms hovering over his, perching on his shoulders, and sticking out of his skin. He sees them helping to suck the patient's body. He must drink tobacco juice every few hours to 'keep them fed' so that they will not leave him.



This snake *tsentsak* was seen by Mashu, coiled within the stomach of one of his patients. To work his cure, Mashu then sucked this supernatural essence from the patient's abdomen.

The curing shaman must also deal with any pasuk that may be in the patient's vicinity for the purpose of casting more darts. He drinks additional amounts of natema in order to see them and engages in *tsentsak* duels with them if they are present. While the pasuk is enclosed in iron armor, the shaman himself has his own armor composed of his many *tsentsak*. As long as he is under the influence of natema, these magical darts cover his body as a protective shield, and are on the lookout for any enemy *tsentsak* headed toward their master. When these *tsentsak* see such a missile coming, they immediately close up together at the point where the enemy dart is attempting to penetrate, and thereby repel it.

If the curer find *tsentsak* entering the body of his patient after he has killed pasuk, he suspects the presence of a wakani bird. The shaman drinks maikua (*Datura* sp.), an hallucinogen even more powerful than natema, as well as tobacco juice, and silently sneaks into the forest to hunt and kill the bird with *tsentsak*. When he succeeds, the curer returns to the patient's home, blows all over the house to get rid of the 'atmosphere' created by the numerous *tsentsak* sent by the bird, and completes his sucking of the patient. Even after all the *tsentsak* are extracted, the shaman may remain another night at the house to suck out any 'dirtiness' (*pahuri*) still inside. In the cures which I have witnessed, this sucking is a most noisy process, accompanied by deep, but dry, vomiting.

After sucking out a *tsentsak*, the shaman puts it into a little container. He does not swallow it because it is not his own magical dart and would therefore kill him. Later, he throws the *tsentsak* into the air, and it flies back to the shaman who sent it originally into the patient. *tsentsak* also fly back to a shaman at the death of a former apprentice who has originally received them from him. Besides receiving 'old' magical darts unexpectedly in this manner, the shaman may have *tsentsak* thrown at

him by a bewitcher. Accordingly, shamans constantly drink tobacco juice at all hours of the day and night. Although the tobacco juice is not truly hallucinogenic, it produces a narcotized state, which is believed necessary to keep one's *tsentsak* ready to repel any other magical darts. A shaman does not even dare go for a walk without taking along the green tobacco leaves with which he prepares the juice that keeps his spirit helpers alert. Less frequently, but regularly, he must drink natema for the same purpose and to keep in touch with the supernatural reality.

While curing under the influence of natema, the curing shaman 'sees' the shaman who bewitched his patient. Generally, he can recognize the person, unless it is a shaman who lives far away or in another tribe. The patient's family knows this, and demands to be told the identity of the bewitcher, particularly if the sick person dies. At one curing session I attended, the shaman could not identify the person he had seen in his vision. The brother of the dead man then accused the shaman himself of being responsible. Under such pressure, there is a strong tendency for the curing shaman to attribute each case to a particular bewitcher.

Shaman's gradually become weak and must purchase *tsentsak* again and again. Curers tend to become weak in power, especially after curing a patient bewitched by a shaman who has recently received a new supply of magical darts. Thus, the most powerful shamans are those who can repeatedly purchase new supplies of *tsentsak* from other shamans.

Shamans can take back *tsentsak* from others to whom they have previously given them. To accomplish this, the shaman drinks natema, and using his *tsentsak*, creates a 'bridge' in the form of a rainbow between himself and the other shaman. Then he shoots a *tsentsak* along this rainbow. This strikes the ground beside the other shaman with an explosion and flash likened to a lightning bolt. The purpose of this is to surprise the other shaman so that he temporarily forgets to maintain his guard over his magical darts, thus permitting the other shaman to suck them back along the rainbow. A shaman who has had his *tsentsak* taken away in this manner will discover that 'nothing happens' when he drinks natema. The sudden loss of his *tsentsak* will tend to make him ill, but ordinarily the illness is not fatal unless a bewitcher shoots a magical dart into him while he is in this weakened condition. If he has not become disillusioned by his experience, he can again purchase *tsentsak* from some other shaman and resume his calling. Fortunately for anthropology some of these men have chosen to give up shamanism and therefore can be persuaded to reveal their knowledge, no longer having a vested interest in the profession. This divulgence, however, does not serve as a significant threat to practitioners, for words alone can never adequately convey the realities of shamanism. These can only be approached with the aid of natema, the chemical door to the invisible world of the Jivaro shaman.



## The Ayahuasca-Alien Connection

From *Ayahuasca Visions, The Religious Iconography of a Peruvian Shaman* a publication of outstanding paintings of ayahuasca visions by native shaman **Pablo César Amaringo**, in collaboration with anthropologist **Luis Eduardo Luna, Ph.D.**

This large format book contains 160 pages and 49 magnificent 10.25" x 8" color plates. **Published by North Atlantic Books, 2800 Woolsey Street, Berkeley, California 94705 ISBN 1-55643-064-7** You can find it at [Mind Books](#) and [Amazon](#). For more information, and to purchase paintings directly from the artist visit <http://www.pabloamaringo.com>

*This 2nd edition of this [deoxy](#) remix combines excerpts from the text with small scanned regions from 27 of Pablo's 49 larger paintings. The 1st edition contained several errors and omissions, and was not illustrated. Revised 7/23/99*

[deoxy](#) » [shamanism](#)

[ayahuasca](#)



## Vision 7

icaro



Sayer

Gebhart-

Gebhart-Sayer

(Gebhart-Sayer 1987:141-2)



[\(San Jose 1767:364\)](#)



[\(Gebhart-Sayer  
1985:168,172;1986:205;1987:240\);](#)

[Whitten 1985:147\);  
\(Chevalier 1982:352-3\);](#)

[Pellizzaro 1976:23,249](#)

[Luna 1986:93;  
Pellizzaro 1976:47\);](#)

[insect](#)

[\(1959\)](#)

[Jung](#)



[Gomez 1969; Reichel-  
Dolmatoff 1971:43,173; Vickers & Plowman 1984:19; Ramirez de Jara &  
Pinzon 1986:173-4; Chaumeil 1982:40; Cipoletti1987;etc.\)](#)

[Gomez:](#)

[\(Gomez 1969:67\)](#)

[Valle \(1979\)](#)

[Meheust \(1988\)](#)

[hallucinogens](#)

[Terence McKenna](#)

[tryptamine](#)

[cf. McKenna 1984,1989\)](#)

[dimethyltryptamine](#)

[Valle \(1979:209-10\)](#)

## **THE VISIONS PART I: Plant-Teachers and Shamanic Powers**

[deoxy](#) **shamanism**

**Bibliography of references cited**

Chaumeil, Jean-Pierre

1982 Representation du Monde d'un Chaman Yagua. L'Ethnographie 78(87/88)49-83.

Chevalier, Jacques M.

1982 Civilization and the Stolen Gift: Capital, Kin, and Cult in Eastern Peru. University of Toronto Press.

Cipoletti, Maria Susana

1987 El Ascenso al Cielo en la Tradicion Oral Secoya (Noroeste Amazonico). Indiana 11190, Berlin.

Gebhart-Sayer, Angelika

1985 The Geometric Designs of the Shipibo-Conibo in ritual context. Journal of Latin American Lore 11(2)143-75

1986 Una Terapia Estetica. Los Disenos Visionarios del Ayahuasca entre los Shipibo-Conibo. America Indigena 46(1)189-218. Mexico.

1987 Die Spitze des Bewusstseins. Untersuchungen zu Weltbild und Kunst der Shipibo-Conibo. Hohen scaftlarn, Klaus Renner Verlag.

Gomez, Antonio

1969 El Cosmos, Religion y Creencias de los Indios Cuna. In Boletin de Antropologia 3(11)55-98. Medellin, Universidad de Antioquia.

Jung, Carl G.

1959 Flying Saucers: A Modern Myth of Things Seen in the Sky. London & Henley, Routledge & Kegan Paul.

Luna, Luis Eduardo

1986a Vegetalismo Shamanism Among the Mestizo Population of the Peruvian Amazon. Stockholm, Almqvist & Wiksell International.

[McKenna, Terence K.](#)

1984 True Hallucinations, Berkeley, Lux Natura Inc. (An eight-tape talking book.)

1989a A Conversation over Saucers, ReVision 2(3)23-30.

Meheust, B

1988 Transeapatride. Pensees Mythique et Pensees Delirantes. Synapse 4458-75. Paris.

Pellizzaro, Siro

1976 Iniciacion, Ritos y Cantos de los Chamanes. Mitologia Shuar. Sucua, Ecuador, Mundo Shuar.

Ramirez De Jara, Maria Clemencia & Pinzon, Carlos Ernesto

1986 Los Hijos del Bejuco Solar y la Campana Celeste. El Yaje en la Cultura Popular Urbana. America Indigena 46(1)163-88. Mexico.

Reichel-Dolmatoff, Gerardo

1971 Amazonian Cosmos: The Sexual and Religious Symbolism of the Tukano Indians. Chicago, University of Chicago Press.

San Jose, Francisco de

1767 Relacion del padre fray Francisco de San Jose. Guardian de Ocopa. In B. Izaguirre, Historia de las Misiones Franciscanas y Narracion de los Progresos de la Geografia en el Oriente del Peru, 1619-1921, tomo II, Apendices VII. Lima 1922.

Valle, Jacques

1979 Messengers of Deception: UFO Contacts and Cults. Berkely, And/Or Press.

Vickers, William T. & Plowman, Timothy

1984 Useful Plants of the Siona and Secoya Indians of Eastern Ecuador. Fieldiana. Chicago, Field Museum of Natural History. Publication 1351.

Whitten, Norman E.

1985 Sicuanga Runa: The Other Side of Development in Amazonian Ecuador. Urbana and Chicago, University of Illinois Press.

## **THE VISIONS PART I: Plant-Teachers and Shamanic Powers**

## THE VISIONS PART I

### PLANT-TEACHERS AND SHAMANIC POWERS

#### *VISION 2* *ORIGIN OF AYAHUASCA*

To the left we see the giant Liborim with a magical flying dagger he uses against his enemies. Behind him there are three flying saucers coming from Andromeda to influence those learning magical sciences with their enigmatic vibrations.

In front of the flying saucer is the house where several curanderos are in the midst of



these beautiful ayahuasca visions.



#### *VISION 4* *THE SPIRITS OR MOTHERS OF THE PLANTS*

Further in the background a great garden stretches back to an enchanted castle on the outskirts of the dense city Ankord. Ankord is a mysterious city that lies in some unknown part of the earth. Over the city circles a strange spaceship.

#### *VISION 7*



#### *CURANDERA TRANSFORMED INTO A BOA*

This is a very strong vision in which we see that a great vegetalista curandera has become a beautiful queen wearing a golden crown, with the body of a blue serpent with disc-shaped marks.

Some of her companions are frightened and haven't the courage to look at her and withstand the aura she makes sprout from their heads. She unfolds in their midst,



showing them the power she possesses. She makes them see and listen to a great roaring machine in the form of a disc of very complicated structure and a flashing luminescence. Violet, orange, and yellow lights emanate from this machine. It is a large cosmic ship capable of moving at fantastic speeds, built by beings with an intelligence superior to humans.

#### **VISION 8**

##### **THE POWERS OF THE MARIRIS**

Above the queen appear the killo-caranchi {the yellow skins}, whose hair takes the form of the cobra. The killo-caranchi are engaged in a magical tambourine dance. Behind them flying saucers appear from the most distant reaches of the universe. Some day, far in the future, mankind will be able to comprehend these unfathomable beings.



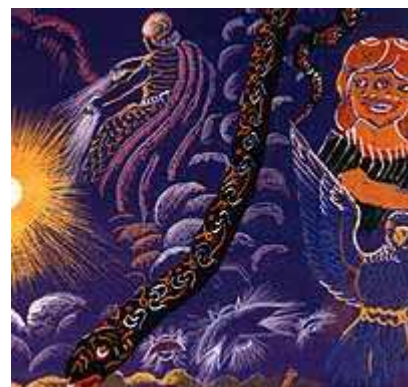
#### **VISION 9**

##### **EL SOLITARIO**

A shaman has taken ayahuasca in solitude... In the background we see several giants from Antares, a distant galaxy; they have come to visit the Earth in their flying saucer.

#### **VISION 10** **INCAIC VISION**

To the right we see a creature with wings and an eagle's head, always travelling through the universe. Behind it we see another creature called Quinsanahui, used by shamans to frighten their enemies. In the background are three spaceships from Andromeda, just arriving from a visit to the subaquatic city. We also



see two celestial beings controlling the solar rays to benefit the earth.

### **VISION 13**

#### ***IN CONNECTION WITH HEALERS IN TIME AND SPACE***



We see shamans from different parts of the world, all practicing vegetal and spiritual medicine... Also present are two women called cuayacunas or caressing women. At their side is an extraterrestrial ship from Ganymede with a magic ladder by which the crew may disembark.

Below are two ships that have come from Venus; their crews approach the house of the shaman in haste. In front of the house is the supay-tuyuyo (tuyuyo, a large bird), which the master uses as a vehicle when leaving for the outer world and space regions. Below are the callampas (mushrooms) and the callampa machaco (mushroom snake).



## **THE VISIONS PART II: The Spirit World**

### **The Ayahuasca-Alien Connection**

## **THE VISIONS PART II SPIRIT WORLD**

### **A. FOREST SPIRITS**



#### **VISION 14 THE THREE POWERS**

Four flying objects always accompany the sylphs as guardians wherever they go.

#### **VISION 16**

##### **THE SESSION OF THE CHULLACHAKI**



In the upper left corner is the chirapa {rainbow} and two dazzling spaceships that hasten to make contact with human beings. They come from the Pleiades.

In the pond, on top of two ivory towers, the yanahuarmis twins {black women} are sitting with nets to catch the spaceships. They wish to take them to the bottom and make the crew members live with them in luxurious aquatic palaces.

On the right there is another extraterrestrial spaceship with a melodious icaro that has come from the Kima constellation. It emanates wisdom in the form of heavenly light.

#### **B. CHTHONIC SPIRITS**

#### **VISION 18**

##### **MURAYA ENTERING THE SUBAQUATIC WORLD**

In the middle is seen an airport for extraterrestrial spaceships from various places. A ship from Jupiter descends to land in this airport at the bottom of the river.

The ship in the center of the airport is from Ganymede.

The one at the right is from Venus, the one at the left is

from Saturn, and the one in the back from mars.





#### ***VISION 21***

#### ***THE SUBLIMITY OF THE SUMIRUNA***

Two acorones or giant boas open their mouths to let the animals and yakurunas used by vegetalistas give their farewells to the great sumiruna. White mermaids make the capsule levitate. Flying saucers hurry to receive it, and to accompany it in its astral travel.

### **C. OURANIAN SPIRITS**

## VISION 25

### VISION OF THE PLANETS



In the vision we also see a spaceship coming from Mars, one of the planets shown, which is comprised of four different regions - that of the great volcanoes, the region of deep canyons, the region of great craters, and the region of the terraces, full of deep caves.

A little beyond is Jupiter and even farther out is Guibori, a fairy, with her magic blue star. Two comets are travelling very fast. Vegetalistas are able to call them to travel to distant places in the universe.

In the center we see the other planets: Saturn, Uranus, Neptune, and Pluto. Vegetalistas may visit all these planets rather easily, because they are not very far away.



In the background we see Nina-runu with her horses of fire. She is called upon by shamans as a powerful defense.

To the left (in the original painting, to the right here) we see Venus, from which a spaceship is coming.



## VISION 27

### SPIRITS DESCENDING ON A BANCO

To the left there is a Sachamama with a rainbow coming from her eyes. Near her is a medicinal plant called maramara (unidentified). Above is a flying saucer that comes from one of Saturn's satellites, and two angels armed with swords and spherical shields.

## THE VISIONS PART III: Illness and Curing

## THE VISIONS PART III

### ILLNESS AND CURING

#### VISION 28



#### *SPIRITUAL HEART OPERATION*

This happened when I arrived in Tamanco in 1959. My father took me to a settlement called Brazil. In a house on one end of town lived a woman called Maria Pacaya. My father had to cure several patients, and there he took ayahuasca. He also gave me the brew after blowing on it with the purpose of helping me, as I was suffering from a heart disease.

The brew was so strong that I was at the edge of screaming. The visions were so vivid that I thought what I saw was not just imagination, but a contact with something physical and real. I saw sphinxes; I was in Africa, Europe, and the Americas; suddenly I saw a doctor dressed in a grey-violet suit. He was an American. His wife was wearing an emerald-green dress. Their daughter had a dress of the same color. They seemed to be nurses, and had with them scalpels, scissors, pincers, hooks, cotton, needles and thread, and medicine of various kinds.

The doctor asked me to take off my shirt. He took a large, broad knife and opened me from the clavicle to the last rib of the left side. With a hammer he broke the ribs and opened my chest. He put my heart on a dish, where he operated on its arteries and joined them with some sort of soft plastic tubes. The doctor showed me the location of the damage in my arteries.

In the meantime the daughter of the doctor had already prepared the needle and threaded needle to sew the wound. They put my heart back in its place, closed my chest, and cleansed and sewed up the wound. They told me that I had to fast for a week. I did so, and since then I have felt perfect.<sup>[149]</sup>

<sup>149</sup>In the course of interviews with vegetalistas and their patients I have encountered several narrations in which healing takes place through imagery, either in the visions or in dreams... Clodomir Monteiro da Silva reports that Sebastiao Costa, a disciple of Irineu Serra, the founder of the Santo Daime (ayahuasca) church in Brazil, was 'operated on' under the effects of the brew. He saw his body lying in front of him, and two men arrived with instruments, removed his bones and put them back into his body, opened his body, and took a square piece out from which three small animals came that were the cause of the illness (Monteiro 1985:104-5).

This seems to suggest that in the visions the patients or the shaman metaphorically enacts the healing process, and it is this visualization which carries out the healing (cf. Achterberg 1985).



## **VISION 29**

### **TYPES OF SORCERY**



In front of the city we see a flying object that approaches the house where ayahuasca is taken. It comes from the planet Mars, and in it come goblins, experts in surgical operations. They come from the area of the impenetrable craters.



Further down we see another extraterrestrial ship, which comes from the galaxy Antares with beings of elastic body who do not walk upon the ground, as they have strong levitation powers which can suspend even the heaviest body.



## **VISION 31**

### **CUNGATUYA**

In the background, we see a big spaceship from the Kima constellation, with powerful knowledge about meditation and levitation.

## **VISION 32**

### **PREGNANT BY AN ANACONDA**

The spaceship behind her is seeing to it that the boa is not stronger than vegetalista and thus cannot harm him. It comes from a galaxy where there is a city called Aponia, where the people live in peace without knowing money, only love; where people don't fight against

each other, but work in harmony.





### ***VISION 33***

#### ***CAMPANA AYAHUASCA***

We see a flying object coming from the North with blue beings from Venus. Half the body of these beings is like that of humans, the other half is made only of energy. They come to teach the vegetalistas medicine...

In the center is a spaceship that travels at great speeds...



### ***VISION 36***

#### ***INCORPORATION IN A PATIENT***

The helpers of the vegetalistas are genies of ancient cultures... There are three temples. Those initiates who are going to be ordained ascend colored steps to the first temple. Those descending have already been admitted, which is why a lilac-colored horse with wings is coming from there. The initiated go to the second temple to graduate as masters with deeper esoteric knowledge. That's why we see a spaceship leaving. It symbolizes the fact that they are now better protected. To the third temple with its light-blue stairs go those ordained as sublime masters, and they come down having been approved as worthy and respected masters of the esoteric sciences. That is why we see one spaceship

leaving in an upward direction and another downward.

**VISION 38**

**FRIGHTENED BY THE CHULLACHAKI**

Lower down is the great Sakia Kuan Jo, with his flying hat like lightening that strikes the enemy. This prince holds a goblet containing the miraculous balsam that cures any ailment.

Below, glowing with green, red, and yellow lights, is a spaceship of the elves who live on terraces of the planet Mars, and who from time to time visit the Earth.



**VISION 39**

**RECOVERING A YOUNG MAN KIDNAPPED BY A YAKURUNA**



On the left we see a powerful cosmic ship that moves through the different galaxies bringing auras of great wisdom.

**VISION 41  
PULSATIONS**

In the upper right corner we see a spaceship coming from a distant place, near the edge of the universe, where darkness becomes solid and impenetrable. It has come here by travelling through trillions of galaxies of the unfathomable universe one can visit by means of the sacred plant ayahuasca. The people of the world from which this spaceship comes live in perfect harmony, love, and wisdom, without



egoism and wars.



*VISION 42*

*LUCERO AYAHUASCA*

To the right is a great palace of the sublime fakirs of Brahma. In front is the mystical rose of wisdom, made of precious diamonds and lights of psychic illumination. There is also an extraterrestrial spaceship with standards pointing towards the four cardinal points. In this ship come beings from the constellation Kima. They resemble humans and speak very slowly.

In the lower part of the painting there are several giants that come from the center of the galaxy Antares. They have great power and teach icaros that many vegetalistas use to cure snake bites or the bites of other poisonous animals.

#### VISION 45

#### VEGETALISTAS TRANSFORMING THEMSELVES INTO WOLVES TO HIDE FROM A SORCERER.



In this painting we see a *sumi*, or great sorcerer, trying to cause harm to a group of people peacefully taking ayahuasca. He is wearing a sword the color of fire. As he moves, lightning and thunder are produced. The ghosts of horrible men, women, and animals surround him. They all pass like locusts. But the sorcerer is deceived by the vegetalistas, who transform themselves into wolves, drinking ayahuasca from a gourd.

#### VISION 46

#### SEPULTURA TONDURI



But this muraya is stronger than the three vegetalistas. We see to the far right how he summons his powers, the nina-rumis volcanoes {nina=fire, rumis=stone}, which are mighty with their lava flows and earthquakes and their large spaceships, which come to attack making circles with laser nets, ready to catch in their traps everything the sorcerer uses.

#### VISION 47

#### ELECTROMAGNETISM OF THE YANA-YAKUMAMA

The icaros of the curandero pull the black boa towards a hole in the ground, where it will be closed with circling discs, charged with radioactivity, which were brought by the great acrobats called yura-pachacama, white souls who take care of the universe.







## GRADATION OF POWERS

A splendid vision in which the sublime powers of the invisible

world are seen as luminous rays, with qualities or grades that go beyond all human knowledge... Then there is a turquoise-blue ray representing the sapphire. There we see angels or messengers who roam the vast universe, dwelling in different galaxies for some time. They have extrasensory wisdom and move with the speed of thought. They are the guardians appointed to the immense universe.

3. The beta -carbolines. Beta-carbolines, such as harmine and harmaline, can be hallucinogenic at close to toxic levels. They are important for visionary shamanism because they can inhibit enzyme systems in the body that would otherwise depotentiate hallucinogens of the DMT type. Hence beta-carbolines can be used in conjunction with DMT to prolong and intensify visual hallucinations. This combination is the basis of the hallucinogenic brew ayahuasca or yage, in use in Amazonian South America. Beta-carbolines are legal and until very recently were virtually unknown to the general public.

From observing the ayahuasca-using people of the Upper Amazon, it became very clear to me that shamanism is often intuitively guided group decision making. The shamans decide when the group should move or hunt or make war. Human cognition is an adaptive response that is profoundly flexible in the way it allows us to manage what in other species are genetically programmed behaviors.

In these situations it functions much as ayahuasca functions among its traditional users; as a boundary-dissolving visionary hallucinogen. Here is another example of research only waiting for social attitudes to change in order to be done.

Of course, when I arrived in the Amazon twenty years ago, I knew nothing of the above. Like most Westerners, I believed that magic was a phenomenon of the naive and the primitive, that science could provide an explanation for the workings of the world. In that position of intellectual naivete, I encountered psilocybin mushrooms for the first time, at San Augustine in the Alto Magdalena of southern Colombia. Later and not far away, in Florencia, I also encountered and used visionary brews made from Banisteriopsis vines, the yage or ayahuasca of 1960s underground legend.' The experiences that I had during those travels were personally transforming and, more important, they introduced me to a class of experiences that is vital to the restoration of balance in our social and environmental worlds.

I have shared the group mind that is generated in the vision sessions of the ayahuasqueros. I have seen the magical darts of red light that one shaman can send against another. But more revelatory than the paranormal feats of gifted magicians and spiritual healers were the inner riches that I discovered within my own mind at the apex of these experiences. I offer my account as a kind of witness, an Everyman; if these experiences happened to me, then they can be part of the general experience of men and women everywhere.

An understanding of how to achieve this balance lingers on in the forgotten and trampled cultures of the rain forests and deserts of the Third World, and in the reserves and reservations into which dominator cultures force their aboriginal people. The shamanic gnosis is possibly dying; certainly it is changing. Yet the plant hallucinogens that are the source of this, the oldest of human religions, remain a clear running spring, as refreshing as they have always been. Shamanism is vital and real



because of the individual encounter with the challenge and wonder, the ecstasy and exaltation induced by hallucinogenic plants.

My encounters with shamanism and hallucinogens in the Amazon convinced me of their salvific importance. Once convinced, I was determined to filter out the various forms of linguistic, cultural, pharmacological, and personal noise that obscured the Mystery. I hoped to distill the essence of shamanism, to track the Epiphany to her lair. I wanted to see beyond the veils of her whirling dance. A cosmic peeping Tom, I dreamed of confronting naked beauty.

A cynic in the dominator style might be content to dismiss this as delusions of romantic youth. Ironically, I was at one time that cynic. I felt the folly of the quest. I knew the odds. "The Other? Naked Platonic beauty? You must be kidding!"

And it must be admitted that there were many wild misadventures along the way. "We must become God's fools," an enthusiastic Zen acquaintance once urged, by which he meant, "Hit the road."

Seeking and finding had been a method that had worked for me in the past. I knew that shamanic practices based on the use of hallucinogenic plants still survived in the Amazon, and I was determined to confirm my intuition that a great secret lay undiscovered behind this fact.

Reality outran apprehension. The mottled face of the leprous old woman was made more startlingly hideous when the fire she tended suddenly flared as she added more wood. In the semidarkness behind her, I could see the guide who had brought me to this unnamed place on the Rio Cumala.

Back in the river town bar this chance encounter with a boatman willing to take me to see the miracleworking ayahuasca witch of local legend had seemed like a great chance for a story. Now, after three days of river travel and a halfday struggling through trails so flooded with mud that they threatened with each step to suck your boots right off you, I was not so sure.

At this point, the original object of my quest the authentic deep forest ayahuasca, reportedly so different from the swill of the char latans of the marketplace-hardly held any interest for me.

"Tome, caballero!" the old woman had cackled as she offered me a full cup of the black, slow-flowing liquid. Its surface had the sheen of motor oil.

She must have grown into this role, I thought as I drank. It was warm and salty, chalky and bittersweet. It tasted like the blood of some old, old thing. I tried not to think about how much at the mercy of these strange people I now was. But in fact my courage was failing. Both Dona Catalina and the guide's mocking eyes had slowly gone cold and mantislike. A wave of insect sound sweeping up the river seemed to splatter the darkness with shards of sharpened light. I felt my lips go numb.

Trying not to appear as loaded as I felt, I crossed to my hammock and lay back. Behind my closed eyelids there was a flowing river of magenta light. It occurred to me in a kind of dreamy mental pirouette that a helicopter must be landing on top of the hut, and this was the last impression I had. When I regained consciousness I appeared to myself to be surfing on the inner curl of a wave of brightly lit transparent information several hundred feet high. Exhilaration gave way to terror as I realized that my wave was speeding toward a rocky coastline. Everything disappeared in the roaring chaos of informational wave meeting virtual land. More lost time and then an impression of being a shipwrecked sailor washed onto a tropical shore. I feel that I am pressing my face into the hot sand of a tropical beach. I feel lucky to be alive. I am lucky to be alive! Or is it that I am alive to be lucky? I break up laughing.

At this point the old woman begins to sing. Hers is no ordinary song, but an icaro, a magical curing song that in our intoxicated and ecstatic state seems more like a tropical reef fish or an animated silk scarf of many colors than a vocal performance. The song is a visible manifestation of power, enfolding us and making us secure.

Harmaline, the beta-carboline present in *Peganum harmala*, is distinct in its pharmacological activity from harmine, its near relative which occurs in the South American ayahuasca plant, *Banisteriopsis caapi*.

## THE NEW WORLD HALLUCINOGENS

Indole-containing plant hallucinogens, and their cults, cluster in the tropical New World. The New World subtropical and tropical zones are phenomenally rich in hallucinogenic plants. Similar ecosystems in the Southeast Asian and Indonesian tropics cannot compare in numbers of endemic species that contain psychoactive indoles. Why are the Old World tropics, the tropics of Africa and Indonesia, not equally rich in hallucinogenic flora? No one has been able to answer this question. But statistically speaking the New World seems to be the preferred home of the more powerful

psychoactive plants. Psilocybin, while now known to occur in European species, of diminutive mushrooms of the genus *Psilocybe*, has never been convincingly shown to have been a part of European shamanism or ethnomedicine. Yet its shamanic use in Oaxacan Mexico is three millennia old. Similarly, the New World has the only living cults based on use of dimethyltryptamine (DMT), the beta-carboline group including harmine, and the ergotlike complex in morning glories.

A historical consequence of this clustering of hallucinogens in the New World was that Western science discovered their existence rather late. This may explain the absence of "psychedelic" input into Western drugs for psychiatric uses. Meanwhile, because of the influence of hashish and opium on the Romantic imagination, the hashish reverie or opium dream became the paradigm of the action of the new "mental drugs" that fascinated the Bohemian literati from the late eighteenth century on. Indeed, hallucinogens were seen as capable of mimicking psychoses in their early encounter with Western psychotherapy.

In the nineteenth century explorer-naturalists began to return with more or less accurate ethnographic reports of the activities of aboriginal peoples. Botanists Richard Spruce and Alfred Russel Wallace traveled in the Amazon drainage in the 1850s. On the upper reaches of the Rio Negro, Spruce observed a group of Indians prepare an unfamiliar hallucinogen. He further observed that the main ingredient for this intoxicant was a liana, a woody climbing vine, which he named *Banisteria caapi*. Several years later, while traveling in western Ecuador

he saw the same plant being used to make a hallucinogen called ayahuasca.<sup>2</sup> (See Figure 25.)

Ayahuasca has continued to the present day to be a part of the spiritual life of many of the tribes in the montane rain forest of South America. Immigrants into the Amazon basin have also accepted ayahuasca and have created their own ethnobotanical-medical system for using the psychedelic visions it imparts to promote healing.

The word ayahuasca is a Quechua word that roughly translates as "vine of the dead" or "vine of souls." This term refers not only to the prepared hallucinogenic beverage but also to one of its main ingredients, the woody liana. The tissues of this plant are rich in alkaloids of the beta-carboline type. The most important beta-carboline occurring in what is now called *Banisteriopsis caapi* is harmine. Harmine is an indole, but it is not overtly psychedelic unless taken in amounts that approach what is considered a toxic dose. However, well below that level, harmine is an effective short-acting monoamine oxidase inhibitor. Thus, a hallucinogen such as DMT, which would normally be inactive if taken orally, is rendered highly psychoactive if taken orally in combination with harmine. Native peoples of the Amazon region have brilliantly exploited these facts in their search for techniques to access the magical dimensions crucial to shamanism.<sup>3</sup> By combining, in ayahuasca, DMT-containing plants with plants that contain MAO inhibitors, they have long exploited a pharmacological mechanism, MAO inhibition, not described by Western science until the 1950s.

In the presence of harmine, DMT becomes a highly psychoactive compound that enters the bloodstream and eventually makes its way past the blood-brain barrier and into the brain. There it very effectively competes with serotonin for synaptic bonding sites. This experience of the slow release of DMT lasts four to six hours and is the basis of the magical and shamanic view of reality that characterizes the ayahuasquero and his or her circle of initiates. Uninvolved or so-called objective styles of anthropological reportage have tended to underemphasize the culture-shaping importance that these altered states have had for tribal Amazonian societies.

The experience of ingesting ayahuasca—organic DMT taken in combination with the *Banisteriopsis* vine—has a number of characteristics that set it apart from the experience of smoking DMT.

Ayahuasca is gentler and of much greater duration. Its themes and hallucinations are oriented toward the organic and the natural world, in marked contrast to the titanic, alien, and off-planet motifs that characterize the DMT flash. Why such major differences should exist between compounds that appear to be so structurally similar is an uninvestigated problem. Indeed, the whole relationship of particular kinds of visions to the compounds that elicit them is not well understood. In the native areas of its use, ayahuasca is regarded as a general-purpose healing elixir and is called *la purga*, the purge. Its effectiveness in combating intestinal parasites has been proven. Its effectiveness in killing the malaria organism is now being investigated. And its long history of effective shamanic use in folk psychiatry has been documented by Naranjo, Dobkin de Rios, Luna, and others.

## **AYAHUASCA**

The experience induced by ayahuasca includes extremely rich tapestries of visual hallucination that are particularly susceptible to being "driven" and directed by sound, especially vocally produced

sound. Consequently, one of the legacies of the ayahuasca-using cultures is a large repository of icaros, or magical songs (Figure 26). The effectiveness, sophistication, and dedication of an ayahuasquero is predicated upon how many magical songs he or she has effectively memorized. In the actual curing sessions, both patient and healer ingest ayahuasca and the singing of the magical songs is a shared experience that is largely visual.

The impact of long-term use of hallucinogenic indoles on mental and physical health is not yet well understood. My own experiences among the mestizo populations of Amazonas convince me that the long-term effect of ayahuasca use is an extraordinary state of health and integration. Ayahuasqueros use sound and suggestion

to direct healing energy into parts of the body and unexamined aspects of an individual's personal history where psychic tension has come to rest. Often these methods exhibit startling parallels to the techniques of modern psychotherapy; at other times they seem to represent an understanding of possibilities and energies still unrecognized by Western theories of healing.

Most interesting from the point of view of the arguments made in this book are the persistent rumors of states of group-mind or telepathy that occur among the less acculturated tribal peoples. Our history of skepticism and empiricism would have us dismiss such claims as impossible, but we should think twice before doing so. The chief lesson to be learned from the psychedelic experience is the degree to which unexamined cultural values and limitations of language have made us the unwitting prisoners of our own assumptions. For it cannot be without reason that wherever in the world hallucinogenic indoles have been utilized, their use has been equated with magical self-healing and regeneration. The low incidence of serious mental illness among such populations is well documented.

## Ecstasy

Literally: the withdrawal of the soul from the body; mystical or prophetic exaltation or [rapture](#) characteristic of [shamanism](#) and visionary states, originally and *naturally* catalyzed by [entheogenic](#) plants; also, such states *artificially* induced by breath control, fasting, [meditation](#), drumming and other shamanic and [yogic](#) practices. Hence: Ecstasied, Ecstasis, Ecstasize, Ecstatic, Ecstatical.

**1857** Ludlow *The Hasheesh Eater*, 55. My ecstasy became so great that I seemed to cast off all shackles of flesh.

**1957** Wasson *Mushrooms, Russia & History*, 295. On both nights RGW stood for a long time... transfixed in ecstasy by the visions that he was seeing... For the first time the word "ecstasy" took on a subjective meaning for him. "Ecstasy" was not someone else's state of mind. It was no longer a trite superlative cheapened by overuse. It signified something different and superior in kind, about which RGW could now testify as a competent witness.

**1961** Wasson *Botanical Museum Leaflets*, 19: 137. At last you know what the ineffable is and what ecstasy means. Ecstasy! The mind harks back to the origin of that word. For the Greeks ekstasis meant the flight of the soul from the body. Can you find a better word than that to

describe the [bemushroomed](#) state? In common parlance, among the many who have not experienced ecstasy, ecstasy is fun, and I am frequently asked why I do not reach for mushrooms every night. But ecstasy is not fun. Your very soul is seized and shaken until it tingles. After all, who will chose to feel undiluted awe, or to float through that door yonder into the Divine presence?

**Source:**

The Age of Entheogens & The Angel's Dictionary  
by Jonathan Ott

File last modified: March 02, 2009

URI: <http://deoxy.org/def/ecstasy.htm>

— [index](#) —

## **Ayahuasca**

**Pablo's Warning:** *Ayahuasca* is not something to play with. It may even kill, not because it is toxic in itself, but because the body may not be able to stand the spiritual realm, the vibrations from the spirit world. Pablo said he had several frightening experiences with *ayahuasca*. Three times he thought he was going to die.\*

One needs courage, a strong discipline, and to proceed by degrees. It is a long process that might take two or three years before one can venture into the higher realms. One needs a teacher that shows the correct procedures, and how to defend oneself against supernatural attack. But after some time, one needs to continue alone, because even one's teacher might become jealous of one's progress and could take away all one has learned.

\*Frightening ayahuasca experiences are quite frequent. It is common that people take ayahuasca only once, and are afraid to take it again.

From *Ayahuasca Visions* by Luna and Amaringo

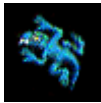


bemushroomed

- [Ayahuasca: King of Brews](#)
- [Diet and other traditional precautions](#)
- [What foods you should avoid on MAOIs](#)
- [Neuro-Alchemy: Beta-Carbolines as Potentiating Agents](#)
- [Tryptamine Carriers FAQ](#)

## Common Themes in South American Indian Yage Experiences

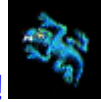
Discovering the Way of the Shaman and The Sound of Rushing Water by Michael Harner.



The basic notion exists that  
ayahuasca  
teaches "magic melodies" known  
as *icaros*.

In my first experience with ayahuasca in the Amazon jungle, plants of the jungle did appear before me and speak, just as the shamans report happens with them. [The problem was that I did](#)

[not understand their language!](#)



## **Gracie & Zarkov take Ayahuasca and visit with an [Indo European Plant Teacher](#).**

[A description by a Peruvian youth who was captured by  
Amahuaca Indians of the preparation of \*ayahuasca\* by the tribal](#)

[medicine man.](#)



## **[Ayahuasca adventures in the Peruvian Amazon](#)**

# **Diet and other precautions**

From [Luis Eduardo Luna, 1991:10,13,14,17,48](#)



**Vegetalistas**, like their counterparts the Indian shamans of many indigenous groups of the Upper Amazon, claim to derive healing skills and powers from certain plant teachers - often psychoactive - believed to have a *mother* ([cf. Luna 1984](#)). Knowledge -- particular medicinal knowledge -- comes from the plants themselves, the senior shaman only mediating the transmission of information, protecting the novice from the attack of sorcerers or evil spirits, and indicating to him or her the proper

conditions under which transmission is possible.<sup>[4]</sup> Among the plant teachers large trees are considered particularly powerful.

The necessity of diet -- which also includes sexual segregation -- to learn from the plants was *stressed* by every *vegetalista* I met. The body has to be purified to communicate with the spirit realm. Only in this way will the neophytes acquire their spiritual helpers, learn *icaros* (power songs), and acquire their *yachay*, *yausa*, *ormariri* -- phlegm the novice receives at some point during his initiation, either from the senior shaman or from the spirits. Particularly important are the *icaros*.... The *icaros* constitute the quintessence of shamanic power. The *icaros* and the phlegm -- both of which have material and immaterial qualities -- represent the transference of the spirits of each plant, with all their knowledge and theriomorphic and anthropomorphic manifestations, into the body of the shaman.<sup>[5]</sup>

Diet: "During the month ... we ate only fish, plantains, and rice without salt or any spices, and only twice a day ... We took *ayahuasca* once a week" (cf. [Luna 1991](#):14). "We were supposed to be far from people who were not keeping the diet. There were people coming there, the relatives of the patients, women of fertile age. It was not possible to learn anything in this way" (cf. [Luna 1991](#):16). "He gave me a mixture of [Psychotria viridis](#) and tobacco to drink every four days. He told me that it was like this he had learned medicine: If the diet and isolation were maintained long enough, the plants themselves would reveal their properties in a sort of telepathic way" (cf. [Luna 1991](#):17). You can only become a good *vegetalista* by keeping a diet or fasting for years,<sup>[81]</sup> then you become one that knows the science of the *muraya*, of the *sumi*, and of the *banco*, which are the three highest degrees in the traditional *vegetalista* medicine in the Amazon (cf. [Luna 1991](#):48).

## Footnotes

**4** - The importance of psychotropic plants in the shamanistic practices of many indigenous groups of the Upper Amazon is paramount. For the Yagua, for example, contact with the spirits of the plants by ingesting them is considered "the only path to knowledge" ([Chaumeil 1983](#):33). Psychotropic plants correspond to the category of plants known among the Shipibo as *muraya-cai* = shaman-makers ([Gebhart-Sayer 1986](#):203). These plants reveal the "real" world, while the normal world is often considered illusory (cf. [Chaumeil 1983](#):102 for the Yagua; [Langdon 1979b](#):78 for the Siona; [Harner 1972](#): 134 for the Jivaro). Also see Harner 1973: [The Sound of Rushing Water](#)

**5** - The same plant may manifest itself to the *vegetalista* by means of several spiritual figures, all having common features among them, in such a way that there is no extreme contradiction between one vision and another.

**81** - The term *dietar* (to keep a diet) includes not only dietary restrictions (not eating salt or condiments, sweets, pork fat ,etc.), but also sexual segregation and other prerequisites, as for example avoiding the sun or making food, etc. (cf. [Chevalier](#)



[1982:346](#)). One of the reason shamanism is declining among Indians and mestizos alike is because young people don't bother to keep the difficult diet (cf. [Huxley 1963:192](#); [Taussig 1987:418](#); [Gebhart-Sayer 1987:175](#)).

## **Bibliography**

### **Chaumeil, Jean-Pierre**

1983 Voir, Savoir, Pouivoir. Le chamanisme chez les Yagua du Nord-Est peruvien. Paris, Editions de l'Ecole des Hautes Etudes en Sciences Sociales.

### **Chevalier, Jacques M.**

1982 Civilization and the Stolen Gift: Capital, Kin, and Cult in Eastern Peru, University of Toronto Press.

### **Gebhart-Sayer, Angelika**

1984 The Cosmos Encoiled Indian Art of the Peruvian Amazon, New York, Center for Inter-American Relations

1986 Una Terapia Estetica. Los Disenos Visionarios del Ayahuasca entre los Shipibo-Conibo. America Indigena 46(1)189-218. Mexico.

1987 Die Spitze des Bewusstseins. Untersuchungen zu Weltbild und Kunst der Shipibo-Conibo. Hohenscaftlarn, Klaus Renner Verlag.

### **Harner, Michael J.**

1972 The Jivaro People of the Sacred Waterfalls, Berkeley, University of California

### **Huxley, Francis**

1963 Affable Savages: An Anthropologist Among the Urubu Indians of Brazil, London, Rupert Hart-Davis.

### **Langdon E. Jean**

1979b The Siona Halliucinogenic Ritual, Its meaning and Power. In John H. Morgan (ed.), Understanding Religion and Culture: Anthropological and Theological Perspectives. Washington University Press of America.

### **Luna, Luis Eduardo**

1984 The Concept of Plants as Teachers Among Four Mestizo Shamans of Iquitos, Northeast Peru, Journal of Ethnopharmacology 11:135-56.

**1991** [Ayahuasca Visions: The Religious Iconography of a Peruvian Shaman](#), North Atlantic Books

### **Taussig, Michael**

1987 Shamanism, Colonialism, and the Wild Man: A Study in Terror and Healing. The University of Chicago Press.



# What foods you should avoid on MAOIs



From: Saklad@uthscsa.edu (Stephen R Saklad)

Subject: Re: MAO-I's dietary restrictions

Date: Mon, 28 Nov 1994 23:05:01 -0600

This almost deserves to be a FAQ. I have copied the Micromedex drug consult on this from the current database.

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*Q. Please review the dietary restrictions that should be observed when a patient is receiving monoamine oxidase inhibitor (MAOI) therapy?*

R. Tyramine, is an amino acid which is found in various foods, and is an indirect sympathomimetic that can cause a hypertensive reaction in patients receiving MAOI therapy. Monoamine oxidase is found in the gastrointestinal tract and inactivates tyramine; when drugs prevent the catabolism of exogenous tyramine, this amino acid is absorbed and displaces norepinephrine from sympathetic nerve ending and epinephrine from the adrenal glands. If a sufficient amount of pressor amines are released, a patient may experience a severe occipital or temporal headache, diaphoresis, mydriasis, nuchal rigidity, palpitations, and the elevation of both diastolic and systolic blood pressure may ensue (Anon, 1989; Da Prada et al, 1988; Brown & Bryant, 1988). On rare occasions,

cardiac arrhythmias, cardiac failure, and intracerebral hemorrhage have developed in patients receiving MAOI therapy that did not observe dietary restrictions (Brown & Bryant, 1988). Therefore, dietary restrictions are required for patients receiving MAOIs. Extensive dietary restrictions previously published were collected over a decade ago and due to changes in food processing and more reliable analytical methods, new recommendations have been published (Anon, 1989; McCabe, 1986). The tyramine content of foods varies greatly due to the differences in processing, fermentation, ripening, degradation, or incidental contamination. Many foods contain small amounts of tyramine and the formation of large quantities of tyramine have been reported if products were aged, fermented, or left to spoil. Because the sequela from tyramine and MAOIs is dose-related, reactions can be minimized without total abstinence from tyramine-containing foods. Approximately 10 to 25 mg of tyramine is required for a severe reaction compared to 6 to 10 mg for a mild reaction. Foods that normally contain low amounts of tyramine may become a risk if unusually large quantities are consumed or if spoilage has occurred (McCabe, 1986). Three lists were compiled (foods to avoid, foods that may be used in small quantities, and foods with insufficient evidence to restrict) to minimize the strict dietary restrictions that were previously used and improve compliance and safety of MAOI therapy. The foods to avoid list consists of foods with sufficient tyramine (in small or usual serving sizes) that would create a dangerous elevation in blood pressure and therefore should be avoided (McCabe, 1986).

### **Foods to Avoid**

**ALCOHOLIC BEVERAGES** - avoid Chianti wine and vermouth. Consumption of red, white, and port WINE in quantities less than 120 mL present little risk (Anon, 1989; Da Prada et al, 1988; McCabe, 1986). BEER and ALE should also be avoided (McCabe, 1986), however other investigators feel major domestic (US) brands of beer is safe in small quantities (1/2 cup or less than 120 mL) (Anon, 1989; Da Prada, 1988), but imported beer should not be consumed unless a specific brand is known to be safe. WHISKEY and LIQUEURS such as Drambuie(R) and Chartreuse(R) have caused reactions. NONALCOHOLIC BEVERAGES (alcohol-free beer and wines) may contain tyramine and should be avoided (Anon, 1989; Stockley, 1993).

**BANANA PEELS** - a single case report implicates a BANANA as the causative agent, which involved the consumption of whole stewed green banana, including the peel. Ripe banana pulp contains 7 mcg/gram of tyramine compared to a peel which contains 65 mcg/gram and 700 mcg of tyramine and dopamine, respectively (McCabe, 1986).

**BEAN CURD** - fermented bean curd, fermented soya bean, soya bean pastes contain a significant amount of tyramine (Anon, 1989).

**BROAD (FAVA) BEAN PODS** - these beans contain dopa, not tyramine, which is metabolized to dopamine and may cause a pressor reaction and therefore should not be eaten particularly if overripe (McCabe, 1986; Anon, 1989; Brown & Bryant, 1988).

**CHEESE** - tyramine content cannot be predicted based on appearance, flavor, or variety and therefore should be avoided. CREAM CHEESE and COTTAGE CHEESE have no detectable level of tyramine (McCabe, 1986; Anon, 1989; Brown & Bryant, 1988).

**FISH** - fresh fish (Anon, 1989; McCabe, 1986) and vacuum- packed pickled fish or CAVIAR contain only small amounts of tyramine and are safe if consumed promptly or refrigerated for short periods; longer storage may be dangerous (Anon, 1989). Smoked, fermented, pickled (Herring) and otherwise aged fish, meat, or any spoiled food may contain high levels of tyramine and should be avoided (Anon, 1989; Brown & Bryant, 1988).

**GINSENG** - some preparations have resulted in a headache, tremulousness, and manic-like symptoms (Anon, 1989).

**PROTEIN EXTRACTS** - three brands of meat extract contained 95, 206, and 304 mcg/gram of tyramine and therefore meat extracts should be avoided (McCabe, 1986). Avoid liquid and powdered PROTEIN DIETARY SUPPLEMENTS (Anon, 1989).

**MEAT**, nonfresh or liver - no detectable levels identified in fresh chicken livers; high tyramine content found in spoiled or unfresh livers (McCabe, 1986). Fresh meat is safe, caution suggested in restaurants (Anon, 1989; Da Prada et al, 1988).

**SAUSAGE, BOLOGNA, PEPPERONI and SALAMI** contain large amounts of tyramine (Anon, 1989; Da Prada et al, 1988; McCabe, 1986). No detectable tyramine levels were identified in country CURED HAM (McCabe, 1986).

**SAUERKRAUT** - tyramine content has varied from 20 to 95 mcg/gram and should be avoided (McCabe, 1986).

**SHRIMP PASTE** - contain a large amount of tyramine (Anon, 1989).

**SOUPS** - should be avoided as protein extracts may be present; miso soup is prepared from fermented bean curd and contain tyramine in large amounts and should not be consumed (Anon, 1989).

**YEAST**, Brewer's or extracts - yeast extracts (Marmite) which are spread on bread or mixed with water, Brewer's yeast, or yeast vitamin

supplements should not be consumed. Yeast used in baking is safe (Anon, 1989; Da Prada et al, 1988; McCabe, 1986).

The foods to use with caution list categorizes foods that have been reported to cause a hypertensive crisis if foods were consumed in large quantities, stored for prolonged periods, or if contamination occurred. Small servings (1/2 cup, or less than 120 mL) of the following foods are not expected to pose a risk for patients on MAOI therapy (McCabe, 1986).

## **FOODS TO USE WITH CAUTION**

### **(1/2 cup or less than 120 mL)**

**Alcoholic beverages** - see under foods to avoid.

**AVOCADOS** - contain tyramine, particularly overripe (Anon, 1989) but may be used in small amounts if not overripened (McCabe, 1986).

**CAFFEINE** - contains a weak pressor agent, large amounts may cause a reaction (Anon, 1989).

**CHOCOLATE** - is safe to ingest for most patients, unless consumed in large amounts (Anon, 1989; McCabe, 1986).

**DAIRY PRODUCTS - CREAM, SOUR CREAM, cottage cheese, cream cheese, YOGURT, or MILK** should pose little risk unless prolonged storage or lack of sanitation standards exists (Anon, 1989; McCabe, 1986). Products should not be used if close to the expiration date (McCabe, 1986).

**NUTS** - large quantities of PEANUTS were implicated in a hypertensive reaction and headache. COCONUTS and BRAZIL NUTS have also been implicated, however no analysis of the tyramine content was performed (McCabe, 1986).

**RASPBERRIES** - contain tyramine and small amounts are expected to be safe (McCabe, 1986).

**SOY SAUCE** - has been reported to contain large amounts of tyramine and reactions have been reported with teriyaki (Anon, 1989), however analysis of soy sauce reveals a tyramine level of 1.76 mcg/mL and fermented meat may have contributed to the previously reported reactions (McCabe, 1986).

**SPINACH**, New Zealand prickly or hot weather - large amounts have resulted in a reaction (Anon, 1989; McCabe, 1986).

More than 200 foods contain tyramine in small quantities and have been implicated in reactions with MAOI therapy, however the majority of the previous

reactions were due to the consumption of spoiled food. Evidence does not support the restriction of the following foods listed if the food is fresh (McCabe, 1986).

### **FOODS WITH INSUFFICIENT EVIDENCE FOR RESTRICTION (McCabe, 1986)**

- anchovies - cream cheese - raisins
- beetroot - cucumbers - salad dressings
- chips with vinegar - egg, boiled - snails
- Coca Cola(R) - figs, canned - tomato juice
- cockles - fish, canned - wild game
- coffee - junket - worcestershire sauce
- corn, sweet - mushrooms - yeast-leavened bread
- cottage cheese - pineapple, fresh

Any protein FOOD, improperly stored or handled, can form pressor amines through protein breakdown. Chicken and beef liver, liver pate, and game generally contain high amine levels due to frequent mishandling. Game is often allowed to partially decompose as part of its preparation. Ayd (1986) reported that the freshness of the food is a key issue with MAOIs and that as long as foods are purchased from reputable shops and stored properly, the danger of a hypertensive crisis is minimal. Some foods should be avoided, the most dangerous being aged cheeses and yeast products used as food supplements (Gilman et al, 1985).

With appropriate dietary restrictions, the incidence of hypertensive crises has decreased to approximately 4% (Zisook, 1985). Treatment of a hypertensive reactions includes the administration of phentolamine (Anon, 1989) 2.5 to 5 milligrams intravenously (slow) titrated against blood pressure (Zisook, 1985; Lippman & Nash, 1990). One report has suggested that the use of sublingual nifedipine 10 milligrams was effective in treating 2 hypertensive reactions following the ingestion of a tyramine-containing food in a patient receiving MAOI therapy (Clary & Schweizerr, 1987). Chlorpromazine also has alpha-blocking properties and has been recommended as an agent for discretionary use (patient-initiated treatment) in the setting of dietary indiscretion (Lippman & Nash, 1990).

### **CONCLUSION:**

Dietary restrictions are required for individuals receiving monoamine oxidase inhibitor therapy to prevent a hypertensive crisis and other side effects. The foods listed in the dietary restrictions have been categorized into those foods that must be avoided, foods that may be ingested in small quantities, and those foods that were previous implicated in reactions but upon analyses of fresh samples only a small tyramine content was identified and should be safe to consume if freshness is considered.

## REFERENCES:

1. **Anon:** Foods interacting with MAOI inhibitors. *Med Lett Drug Ther* 1989; 31:11-12.
2. **Ayd FJ:** Diet and monoamine oxidase inhibitors (MAOIs): an update. *Int Drug Ther Newslett* 1986; 21:19-20.
3. **Brown CS & Bryant SG:** Monoamine oxidase inhibitors: safety and efficacy issues. *Drug Intell Clin Pharm* 1988; 22:232-235.
4. **Clary C & Schweizer E:** Treatment of MAOI hypertensive crisis with sublingual nifedipine. *J Clin Psychiatry* 1987; 48:249-250.
5. **Da Prada M, Zurcher G, Wuthrich I et al:** On tyramine, food, beverages and the reversible MAO inhibitor moclobemide. *J Neural Transm* 1988; 26(Suppl):31-56.
6. **Gilman AG, Goodman LS & Rall TW et al (Ed):** *Goodman and Gilman's The Pharmacological Basis of Therapeutics*, 7th ed., Macmillan Publishing, New York, NY, 1985.
7. **Lippman SB & Nash K:** Monoamine oxidase inhibitor update. Potential adverse food and drug interactions. *Drug Safety* 1990; 5:195-204.
8. **McCabe BJ:** Dietary tyramine and other pressor amines in MAOI regimens: a review. *J Am Diet Assoc* 1986; 86:1059-1064.
9. **Stockley I:** Alcohol-free beer not safe for MAOI patients. *Pharm J* 1993; 250:174.
10. **Zisook S:** A clinical overview of monoamine oxidase inhibitors. *Psychosomatics* 1985; 26:240-251.



**What foods you should avoid on  
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Subject: Re: MAO-I's dietary restrictions  
Date: Mon, 28 Nov 1994 23:05:01 -0600

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**SOY SAUCE** - has been reported to contain large amounts of tyramine and reactions have been reported with teriyaki (Anon, 1989), however analysis of soy sauce reveals a tyramine level of 1.76 mcg/mL and fermented meat may have contributed to the previously reported reactions (McCabe, 1986).

**SPINACH**, New Zealand prickly or hot weather - large amounts have resulted in a reaction (Anon, 1989; McCabe, 1986).

More than 200 foods contain tyramine in small quantities and have been implicated in reactions with MAOI therapy, however the majority of the previous reactions were due to the consumption of spoiled food. Evidence does not support the restriction of the following foods listed if the food is fresh (McCabe, 1986).

## **FOODS WITH INSUFFICIENT EVIDENCE FOR RESTRICTION (McCabe, 1986)**

- anchovies - cream cheese - raisins
- beetroot - cucumbers - salad dressings

- chips with vinegar - egg, boiled - snails
- Coca Cola(R) - figs, canned - tomato juice
- cockles - fish, canned - wild game
- coffee - junket - worcestershire sauce
- corn, sweet - mushrooms - yeast-leavened bread
- cottage cheese - pineapple, fresh

Any protein FOOD, improperly stored or handled, can form pressor amines through protein breakdown. Chicken and beef liver, liver pate, and game generally contain high amine levels due to frequent mishandling. Game is often allowed to partially decompose as part of its preparation. Ayd (1986) reported that the freshness of the food is a key issue with MAOIs and that as long as foods are purchased from reputable shops and stored properly, the danger of a hypertensive crisis is minimal. Some foods should be avoided, the most dangerous being aged cheeses and yeast products used as food supplements (Gilman et al, 1985).

With appropriate dietary restrictions, the incidence of hypertensive crises has decreased to approximately 4% (Zisook, 1985). Treatment of a hypertensive reactions includes the administration of phentolamine (Anon, 1989) 2.5 to 5 milligrams intravenously (slow) titrated against blood pressure (Zisook, 1985; Lippman & Nash, 1990). One report has suggested that the use of sublingual nifedipine 10 milligrams was effective in treating 2 hypertensive reactions following the ingestion of a tyramine-containing food in a patient receiving MAOI therapy (Clary & Schweizerr, 1987). Chlorpromazine also has alpha-blocking properties and has been recommended as an agent for discretionary use (patient-initiated treatment) in the setting of dietary indiscretion (Lippman & Nash, 1990).

## CONCLUSION:

Dietary restrictions are required for individuals receiving monoamine oxidase inhibitor therapy to prevent a hypertensive crisis and other side effects. The foods listed in the dietary restrictions have been categorized into those foods that must be avoided, foods that may be ingested in small quantities, and those foods that were previously implicated in reactions but upon analyses of fresh samples only a small tyramine content was identified and should be safe to consume if freshness is considered.

## REFERENCES:

1. **Anon:** Foods interacting with MAOI inhibitors. Med Lett Drug Ther 1989; 31:11-12.
2. **Ayd FJ:** Diet and monoamine oxidase inhibitors (MAOIs): an update. Int Drug Ther Newslett 1986; 21:19-20.
3. **Brown CS & Bryant SG:** Monoamine oxidase inhibitors: safety and efficacy issues. Drug Intell Clin Pharm 1988; 22:232-235.

4. **Clary C & Schweizer E:** Treatment of MAOI hypertensive crisis with sublingual nifedipine. J Clin Psychiatry 1987; 48:249-250.
5. **Da Prada M, Zurcher G, Wuthrich I et al:** On tyramine, food, beverages and the reversible MAO inhibitor moclobemide. J Neural Transm 1988; 26(Suppl):31-56.
6. **Gilman AG, Goodman LS & Rall TW et al (Ed):** Goodman and Gilman's The Pharmacological Basis of Therapeutics, 7th ed., Macmillan Publishing, New York, NY, 1985.
7. **Lippman SB & Nash K:** Monoamine oxidase inhibitor update. Potential adverse food and drug interactions. Drug Safety 1990; 5:195-204.
8. **McCabe BJ:** Dietary tyramine and other pressor amines in MAOI regimens: a review. J Am Diet Assoc 1986; 86:1059-1064.
9. **Stockley I:** Alcohol-free beer not safe for MAOI patients. Pharm J 1993; 250:174.
10. **Zisook S:** A clinical overview of monoamine oxidase inhibitors. Psychosomatics 1985; 26:240-251.



## Neuro-Alchemy: Beta-Carbolines as Potentiating Agents

by J.B. Fleming

"I began to get high-and then the whole fucking Cosmos broke loose around me" —Allen Ginsberg

During the nineteen twenties, ethnographers returning from the Amazon jungle gave strange accounts of tribal shamans who used a telepathy-increasing plant drug to direct the course of their societies. The drug was a hallucinogenic drink which had several different native names including [Ayahuasca](#), Yage, Caapi, and Natema. It was brewed from a species of woody vine called Banisteriopsis along with various admixtures which commonly included the leaves of Banisteriopsis rusbyana, Psychotria viridis, and Brugmansia.

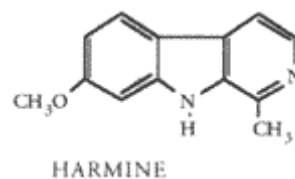
Native users of ayahuasca were reported to experience collective hallucinations of jaguars, snakes, and jeweled birds. These visions were often accompanied by contact with dead ancestors, the ability to see future events, and telepathic communication among tribal members. Secondary effects included heightened sexual responses, vomiting and



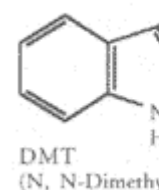
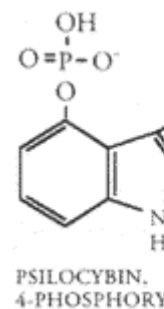
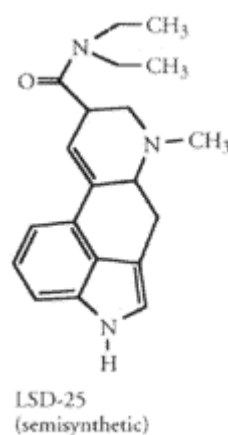
diarrhea. Ayahuasca's purgative effects also made it useful as a general medicine to stimulate health and fight diseases.

Toxicologists were fascinated by the drug and soon extracted the active compound from the Banisteriopsis vine, naming it *Telepathine*. However, in the nineteen thirties, research interest in ethnopharmacology faded and the matter was left to rest. The case on ayahuasca was reopened in 1957

when researchers discovered that Telepathine was actually Harmine, one of several compounds from the beta-carboline family of hallucinogens. Secondary alkaloids called Harmaline and Tetrahydroharmine were also identified.



The beta-carbolines were first isolated in 1841 from the seeds of *Peganum harmala*, a small, bushy herb known as Syrian Rue which grows along the Mediterranean and throughout Central Asia. It is also reported to have escaped cultivation and can now be found throughout the American southwest. Middle Eastern people have long used Syrian Rue as a folk medicine and for the unique red dye in Turkish and Persian rugs. Egyptians employed the seeds as an aphrodisiac and the plant has been considered as a possible (although unlikely) candidate for the mysterious Soma described in the *Rig-Veda*. Beta-carbolines have since been identified in several more plants including Passionflower (*Passiflora incarnata*), Tobacco (*Nicotiana rustica*), and even within the human pineal gland.



The beta-carbolines are members of [the indole family of alkaloids](#) which includes the highly illegal drugs LSD, Psilocybin, [DMT](#), Bufotenin, and Ibogaine. Interestingly, the beta-carbolines have never been scheduled as illegal substances. All of the indoles possess a structural similarity to the neurotransmitters serotonin and dopamine. However, the beta-carbolines have a unique quality called MAO inhibition that sets them apart from other psychedelics.

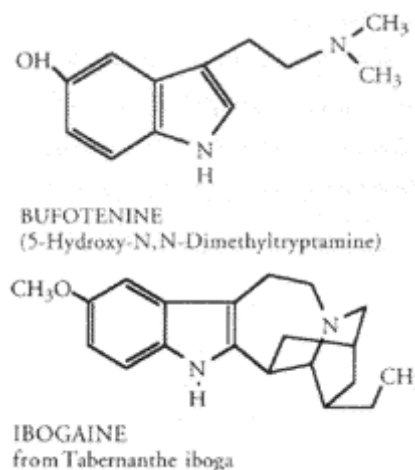
Monoamine oxidase (MAO) is an enzyme produced in the human body which serves several regulatory functions. Within the nerve terminals of norepinephrine, dopamine, and serotonin neurons MAO acts to modulate the amount of neurotransmitter present. MAO bonds with the transmitters and deactivates them preventing the build up of excessive neurotransmitters at the nerve synapses. MAO is also responsible for deactivating many of the toxins that are present in the foods that we eat. Tyramine is an example of a toxin found in many common foods including aged cheese, red wine, pickled herring, figs, and yeast. Without the presence of MAO to inactivate it the consumption of tyramine would be followed by a severe, and possibly life-threatening increase in blood pressure.

In addition to the beta-carbolines psychoactive effects they are also powerful, short-term, MAO inhibitors. For the six to eight hours that the beta-carboline trip lasts MAO activity is suppressed, allowing serotonin to build up at the neuron synapses. This action may be responsible for some of their mental effects. It also means that the body is vulnerable to any toxins that might be consumed.

The South-American indians learned to take advantage of this condition by adding DMT containing plants to the ayahuasca mixture. Normally DMT is inactive when taken orally. Up to a gram of this powerful psychedelic can be consumed with no noticeable effect. However, when combined with beta-carbolines, DMT is absorbed through the stomach and its normally short action is extended for several hours. Although the principles of MAO inhibition were not described by Western science until the nineteen fifties the indians have exploited it for hundreds of years.

## Western Experiments with Beta-Carbolines

In the 1960s Chilean psychiatrist Claudio Naranjo carried out a series of experiments using pure harmaline taken intravenously. He reported its effect in his book *The Healing Journey* as producing vivid mental imagery which took the form of dreamlike sequences accompanied by physical sedation and nausea. His



subjects, all drawn from an urban background, often described the same jungle imagery of snakes, vines, jaguars and birds that native ayahuasca users reported. Other researchers since Naranjo have concluded that the beta-carbolines when taken orally do not produce a psychedelic state except at near toxic doses. Instead they seem to create a hazy, dreamy mental state along with an uncomfortable lethargic condition closer in effect to tranquilizers than psychedelics.

It appears that the real value of the beta-carbolines lies not in their psychoactive effects but in their ability to potentiate other psychedelic substances. Over the years there have been numerous accounts of this potentiating quality from underground sources. In Terence and Dennis McKenna's book *The Invisible Landscape* and its companion book *True Hallucinations* by [Terence McKenna](#) the effects of a Banisteriopsis and Psilocybe cubensis combination are described. In a series of events that culminated in what they called "The Experiment at La Chorrera" the brothers drank an infusion of boiled Banisteriopsis vine and consumed Psilocybe mushrooms supplemented by smoking dried shavings of Banisteriopsis. What resulted was a spectacular, month long experience of an extremely bizarre nature best left up to the McKenna's to recount.

Another set of experiments using beta-carbolines to synergize DMT was carried out by ["Gracie and Zarkov"](#). Their collection of samizdat reports titled *Notes from the Underground* detail their use of beta-carbolines to prolong and intensify the effects of synthetic DMT, Psilocybin and LSD. Their procedure was to extract beta-carbolines from Banisteriopsis vines, Passionflower, and Syrian Rue seeds. After drying the extracts were smoked and followed by DMT or other indole psychedelics. The effects of the beta-carboline extracts when taken by themselves are described as "...not particularly psychedelic or hallucinogenic. One feels calm. ...At higher doses, dizziness and nausea sets in with very little increase in the high. Closed eye imagery is at best hypnagogic."

Jim DeKorne in his book *Psychedelic Shamanism* also looks into the potentiating action of beta-carbolines. Working with "Mushroom Ayahuasca", a combination of Syrian Rue extract with Psilocybe cubensis, DeKorne describes its effects as; "This is in no way a 'recreational' compound... One is quite simply 'flattened' by the mixture. Like most authentic ayahuasca experiences, some gastrointestinal upset is par for the course, but by then one's consciousness is so profoundly transformed, that nausea and vomiting are somehow beside the point."

There is a possibility that ayahuasca "analogues" can be created using plants found in North America. The goal is to render the DMT found in certain plants orally active by combining them with threshold doses of short-term MAO inhibitors such as the beta-carbolines. Jonathan Ott provides a wealth of information on experimental ayahuasca mixtures in

his books *Pharmacotheon* and *Ayahuasca Analogues*. Ott's detailed experiments using harmine extracted from Syrian Rue seeds and DMT clearly show that DMT can be rendered orally active when combined with low doses of beta-carbolines. However, a suitable source for pure DMT is problematic. Much research must still be done in this area.

Given time, underground researchers will find an easily obtained and legal plant which contains DMT. This will enable home users to create what Dennis McKenna calls *Ayahuasca borealis*, the North American equivalent of the legendary Amazonian ayahuasca brew. Once this technique is perfected it will be possible for anyone to explore the psychedelic experience free from the stigma of criminal activity and profiteering drug dealers.

## References and Suggested Reading

1. *The Yage Letters* by William S. Burroughs & Allen Ginsberg
2. [Psychedellic Shamanism](#) by Jim DeKorne
3. *Hallucinogens* by Marlene Dobkin De Rios
4. *Hallucinogens and Culture* by Peter T. Furst
5. [Notes From The Underground](#) by Gracie & Zarkov
6. *The Invisible Landscape* by Terence and Dennis McKenna
7. *True Hallucinations* by Terence McKenna
8. *The Archaic Revival* by Terence McKenna
9. *The Healing Journey* by Claudio Naranjo
10. *Ayahuasca Analogues* by Jonathan Ott
11. *Pharmacotheon* by Jonathan Ott
12. *Plants of the Gods* by Richard Evans Schultes and Albert Hofmann
13. *Psychedelics Encyclopedia* by Peter Stafford
14. [The Natural Mind](#) by Andrew Weil
15. *The Marriage of the Sun and Moon* by Andrew Weil

**NOTE:** The principles of MAO inhibition are extremely complex and potentially dangerous. The information presented in this article is highly speculative. Self experimentation is not recommended.

## Tryptamine Carriers FAQ

by [Petrus Pennanen](#)

with help from [Michael from Melbourne](#).

Hypertexture and ©continuing illustration effort via <http://deoxy.org>

Thanks to many individuals for help in putting this together.

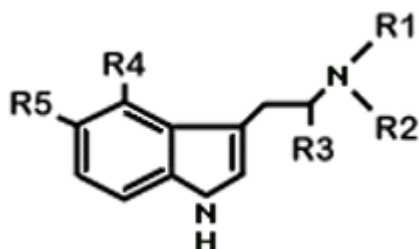
If you know sources of tryptamines that are not mentioned here please mail us.



Last deoxy update Jul 1999

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[Synthesis of DMT Derivatives](#)

[Psychedelic Toads](#)

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## Orally and Parenterally Active Psychotropic Tryptamine Derivatives

Based on [McKenna & Towers 1984](#)

Name of Compound	R1	R2	R3	R4	R5	Dosage (mg)	Route Oral/Par.
tryptamine	H	H	H	H	H	100 *1	par/oral?
<a href="#">DMT (dimethyltryptamine)</a>	CH3	CH3	H	H	H	60	par
<a href="#">DET</a>	C2H5	C2H5	H	H	H	60	par/oral
<a href="#">DPT</a>	n-prop	n-prop	H	H	H	60	par/oral
DAT	C3H5	C3H5	H	H	H	30	par/oral
DIPT	i-prop	i-prop	H	H	H	30	oral
5-MeO-DIPT	i-prop	i-prop	H	H	OCH3	12	oral
5-MeO-DMT	CH3	CH3	H	H	OCH3	6	par
psilocin	CH3	CH3	H	OH	H	12 *2	oral

CZ-74	C2H5	C2H5	H	OH	H	15 *2	oral
serotonin	H	H	H	H	OH	100 *3	oral
bufotenine	CH3	CH3	H	H	OH	16 *4	par
IT-290	H	H	CH3	H	H	30	oral
4-hydroxy-alfa-methyl-tryptamine	H	H	CH3	OH	H	20 *3	oral
MP-809	H	H	CH3	H	CH3	60 *5	oral
5-fluoro-alfa-methyl-tryptamine	H	H	CH3	H	F	25 *6	oral
5-methoxy-alfa-methyl-tryptamine	H	H	CH3	H	OCH3	3	oral
4-hydroxy-diisopropyl-tryptamine	i-prop	i-prop	H	OH	H	12 *6	oral
4-hydroxy-N-isopropyl, N-methyl-tryptamine	i-prop	CH3	H	OH	H	6 *6	oral
N-t-butyl-tryptamine	H	t-butylH	H	H	?	*7	par?
3-(2-(2,5-dimethylpyrrolyl)ethyl)-indole	H	H	H	?	?	?	?
5-alfa-DMT	CH3	CH3	CH3	H	H	?	?

Data compiled from [Kantor, et al. 1980](#); [Shulgin 1976, 1982](#); Shulgin&Carter 1980

1. Autonomic symptoms; little central activity.
2. The phosphate esters are psilocybin and CEY-19, respectively;  
both are stoichiometrically equivalent to the 4-hydroxy isomers.
3. Cardiovascular and autonomic symptoms; little central activity.
4. A pressor amine rather than a hallucinogen in man.
5. An antidepressant rather than a hallucinogen in man.
6. Based on anonymous reports in the lay press.  
No clinical studies have been published.
7. No oral activity with doses up to 20 mg, may be parenterally active.

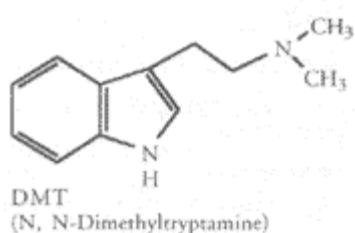
Other potentially psychedelic tryptamines include:



6-fluoro- $\alpha$ -methyltryptamine, 7-methyltryptamine, 5-methyltryptamine  
5-fluorotryptamine, 6-fluorotryptamine and 5- and 6-fluorotryptophans.

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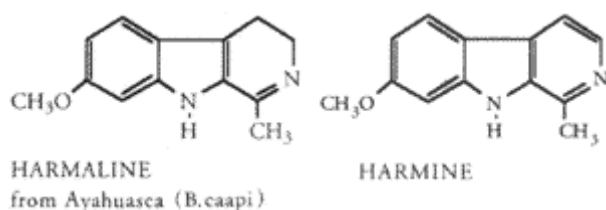
## MAO Inhibitors and Tryptamines

Monoamine oxidase (MAO) is the primary inactivation pathway of most tryptamines. Because of this, inhibitors of the MAO enzyme (MAOIs) can be used to potentiate the effects of tryptamines and to make DMT and 5-MeO-DMT

orally active.

MAO inhibitors fall into two classes: Irreversible and reversible MAOIs. In addition they can inhibit either or both of the two types of the MAO enzyme, MAO-A and MAO-B which are associated with serotonergic and dopaminergic neurons respectively. Irreversible MAOIs (e.g. the hydrazides iproniazid and phenelzine) bind permanently to the enzyme and cause MAO inhibition lasting 1-2 weeks after ingestion. They are used clinically to treat depression. Reversible MAOIs, such as moclobemide, which is used as an antidepressant, and the beta-carbolines harmine and harmaline, are effective for much shorter time, maybe up to 24 hours. Recreational drug users around the world are using mainly harmine and harmaline despite the lack of scientific studies on their effects on humans.

### BANISTERIOPSIS *Caapi* (*Spruce ex Griseb.*) Morton



Natives of Amazon have traditionally combined *Banisteriopsis caapi* vine, which contains harmine, harmaline and related beta-carbolines, with DMT-containing plants to make an orally active brew called [ayahuasca](#). Other plants containing harmine and/or harmaline can be substituted for *B. caapi*. The usual "North American ayahuasca" consists of *Peganum harmala* seeds and [Desmanthus illinoensis](#) roots, and in Australian "acaciahuasca" leaves of *Acacia complanata* are combined with material from [DMT-containing acacias](#) (the effectivity of this mixture hasn't been confirmed). MAOIs have also been used to potentiate the effects of mushrooms containing psilocybin. [Terence McKenna](#) has mentioned chocolate being a weak MAOI, which could be a reason for the popular habit of ingesting mushrooms with cocoa.



*Peganum harmala*, or "Syrian Rue"

*Peganum harmala* (Syrian rue) seeds are the most concentrated natural source of harmine and harmaline—about 3% of their weight consists of these alkaloids. *Banisteriopsis caapi* has been found to contain from 0.18% to 1.36% beta-carbolines, with the concentration of harmine being from 0.057% to 0.635% ([McKenna et al. 1984](#)). According to anecdotal reports one gram of *P. harmala* seeds ingested inhibits MAO enough to make DMT orally active.

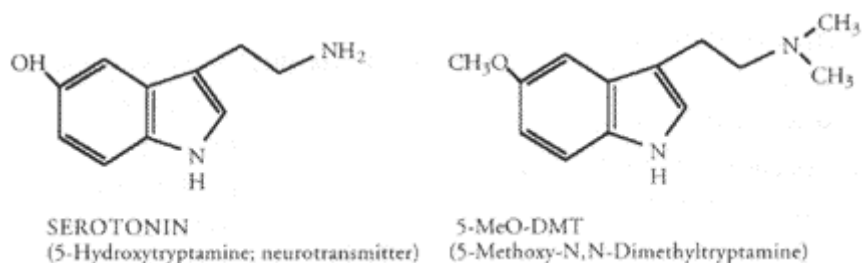
Harmine and harmaline are hallucinogenic on their own with doses starting from around 300 mg ([Naranjo 1967](#)), but often cause physical side-effects such as nausea and tremors in this dose range. They have little emotional or

"psychedelic" effects, but produce strong visual hallucinations. Because of this the natives of Amazon often add larger amounts (75-100 cm of stem per dose) of *B. caapi* to ayahuasca brew than is needed for MAO inhibition ([Luna 1984](#)).

There are significant dangers in using MAO inhibitors. Most MAOIs potentiate the cardiovascular effects of tyramine and other monoamines found in foods. Ingestion of aged cheese, beer, wine, pickled herring, chicken liver, yeast, large amounts of coffee, citrus fruits, canned figs, broad beans, chocolate or cream while MAO is inhibited can cause a hypertensive crisis including a dangerous rise in blood pressure. Effects of amphetamines, general anaesthetics, sedatives, anti-histamines, alcohol, potent analgesics and anticholinergic and antidepressant agents are prolonged and intensified. Overdosage of MAOIs by themselves is also possible with effects including hyperreflexia and convulsions.

## Synthesis of DMT Derivatives

Tryptamine derivatives and beta-Carbolines have been detected as endogenous metabolites in mammals, including humans. Methyl transferases that catalyze the synthesis of tryptamines, including DMT, 5-MeO-DMT and bufotenine, are found in human lung, brain, cerebrospinal fluid, liver and heart ([McKenna & Towers 1984](#)). In the pineal gland MAO is the primary inactivation pathway of serotonin, a neurotransmitter synthesized from the amino acid tryptophan. If MAO is blocked by harmine, harmaline or other MAO inhibitors serotonin can be converted by the methyltransferase enzymes HIOMT and INMT into psychedelic tryptamines (serotonin  $\xrightarrow{\text{HIOMT}}$  5-MeO-trypt.  $\xrightarrow{2 \times \text{INMT}}$  5-MeO-DMT).



So, ingesting l-tryptophan to increase serotonin levels, a candy bar to increase the amount of tryptophan getting to your brain and natural plant material containing 25-50 mg harmine/harmaline to block MAO, all at the same time, might cause your pineal gland to synthesize substantial amounts of 5-MeO-DMT ([Most 1986](#)). This is extremely dangerous for persons with existing amine imbalance or schizophrenia. For normal, healthy people possible consequences are **bad. DON'T TRY THIS.**

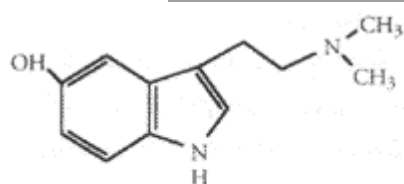
A potent inhibitor of INMT, which is a necessary enzyme for the synthesis of DMT and 5-MeO-DMT, is found in particularly high concentrations in the pineal gland. A bypassing or inhibition of the synthesis of this inhibitor might be responsible for trances and other psychedelic states achieved "without drugs" ([Strassman 1990](#)). See Strassman's article for more info and speculation about the pineal gland.

## Psychedelic Toads

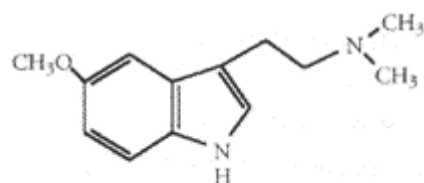
**WARNING** These toads are **POISONOUS**. If you eat the venom you could **DIE**. Several subspecies of this type of toad are *merely poisonous*. Don't even think about doing this unless you can *absolutely* identify the species, and know *all* the consequences of smoking its venom.



**NOTE** The toad mentioned in this section, *Bufo alvarius*, is a rare and endangered species.—dimitri



BUFOTENINE  
(5-Hydroxy-N,N-Dimethyltryptamine)



5-MeO-DMT  
(5-Methoxy-N,N-Dimethyltryptamine)

Bufotenine and related 5-hydroxy-indolethylamines are common constituents of venoms of the genera *Hyla*, *Leptodactylus*, *Rana* and *Bufo*. Bufotenine is not psychedelic in reasonable doses (with larger doses there are dangerous physiological side effects), but the skin of one species, *Bufo alvarius*, contains 50-160 mg 5-MeO-DMT/g of skin ([Daly & Witkop 1971](#)). It's the only *Bufo* species known to contain a hallucinogenic tryptamine ([McKenna & Towers 1984](#)). [Most \(1984\)](#) gives instructions for collecting and drying the venom:

Fresh venom can easily be collected without harm to the toad. Use a flat glass plate or any other smooth, nonporous surface at least 12-inches square. Hold the toad in front of the plate, which is fixed in a vertical position. In this manner, the venom can be collected on the glass plate, free of dirt and liquid released when the toad is handled.

When you are ready to begin, hold the toad firmly with one hand and, with the thumb and forefinger of your other hand, squeeze near the base of the gland until the venom squirts out of the pores and onto the glass plate. Use this method to systematically collect the venom from each of the toad's granular glands: those on the forearm, those on the tibia and femur of the hind leg, and, of course, the [parotids on the neck](#). Each gland can be squeezed a second time for an additional yield of venom if you allow the toad a one-hour rest period. After this the glands are empty and require four to six weeks for regeneration.

The venom is viscous and milky-white in color when first squeezed from the glands. It begins to dry within minutes and acquires the color and texture of rubber cement. Scrape the venom from the glass plate, dry it thoroughly, and store it in an airtight container until you are ready to smoke it.

[Davis and Weil \(1992\)](#) smoked the venom and described what happened:

In comparison to the pure compounds the toad venom appears longer lasting and, because one does not completely lose contact with reality, far more pleasant, even sensual. Shortly after inhalation I experienced warm flushing sensations, a sense of wonder and well-being, strong auditory hallucinations, which included an insect-cicada sound that ran across my mind and seemed to link my body to the earth. Though I was indoors, there was a sense of the feel of the earth, the dry desert soil passing through my fingers, the stars at midday, the scent of cactus and sage, the feel of dry leaves through hands. Strong visual hallucinations in orblike brilliance, diamond patterns that undulated across my visual field. The experience was in every sense pleasant, with no disturbing physical symptoms, no nausea, perhaps a slight sense of increased heart rate. Warm waves coursed up and down my body. The effects lasted only a few minutes but a pleasant afterglow continued for almost an hour. (Wade Davis, personal observation, January 12, 1991)

Profound alteration of consciousness within a few seconds of exhaling. I relax into a deep, peaceful interior awareness. There is nothing scary about the effects and no sense of toxicity. I try to describe my feelings but am unable to talk for the first five minutes and then only with some difficulty. This is a powerful psychoactive drug, one that I think would appeal to most people who like the effects of hallucinogens. For the next hour I feel slow and velvety, with a slight pressure in my head. No long-lasting effects to report. (Andrew T. Weil, personal observation, January 12, 1991).

Other animals contain DMT such as the gorgonian *Paramuricea chamaeleon* ([Cimino & De Stefano, 1978](#)).

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<b>F U N G I</b>	<b>B E M U S H R Ö Ö M E D</b>
<ul style="list-style-type: none"><li>• Family: Bolbitiaceae</li><li>• Genus: Agrocyebe</li><li>• Species: farinacea</li></ul> <p>Contains psilocybin (<a href="#">Koike et al. 1981</a>).</p>	
<ul style="list-style-type: none"><li>• Genus: Conocybe</li></ul>	

- Species: cyanopus, kuehneriana, siligineoides, [smithii](#)

C. cyanopus ([Benedict et al. 1962](#)) and C. smithii ([Benedict et al. 1967](#)) contain psilocybin and psilocin while C. kuehneriana contains psilocin only ([Ohenoja et al. 1987](#)). C. siligineoides may also contain these alkaloids ([Schultes & Hofmann 1979](#) p. 40).

- Family: Coprinaceae
- Genus: Copelandia
- Species: anomala, bispora, cambodginiensis, chlorocystis, cyanescens, tropicalis

All species contain psilocin and psilocybin, for C. cyanescens ([Schultes & Hofmann 1979](#) p. 40) and for C. cambodginiensis as well as C. tropicalis ([Arora, 1986](#)), and for C. anomala as well as C. bispora ([Merlin & Allen, 1993](#)).

- Genus: Panaeolina,
- Species: castaneifolius, foenisecii

P. [foenisecii](#) contains psilocybin ([Robbers et al. 1969](#)).

- Genus: Panaeolus
- Species: africanus, antillarum, ater, campanulatus, firmicola, microsporus, olivacens, retirugis, separatus, sphinctrinus, subbalteatus

Several Panaeolus species contain psilocybin. For P. antillarum refer to Allen et al. (1991), for P. ater refer to [Bresinsky et al. \(1990\)](#), for P. papilionaceus ([Gurevich et al. 1992](#)), for P. retirugis ([Fiussello et al. 1971/72](#)), for P. separatus ([Miller Jr. 1972](#)), for P. sphinctrinus ([Hein & Wasson, 1958](#) p. 322) and for P. olivacens ([Ohenoja et al. 1987](#)). P. subbalteatus contains both psilocin and psilocybin ([Ohenoja et al. 1987](#)) but was known to be hallucinogenic since 1959 ([Stein, 1959](#)). P. firmicola is also described as hallucinogenic and probably contains the same alkaloids ([Schultes, 1979](#)).

- Genus: Psathyrella
- Species: candollenana

Contains psilocybin ([Koike et al. 1981](#)) and psilocin ([Ohenoja et al. 1987](#)).

- Family: Cortinariaceae
- Genus: Galerina

- Species: steglichii

Contains psilocybin and psilocin ([Besl, 1993](#)).

- Genus: Gymnopilus
- Species: aeruginosus, liquiritiae, luteus, purpuratus, spectabilis, validipes, viridans

Many Gymnopilus contain psilocybin, for G. aeruginosus, G. luteus, G. spectabilis, G. validipes and G. viridans refer to [Hatfield et al. \(1978\)](#). For G. liquiritiae ([Koike, 1981](#)) and for G. purpuratus ([Gartz 1991](#)).

- Genus: Inocybe
- Species: aeruginascens, calamistrata, coelestium, corydalna, haemacta, tricolor

These contain psilocin and psilocybin, for P. aeruginascens refer to [Haeselbarth et al. \(1985\)](#) and for the others [Stijve et al. \(1985\)](#).

- Family: Lepiotaceae
- Genus: Lepiota
- Species: humei Murrill also known as peelee "Peele's Lepiota"

This mushroom was claimed by Peele of Florida Mycology Research Center (PO Box 8104 Pensacola Florida 32505) to contain a legal tryptamine, which produces a trip with less physical symptoms and better ability of logical thinking than psilocin or psilocybin. Bioassay results didn't find psychoactivity ([Akers 1992](#)).

- Family: Pluteaceae
- Genus: Pluteus
- Species: atricapillus, cyanopus, nigroviridis, salicinus

P. atricapillus contains psilocybin ([Ohenoja et al. 1987](#)) while both P. salicinus ([Saupe 1981](#)) and P. nigroviridis ([Christiansen et al. 1984](#)) contain psilocin and psilocybin.

- Family: Polyporaceae
- Genus: Gerronema
- Species: fibula, swartzii

These contain psilocybin.



- Genus: Hygrocybe
- Species: psittacina

This contains psilocybin.



- Family: Strophariaceae
- Genus: Psilocybe
- Species: 75 Known hallucinogenic species + antioquensis, aucklandii, beliconiae, coprophila, crobulus, cubensis (pictured), guatapensis, samuiensis, subacutipilea,

There are at least 75 mushroom species in this genera that contain psilocin and psilocybin in [Guzman 1983](#), and there are several more recently discovered species such as *P. aucklandii* ([Guzman et al. 1993](#)), *P. samuiensis* ([Guzman et al. 1991](#)) and *P. antioquensis*, *P. beliconiae*, *P. guatapensis* and *P. subacutipilea* ([Guzman et al. 1994](#)).

Also *P. coprophila*, while lacking psilocin (making it a non-blueing psilocybe) is known to contain psilocybin ([Arora, 1986](#)). *P. crobulus* is also known to be hallucinogenic ([Phillips, 1981](#)).

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## PLANTS

[PLAN, PLANT, PLANET](#)



Waikas  
add  
herb to  
are

- Family: Acanthaceae
- Genus: Justicia
- Species: pectoralis (var. stenophylla)

of Orinoco headwaters in Venezuela dried and pulverized leaves of this their Virola-snuff. Intensely aromatic smelling leaves probably contain tryptamines ([Schultes 1977](#)). Plants available from from [Hoti](#)

[Products](#) or [..Of the jungle.](#)

- Family: Aizoaceae
- Genus: Delosperma

Contains DMT and N-methyltryptamine ([Rivier & Pilet, 1971](#)).

- Family: Alariaceae
- Genus: Ecklonia
- Species: maxima

[Crouch et al. \(1992\)](#) reported finding DMT in brown seaweed extract sold as Kelpak and intended to be used as a plant fertilizer. However, subsequent analysis by [J. Gartz](#) suggests none is present.

- Family: Apocynaceae
- Genus: Prestonia
- Species: amazonica?

May contain DMT but the specimen used may have been misidentified ([Smith 1977](#)).

- Family: Cactaceae
- Genus: Echinocereus
- Species: salm-dyckianus, triglochidiatus

These cacti growing in Mexico are known to Tarahumare Indians as peyote or hikuli and used in their festivals. E. triglochidiatus contains a tryptamine derivative, possibly 5-MeO-DMT ([Bye 1979](#)). E. salm-dyckianus is also supposed to contain tryptamines according to Horus Botanicals catalog 1992.

DMT



- Genus: Trichocereus
- Species: terscheckii "Cardon grande"

has been isolated from this species growing in North-Western Argentina ([Schultes & Hofmann 1979](#) p. 58).

- Family: Caesalpininaceae

- Genus: Petalostylis
- Species: cassiodies

Leaves and stem contain 0.4-0.5% tryptamine, DMT and other alkaloids ([Johns et al. 1966](#)).

- Family: Fabaceae
- Genus: Desmodium
- Species: gangetium, gyrans, tiliaefolium, triflorum,

Leaves, root, stem and seeds contain DMT and 0.06% 5-MeO-DMT of wet weight ([Banerjee & Ghosal 1969](#)).

- Genus: Lespedeza
- Species: bicolor

Leaves and root contain DMT and 5-MeO-DMT ([Smith 1977](#)). Seeds of this hardy perennial shrub are available from ..Of the jungle for \$5.

- Genus: Mucuna
- Species: pruriens

Leaves, stem and fruit of this jungle vine contains DMT and 5-MeO-DMT ([Ghosal et al., 1971](#)). Seeds are available from ..Of the jungle for \$5.

- Genus: Phyllodium
- Species: pulchellum

Dried plant material produced 0.2% 5-MeO-DMT and small amounts of DMT ([Ghosal & Mukherjee 1966](#)).

Black  
and  
Orinoco  
blown  
snuffed  
areas,  
MeO-



- Family: Mimosaceae
- Genus: *Anadenanthera* (*Piptandenia*)
- Species: *colubrina*, *contorta*, *excelsa*, *macrocarpa*, *peregrina*

beans from these trees are toasted, pulverized mixed with ashes or calcined shells to make psychedelic snuff called yopo by Indians in basin in Colombia, Venezuela and possibly in southern part of Brazilian Amazon. Yopo is into the nostrils through bamboo tubes or by birdbone tubes. The trees grow in open plain and leaves, bark and seeds contain DMT, 5-DMT and related compounds (Schultes [1976](#), [1977](#); [Pachter et al. 1959](#);

Phytochem 11, 737).

- Genus: [Acacia](#)
- Species: *confusa* [DMT,st], *jurema*, *maidennii* [DMT,b] *niopo*, *nubica* [DMT, l], *phlebophylla* [DMT,l], *polyacantha* [DMT,l] subsp. *campylacantha*, *senegal* [DMT,l], *simplicifolia* [DMT,b,l,st], *simplex*, *tortilis*.
  - The letters following the tryptamine (DMT in all of these cases) refer to where the tryptamine is found in the plant: "st" is stems, "b" is bark, and "l" is leaves.

Dried *A. confusa* stems contain 0.04% N-methyltryptamine and 0.02% DMT ([Arthur et al. 1967](#)). The dried leaves of *A. phlebophylla* contain 0.3% DMT ([Rovelli & Vaughan 1967](#)). The bark of *A. maidenii* contains 0.6% of N-methyltryptamine and DMT in the proportions approx. 2:3 ([Fitzgerald & Sioumis 1965](#)). *A. simplex* also contains DMT ([Poupat et al. 1976](#)). Several Sudanese species have DMT ([Wahba & Elkheir, 1975](#)). Seeds of several acacia species are available from ..Of the jungle.

- Genus: *Desmanthus*
- Species: *illinoensis* "Illinois Bundleflower"

[Thompson et al.](#) report that the root bark of this North American perennial shrub contains 0.34% DMT and 0.11% N-methyltryptamine. The bark accounts for about a half of the total weight of the roots. The plant should be resistant to cold and draught and easy to grow.

- Genus: *Mimosa*
- Species: *scabrella*, *tenuiflora* (== *hostilis*) "tepescohuite", *verrucosa*

The roots of *M. hostilis*, which is not the common houseplant *M. pudica* ("sensitive plant"),

contain 0.57% DMT and are used by Indians of Pernambuco State in Brazil as part of their Yurema cult ([Pachter et al. 1959](#), [Schultes 1977](#), ([Meckes-Lozoya et al. 1990](#)). *M. scabrella* contains DMT and N-methyltryptamine ([De Moraes et al., 1990](#)). Bark of *M. verrucosa* also contains DMT ([Smith 1977](#)).

- Genus: *Testulea*
- Species: *gabonensis*

Contains DMT ([Leboeuf et al., 1977](#)).

- Family: Malpigiaceae
- Genus: *Banisteriopsis*
- Species: *muricata* (=argentea), *rusbyana* (see *Diplopterys cabrerana*)

Both contain DMT ([Smith 1977](#)).

- Genus: *Diplopterys*
- Species: *cabrerana*

Natives of western Amazon add DMT- and N-methyltryptamine containing leaves of the vine *D. cabrerana* to a drink made from *Banisteriopsis caapi*, which contains beta-carbolines harmine and harmaline, to heighten and lengthen the visions ([Schultes 1977](#), [Smith 1977](#)). *D. cabrerana* is also known as *Banisteriopsis rusbyana*.

- Family: Myristicaceae
- Genus: *Horsfieldia*
- Species: *superba*

Contains 5-MeO-DMT as well as a beta-carboline ([Jossang et al. 1991](#)).

- Genus: *Iryanthera*
- Species: *macrophylla*

The bark contains 5-MeO-DMT ([Holmstedt et al. 1980](#)).

- Genus: *Virola*
- Species: *calophylla*, *calophylloidea*, *rufula*, *sebifera*, *theiodora*

The bark resin of these trees is used to prepare hallucinogenic snuffs in northwestern Brazil by boiling, drying and pulverizing it. Sometimes leaves of a *Justicia* are added. The snuff acts rapidly and violently, "effects include excitement, numbness of the limbs, twitching of facial muscles, nausea, hallucinations, and finally a deep sleep; macroscopia is frequent and enters into Waika beliefs about the spirits resident in the drug." Snuffs made from *V. theiodora* bark contain up to 11% 5-MeO-DMT and DMT. Also leaves, roots and flowers contain DMT.



Amazonian Colombia natives roll small pellets of boiled resin in a evaporated filtrate of bark ashes of *Gustavia Poeppigiana* and ingest them to bring on a rapid intoxication ([Smith 1977](#), [Schultes 1977](#)).

- Family: Pandanaceae
- Genus: *Pandanus* "Screw pine"

DMT has been isolated from *Pandanus* nuts growing in New Guinea ([Barrau 1958, 1962](#)).

- Family: Poaceae
- Genus: *Arundo*
- Species: *donax*

Leaves, flowers and rhizomes contain DMT, bufotenine and related compounds ([Ghosal et al. 1972](#)).



*Phalaris arundinacea*, also known as "Reed Canary Grass"

- Genus: Phalaris
- Species: aquatica (tuberosa), arundinacea

Leaves of *P. arundinacea* and leaves and seedlings of *P. aquatica* contain DMT, 5-MeO-DMT and related compounds ([Smith 1977](#)).

- Genus: Phragmites
- Species: australis

Rhizomes contain DMT ([Wassel et al. 1985](#)).



- Family: Rubiaceae
- Genus: Psychotria
- Species: carthaginensis, viridis (psychotriaefolia)

Psychotria leaves are added to a hallucinogenic drink prepared from Banisteriopsis caapi and B. rusbyana contain beta-carbolines) to strengthen and lengthen the effects western Amazon. *P. carthaginensis* *viridis* both contain DMT ([Rivier, 1972](#)). 5 seeds of *P. viridis* cost \$10 from ..Of

(which  
in  
and *P.*  
[1972](#)).  
the jungle.

- Family: Rutaceae
- Genus: Dictyoloma
- Species: incanescens



<p>Bark contains 0.04% 5-MeO-DMT (<a href="#">Pachter et al. 1959</a>).</p>
<ul style="list-style-type: none"> <li>• Genus: Limonia</li> <li>• Species: acidissima</li> </ul> <p>Contains DMT (<a href="#">Abu Zarga, 1986</a>).</p>
<ul style="list-style-type: none"> <li>• Genus: Melicope</li> <li>• Species: leptococca</li> </ul> <p>Contains 5-MeO-DMT as well as 5-MeO-DMT-Oxide and a beta-carboline (<a href="#">Skaltsounis et al. 1983</a>).</p>
<ul style="list-style-type: none"> <li>• Genus: Vepris</li> <li>• Species: ampody</li> </ul> <p>The leaves and branches contains up to 0.2% DMT (<a href="#">Kan-Fan 1970</a>).</p>
<ul style="list-style-type: none"> <li>• Genus: Zanthoxylum</li> <li>• Species: aborescens</li> </ul> <p>Contains DMT (<a href="#">Grina et al., 1982</a>).</p>

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## References

- Abu Zarga, M.H. 1986. Three new simple indole alkaloids from *Limonia acidissima*. *Lloydia* 49(5), 901-904.
- Akers, B.P. 1992. Peele's *Lepiota*: An identification and a clarification. *Mycotaxon* 43(0), 461-469.
- Arora, D. 1986. *Mushrooms Demystified: A Comprehensive Guide to the Fleshy Fungi*. Ten Speed Press, Berkley.
- Arthur, H.R., Loo, S.N. & Lamberton, J.A. 1967. Nb-methylated tryptamines and other constituents of *Acacia confusa* Merr. of Hong Kong. *Aust. J Chem.* 20, 811.
- Banerjee, P.K. & Ghosal, S. 1969. Simple indole bases of *Desmodium gangeticum*. *Aust. J Chem.* 22, 275-277.
- Barrau, J. 1958.  
Nouvelles observations au sujet des plantes hallucinogenes d'usage autochtone en Nouvelle-Guinee. *J Agric. Trop. Bot. Appl.* 5, 377-378.

- Barrau, J. 1962.  
Observations et travaux recents sur les vegetaux hallucinogenes de la Nouvelle-Guinee. *J Agric. Trop. Bot. Appl.* 9, 245-249.
- Benedict, R.G., Brady, L.R., Smith, A.H. & Tyler, V.E. 1962.  
Occurrence of psilocybin and psilocin in certain Conocybe and Psilocybe species. *Lloydia* 25, 156-159.
- Benedict, R.G., Tyler, V.E. & Watling, R. 1967.  
Blueing in Conocybe, Psilocybe and a Stropharia Species and the Detection of Psilocybin. *Lloydia* 30(2), 150-157.
- Besl, H. 1993.  
Galerina steglichii spec. nov., a hallucinogenic Galerina. *Zeitschrift fuer Mykologie* 59(2), 215-218.
- Bresinsky, A. & Besl, H. 1990.  
*A Colour Atlas of Poisonous Fungi*. Wolfe Publishing Ltd, London.
- Bye, R.A. 1979.  
Hallucinogenic plants of the Tarahumara. *J. Ethnopharmacology* 1, 23-48.
- Christiansen, A.L., Rasmussen, K.E. & Hoeiland, K. 1984.  
Detection of psilocybin and psilocin in Norwegian species of Pluteus and Conocybe. *Planta Med.* 50, 341-343.
- Cimino, G. & De Stefano, S. 1978.  
Chemistry of Mediterranean Gorgonians. Simple indole derivatives from Paramuricea chamaeleon. *Comptes Rendus Biochem. Physiol. Ser. C.* 61, 361-362.
- Crouch, I.J., Smith M.T., Van Staden J., Lewis, M.J. & Hoad, G.V. 1992.  
Identification of auxins in a commercial seaweed concentrate. *J. Plant Physiology* 139(5), 590-594.
- Daly, J.W. & Witkop, B. 1971.  
Chemistry and pharmacology of frog venoms. In *Venomous animals and their venoms. Vol II*. New York: Academic Press.
- Davis, W. & Weil, A.T. 1992.  
Identity of a New World Psychoactive Toad. *Ancient Mesoamerica* 3 (1992) 5, 51-59.
- De Moraes, E.H.F., Alvarenga, Z.M.A., Ferreira, Z.M.G.S. & Alisue, G. 1990.  
*Quim. Nova* 13, 308.
- Fitzgerald, J.S. & Sioumis, A.A. 1965.  
Alkaloids of Australian Leguminosae V. *Aust. J Chem.* 18, 433.
- Fiussello, N. & Ceruti-Scarti, J. 1971/72.  
Presenza di psilocibina ed i 5-idrossi-indolderivati in Panaeolus retirugis. *Atti Acc. Sci. Torino* 106, 725-735.
- Gartz, J. 1991.  
Influence of phosphate on fruiting and secondary metabolism of mycelia of Psilocybe cubensis, Psilocybe semilanceata and Gymnopilus purpuratus. *Zeitschrift fuer Mykologie* 57(1), 149-154.

Ghosal, S., Chaudhuri, R.K., Dutta, S.K. & Bhattacharya, S.K. 1972.  
Occurrence of curaromimetic indoles in the flowers of *Arundo donax*. *Planta Med.* 21, 22.

Ghosal, S. & Mukherjee, B. 1966.  
Indole-3-alkylamine Bases of *Desmodium pulchellum*. *J. Org. Chem.* 31, 2284.

Ghosal, S., Singh, S. & Bhattacharya, S.K. 1971.  
Alkaloids of *Mucuna pruriens*, Chemistry and Pharmacology. *Planta Med.* 19, 279

Grina, J.A. et al. 1982.  
Constituents of *Zanthoxylum aborescens*. Part 7. Old & new alkaloids from *Zanthoxylum aborescens*. *J. Organic Chemistry* 47, 2648-2651.

Gurevich, L.S. 1993.  
Indole derivatives in certain *Panaeolus* species from East Europe & Siberia. *Mycological Research* 97(2), 251-254.

Gurevich, L.S. & Astapenko, V.V. 1992.  
Chromatographic study of some indole metabolites in *Panaeolus* basidiomycetes. *Mikologiya I Fitopatologiya* 26(3), 189-194.

Guzman, G. 1983.  
The Genus *Psilocybe*. *Beihefte Zur Nova Hedwingia* 74, 1-439.

Guzman, G., Bandala, V.M. & Allen, J.W. 1993.  
A New Bluish *Psilocybe* from Thailand. *Mycotaxon* 26, 155-160.

Guzman, G., Bandala, V.M. & King, C. 1991.  
A New Species of *Psilocybe* of Section *Zapotecorum* from New Zealand. *Mycological Research* 95, 507-508.

Guzman, G., Saldarriaga, Y., Pineda, F., Garcia, G. & Velazquez, L.F. 1994.  
New Species of *Psilocybe* from Colombia and Discussion on the known species. *Mycotaxon*, 225.

Haeselbarth, G., Michaelis, H. & Salnikow, J. 1985.  
Nachweis von *Psilocybin* in *Inocybe aeruginescens*. *Mykol. Mitt. bl.* 28(1), 59-62.

Hatfield, G.M., Valdes, L.J. & Smith, A.H. 1978.  
The occurrence of *psilocybin* in *Gymnopilus* species. *Lloydia* 41, 140-144.

Hein, R. & Wasson, R.G. 1958.  
*Les champignons hallucinogenes du Mexique*. Museum National d'Histoire Naturelle, Paris.

Holmstedt, B., Lindgren, J.E., et al. 1980.  
Indole alkaloids in Amazonian Myristicaceae: Field and laboratory research. *Bot. Mus. Leaflet*, Harvard Univ. 28, 215-234.

Johns, S.R., Lamberton, J.A. & Sioumis, A.A. 1966.  
Alkaloids of the Australian Leguminosae VI. *Aust. J. Chem.* 19, 893.

Jossang, A., Jossang, C., Hadi, H.A., Sevenet, T. & Bodo, B. 1991.  
Horsifoline, an oxindole alkaloid from *Horsfieldia superba*. *J. Organic Chem.* 56(23), 6527-6530.

- Kan Fan, C. et al. 1970.  
Alcaloides de Vepris ampody (Rutaceae). *Phytochem.* 9, 1283-1291.
- Kantor, R.E., Dudlettes, S.D. & Shulgin, A.T. 1980.  
5-Methoxy- $\alpha$ -methyl-tryptamine ( $\alpha$ ,O-dimethylserotonin), a hallucinogenic homolog of serotonin. *Biological Psychiatry* Vol 15, 349-352.
- Koike, Y., Wada, K., Kusano, G., Nozoe, S., & Yokoyama, K. 1981.  
Isolation of Psilocybin from *Psilocybe argentipes* and its Determination in Specimens of some Mushrooms. *Lloydia* 44(3), 362-365.
- Leboeuf, M. et al., 1977.  
Alkaloids and triterpenes of *Testulea gabonensis*. *Plant Medicine Phytotherapy* 11, 230.
- Luna, L.E. 1984.  
The Healing Practices of a Peruvian Shaman. *J. Ethnopharmacology* 11, 123-133.
- McKenna, D.J., Towers, G.H.N., & Abbott, F. (1984).  
Monoamine oxidase inhibitors in South American hallucinogenic plants: Tryptamines and Beta-carboline constituents of ayahuasca. *J. Ethnopharmacology* 10, 195-223.
- McKenna, D.J. & Towers, G.H.N. 1984.  
Biochemistry and Pharmacology of Tryptamines and beta-Carbolines: A Minireview. *J. Psychoactive Drugs* 16(4).
- Meckes-Lozoya, M., Lozoya, X., Marles, R.J., Soucy-Breau, C., Sen, A. & Arnason, J.T. 1990.  
N,N-dimethyltryptamine alkaloid in *Mimosa tenuiflora* bark (tepescohuite). *Arch. Invest. Med. Mex.* 21(2), 175-7.
- Merlin, M.D. & Allen, J.W. 1993.  
Species identification and chemical analysis of psychoactive fungi in the Hawaiian islands. *Journal of Ethnopharmacology* 40(1), 21-40.
- Miller Jr., O.K. 1972.  
*Mushrooms of North America*. Dutton & Co., Springfield.
- Most, Albert. 1984.  
[\*Bufo Alvarius: the Psychedelic Toad of the Sonoran Desert\*](#). Venom Press Box 2863 Denton TX 76202.
- Most, Albert. 1986.  
[\*Eros and the Pineal: the layman's guide to cerebral solitaire\*](#). Venom Press, Denton, TX.
- Naranjo, C. 1969.  
Psychotropic Properties of the Harmala Alkaloids. In: Efron (Ed.) *The Ethnopharmacologic Search for Psychoactive Drugs*.
- Ohenoja, E., Jokiranta, J., Makinen, T., Kaikkonen, A. & Airaksinen, M.M. 1987. The Occurrence of Psilocybin and Psilocin in Finnish Fungi. *Lloydia* 50(4), 741-744.
- Pachter, I.J, Zacharias, D.E & Ribeir, O. 1959.  
Indole Alkaloids of *Acer saccharinum* (the Silever Maple), *Dictyoloma incanescens*, *Piptadenia colubrina*, and *Mimosa hostilis*. *J. Org. Chem.* 24, 1285-7.

- Phillips, R. 1981.  
*Mushrooms and other fungi of Great Britain and Europe*. Pan Books, London.
- Poupat, C., Ahond, A. & Sevenet, T. 1976.  
Alcaloides De Acaia simplicifolia. *Phytochemistry* 15, 2019-2120.
- Rivier, L. & Lindgren, J-E. 1972.  
"Ayahuasca," the South American Hallucinogenic Drink: an Ethnobotanical and Chemical Investigation. *Economic Botany* 26, 101-129.
- Rivier, L. & Pilet, P.E. 1971.  
*Annee Biologique* 10, 129.
- Robbers, J.E., Tyler, V.E. & Olan, G.M. 1969.  
Additional evidence supporting the occurrence of psilocybin in *Panaeolus foenisecii*. *Lloydia* 32, 399-400.
- Rovelli, B. & Vaughan, G.N. 1967.  
Alkaloids of Acacia I. Dimethyltryptamine in *Acacia phlebophylla*. *Aust. J. Chem.* 20, 1299-1300.
- Saupe, S.G. 1981.  
Occurrence of Psilocybin/Psilocin in *Pluteus salicinus* (Pluteaceae). *Mycologia* 73, 781-784.
- Schultes, R.E. 1976.  
Indole Alkaloids in Plant Hallucinogens. *J. of Psychedelic Drugs* Vol 8(1), 7-25.
- Schultes, R.E. 1977.  
The Botanical and Chemical Distribution of Hallucinogens. *J. of Psychedelic Drugs* Vol 9(3), 247-263.
- Schultes, R.E. 1979.  
Hallucinogenic Plants: Their Earliest Botanical Descriptions. *J. of Psychedelic Drugs* Vol 11(1-2), 13-24.
- Schultes, R.E. & Hofmann, A. 1979.  
*Plants of the Gods*. McGraw-Hill. Reprint available from Healing Arts Press, Rochester, VT.
- Schultes, R.E. & Hofmann, A. 1980.  
*The Botany and Chemistry of Hallucinogens*. Springfield, Ill: Thomas.
- Shulgin, A.T. 1976.  
Psychotomimetic agents. In: Gordon, M. (Ed.) *Psychopharmacological Agents*, Vol IV. New York: Academic Press.
- Shulgin, A.T. 1982.  
Chemistry of Psychotomimetics. In: Hoffmeister, F. & Stille, G. (Eds.) *Handbook of Experimental Pharmacology*, Vol 55: Alcohol and Psychotomimetics, Psychotropic Effects of Central-Acting Drugs. New York: Springer-Verlag.
- Skaltsounis, A.L., Tillequin, F. & Koch, M. 1983.  
Plantes des Nouvelle- Calédonie LXXXIII: Alcaloides des tiges feuillées de *Melicope leptococca*. *Lloydia* 46(5), 732.

Smith, T.A. 1977.

Review: Tryptamine and Related Compounds in Plants. *Phytochemistry* 16 171-175.

Stein, S.I. 1959.

Clinical Observations on the Effects of *Panaeolus venenosus* Versus *Psilocybe caerulescens* Mushrooms. *Mycologica* 51, 49.

Stijve, T., Klan, J. & Kugper, W. 1985.

Occurrence of psilocybin and baeocystin in the genus *Inocybe*. *Persoonia* 12, 469-472.

Strassman, R.J. 1990.

The Pineal Gland: Current Evidence For Its Role In Consciousness. In: Lyttle, T. (Ed.) *Psychedelic Monographs and Essays* Vol 5.

Thompson, A.C., Nicollier, G.F. & Pope, D.F 1987.

Indolealkylamines of *Desmanthus illinoensis* and Their Growth Inhibition Activity. *J. Agric. Food Chem.* 35, 361-365.

Wahba, S.K. & Elkheir, Y.M. 1975.

Dimethyltryptamine from the leaves of certain *Acacia* species of northern Sudan. *Lloydia* 38, 176-177.

Wassel, G.M. et al. 1985.

Alkaloids from the rhizomes of *Phragmites australis* Cav. *Scientia Pharmaceutica* 53, 169-170.

Petrus.Pennanen@helsinki.fi \* Everything is perfect forever

Michael from Melbourne \* Ditto

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END OF FAQ

The soul is felt to separate from the physical body

Visions of jaguars and snakes

Visions of demons and/or deities

Visions of distant persons, "cities" and landscapes

The sensation of seeing the detailed enactment of recent unsolved crimes



This beverage is narcotic, as one might suppose, and in a few moments it begins to produce the most rare phenomena. Its action appears to excite the nervous system; all the senses liven up and all faculties awaken; they feel vertigo and spinning in the head, then a sensation of being lifted into the air and beginning an aerial journey; the possessed begins in the first moments to see the most delicious apparitions, in conformity with his ideas and knowledge: the savages (apparently the Zaparo of eastern Ecuador) say that they see gorgeous lakes, forests covered with fruit, the prettiest birds who communicate to them the nicest and the most favorable things they want to hear, and other beautiful things relating to their savage life. When this instant passes they begin to see terrible horrors out to devour them, their first flight ceases and they descend to earth to combat the terrors who communicate to them all adversities and misfortunes awaiting them.

































## **The Ayahuasca-Alien Connection**

[deoxy.org](http://deoxy.org)   shamanism







# Discovering the Way of the Shaman

From *The Way of the Shaman* by [Michael Harner](#)

Illustrated by deoxy.org with image credit to [The Alchemy Web Site](#)

Chapter 1. Discovering the way

In 1960 and 1961, the American Museum of Natural History invited me to make a year-long expedition to the Peruvian Amazon to study the culture of the [Conibo Indians of the Ucayali River region](#). I accepted, delighted to have an opportunity to do more research on the fascinating Upper Amazon forest cultures.

Two particular experiences I had among the Conibo [and the Jivaro](#) were basic to my discovering the way of the shaman in both those cultures, and I would like to share them with you. Perhaps they will convey something of the incredible hidden world open to the shamanic explorer.

I had been living for the better part of a year in a Conibo Indian village beside a remote lake off a tributary to the Rio Ucayali. My anthropological research on the culture of the Conibo had been going well, but my attempts to elicit information on their religion me with little success. The people were very friendly, but reluctant to talk about the supernatural. Finally they told me that if I really wished to learn, I must take the

shaman's sacred drink made from [ayahuasca](#), the "soul vine." I agreed, with both curiosity and trepidation, for they warned me that the experience would be very frightening.

The next morning my friend Tomas, the kind elder of the village, went into the forest to cut the vines. Before leaving, he told me to fast: a light breakfast and no lunch. He returned midday with enough ayahuasca vines and leaves of the cawa plant to fill a fifteen gallon pot. He boiled them all afternoon, until only about a quart of dark liquid remained. This he poured into an old bottle and left it to cool until sunset, when he said we would drink it.

The Indians muzzled the dogs in the village so that they could not bark. The noise of barking dogs could drive a man who had taken ayahuasca mad, I was told. The children were cautioned to be quiet, and silence came over the small community with the setting of the sun.

As the brief equatorial twilight was replaced by darkness, Tomas poured about a third of the bottle into a gourd bowl and gave it to me. All the Indians were watching. I felt like Socrates amidst his Athenian compatriots, accepting the hemlock - it occurred to me that one of the alternate names people in the Peruvian Amazon gave ayahuasca was "the little death." I drank the potion quickly. It had a strange, slightly bitter taste. I then waited for Tomas to take his turn, but he said that he had decided not to participate after all.

They had me lie down on the bamboo platform under the great thatched roof of the communal house. The village was silent, except for the chirping of crickets and the distant calls of a howler monkey deep in the jungle.

As I stared upward into the darkness, faint lines of light appeared. They grew sharper, more intricate, and burst into brilliant colors. Sound came from far away, a sound like a waterfall, which grew stronger and stronger until it filled my ears.

Just a few minutes earlier I had been disappointed, sure that the ayahuasca was not going to have any effect on me. Now the sound of rushing water flooded my brain. My jaw began to feel numb, and the numbness was moving up to my temples.

Overhead the faint lines became brighter, and gradually interlaced to form a canopy resembling a geometric mosaic of stained glass. The bright violet hues formed an ever-expanding roof above me. Within this celestial cavern, I heard the sound of water grow louder and I could see dim figures engaged in shadowy movements. As my eyes seemed to adjust to the gloom, the moving scene resolved itself into something resembling a huge fun house, a supernatural carnival of demons. In the center, presiding over the activities, and looking directly at me, was a gigantic,

grinning crocodilian head, from whose cavernous jaws gushed a torrential flood of water. Slowly the waters rose, and so did the canopy above them, until the scene was metamorphosed into a simple duality of blue sky above and sea below. All creatures had vanished.

Then, from my position near the surface of the water, I began to see two strange boats wafting back and forth, floating through the air towards me, coming closer and closer. They slowly combined to form a single vessel with a huge dragon-headed prow, not unlike that of a Viking ship. Set amidships was a square sail. Gradually, as the boat gently floated back and forth above me, I heard a rhythmic swishing sound and saw that it was a giant galley with several hundred oars moving back and forth in cadence with the sound.

I became conscious, too, of the most beautiful singing I have ever heard in my life, high-pitched and ethereal, emanating from myriad voices on board the galley. As I looked more closely at the deck, I could make out large numbers of people with the heads of blue jays and the bodies of humans, not unlike the bird-headed gods of ancient Egypt.

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I became aware of my brain. I felt—physically—that it had become compartmentalized into four separate and distinct levels. At the uppermost surface was the observer and commander, which was conscious of the condition of my body, and was responsible for the attempt to keep my heart going. It perceived, but purely as a spectator, the visions emanating from what seemed to be the nether portions of my brain. Immediately below the topmost level I felt a numbed layer, which seemed to have been put out of commission by the drug—it just wasn't there. The next level down was the source of my visions, including the soul boat. Now I was virtually certain I was about to die.



As I tried to accept my fate, an even lower portion of my brain began to transmit more visions and information. I was "told" that this new material was being presented to me because I was dying and therefore "safe" to receive these revelations. These were the secrets reserved for the dying and the dead, I was informed.

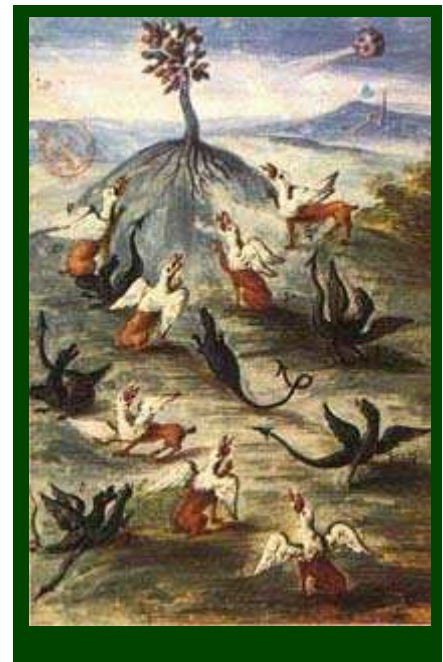
I could only very dimly perceive the givers of these thoughts: giant reptilian creatures reposing sluggishly at the lowermost depths of the back of my brain, where it met the top of the spinal column. I could only vaguely see them in what seemed to be gloomy, dark depths. Then they projected a visual scene in front of me.



First they showed me the planet Earth as it was eons ago, before there was any life on it. I saw an ocean, barren land, and a bright blue sky. Then black specks dropped from the sky by the hundreds and landed in front of me on the barren landscape. I could see that the "specks" were actually large, shiny, black creatures with stubby pterodactyl-like wings and huge whale-like bodies. Their heads were not visible to me. They flopped down, utterly exhausted from their trip, resting for eons.

They explained to me in a kind of thought language that they were

fleeing from something out in space. They had come to the planet Earth to escape their enemy. The creatures then showed me how they had created life on the planet in order to hide within the multitudinous forms and thus disguise their presence. Before me, the magnificence of plant and animal creation and speciation—hundreds of millions of years of activity—took place on a scale and with a vividness impossible to describe. I learned that the dragon-like creatures were thus inside of all forms of life, including man. They were the true masters of humanity and the entire planet, they told me. We humans were but the receptacles and servants of these creatures. For this reason they could speak to me from within myself.



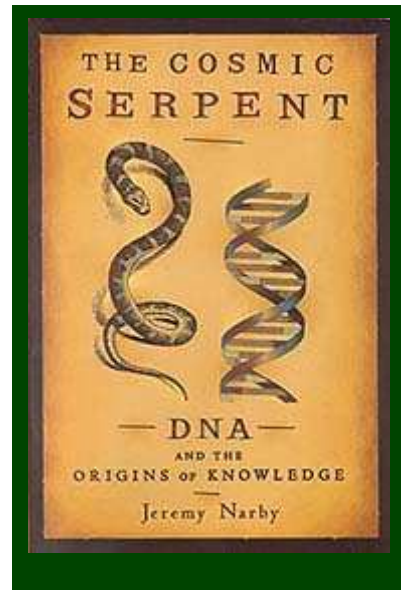
These revelations, welling up from the depths of my mind, alternated with visions of the floating galley, which had almost finished taking my soul on board. The boat with its blue-jay headed deck crew was gradually drawing away, pulling my life force along as it headed toward a large fjord flanked by barren, worn hills. I knew I had only a moment more to live. Strangely, I had no fear of the bird-headed people; they were welcome to have my soul if they could keep it. But I was afraid that somehow my soul might not remain on the horizontal plane of the fjord but might, through processes unknown but felt and dreaded, be acquired or re-acquired by the dragon-like denizens of the depths. I suddenly felt my distinctive humanness, the contrast between my species and the ancient reptilian ancestors. I began to struggle against returning to the ancient ones, who were beginning to feel increasingly alien and possibly evil. Each heart beat was a major undertaking. I turned to human help. With an unimaginable last effort, I barely managed to utter one word to the Indians:

"Medicine!"

I saw them rushing around to make an antidote, and I knew they could not prepare it in time. I needed a guardian who could defeat dragons, and I frantically tried to conjure up a powerful being to protect me against the alien reptilian creatures. One appeared before me; and at that moment the Indians forced my mouth open and poured the antidote into me. Gradually, the dragons disappeared back into the lower depths; the soul boat and the fjord were no more. I relaxed with relief. The antidote radically eased my condition, but it did not prevent me from having many additional visions of a more superficial nature. These were manageable and enjoyable. I made fabulous journeys at will through distant regions, even out into the Galaxy; created incredible architecture; and employed sardonically grinning demons to realize my fantasies. Often I found myself laughing aloud at the incongruities of my adventures. Finally, I slept.

Rays of sunlight were piercing the holes in the palm-thatched roof when I awoke. I was still lying on the bamboo platform, and I heard the normal, morning sounds all around me: the Indians conversing, babies crying, and a rooster crowing. I was surprised to discover that I felt refreshed and peaceful. As I lay there looking up at the beautiful woven pattern of the roof, the memories of the previous night drifted across my mind. I momentarily stopped myself from remembering more in order to get my tape recorder from a duffle bag. As I dug into the bag, several of the Indians greeted me, smiling. An old woman, Tomás' wife, gave me a bowl of fish and plantain soup for breakfast. It tasted extraordinarily good. Then I went back to the platform, eager to put my night's experiences on tape before I forgot anything. The work of recall went easily except for one portion of the trance that I could not remember. It remained blank, as though a tape had been erased. I struggled for hours to remember what had happened in that part of the experience, and I virtually wrestled it back into my consciousness.

The recalcitrant material turned out to be the communication from the dragon-like creatures, including the revelation of their role in the evolution of life on this planet and their innate domination of living matter, including man. I was highly excited at rediscovering this material, and could not help but feel that I was not supposed to be able to bring it back from the nether regions of the mind. I even had a peculiar sense of fear for my safety, because I now possessed a secret that the creatures had indicated was only intended for the dying. I immediately decided to share this knowledge with others so that the "secret" would not reside in me alone, and my life would not be in jeopardy. I put my outboard motor on a dugout canoe and left for an American evangelist mission station nearby.



I arrived about noon. The couple at the mission, Bob and Millie, were a cut above the average evangelists sent from the United States: hospitable, humorous, and compassionate. I told them my story. When I described the reptile with water gushing out of his mouth, they exchanged glances, reached for their Bible, and read to me the following line from Chapter 12 in the Book of Revelation:

*And the serpent cast out of his mouth water as a flood*

They explained to me that the word "serpent" was synonymous in the Bible with the words "dragon" and "Satan." I went on with my narrative. When I came to the part about the dragon-like creatures fleeing an enemy somewhere beyond the Earth and landing here to hide from their pursuers, Bob and Millie became excited and again read me more from the same passage in the Book of Revelation:

*And there was a war in heaven: Michael and his angels fought against the dragon; and the dragon fought and his angels. And prevailed not; neither was their place found any more in heaven. And the great dragon was cast out, that old serpent, called the Devil, and Satan, which deceiveth the whole world: he was cast out into the earth, and his angels with him.*

I listened with surprise and wonder. The missionaries, in turn, seemed to be awed by the fact that an atheistic anthropologist, by taking the drink of the "witch doctors," could apparently have revealed to him some of the same holy material in the Book of Revelation. When I had finished my account, I was relieved to have shared my new knowledge, but I was also exhausted. I fell asleep on the missionaries' bed, leaving them to continue their discussion of the experience.



That evening, as I returned to the village in my canoe, my head began to throb in rhythm with the noise of the outboard motor; I thought I was going mad; I had to stick my fingers in my ears to avoid the sensation. I slept well, but the next day I noticed a numbness or pressure in my head.



*Huarmi Nahui* by [Pablo Amaringo](#) from the [Gallery of Usko-Ayar art](#)

I was now eager to solicit a professional opinion from the most supernaturally knowledgeable of the Indians, a blind shaman who had made many excursions into the spirit world with the aid of the ayahuasca drink. It seemed only proper that a blind man might be able to be my guide to the world of darkness. I went to his hut, taking my notebook with me, and described my visions to him segment by segment. At first I told him only the highlights; thus, when I came to the dragon-like creatures, I skipped their arrival from space and only said, "There were these giant black

animals, something like great bats, longer than the length of this house, who said that they were the true masters of the world." There is no word for dragon in Conibo, so "giant bat" was the closest I could come to describe what I had seen.

He stared up toward me with his sightless eyes, and said with a grin, "Oh, they're always saying that. But they are only the Masters of Outer Darkness."

He waved his hand casually toward the sky. I felt a chill along the lower part of my spine, for I had not yet told him that I had seen them, in my trance, coming from outer space. I was stunned. What I had experienced was already familiar to this barefoot, blind shaman. Known to him from his own explorations of the same hidden world into which I had ventured. From that moment on I decided to learn everything I could about shamanism.

And there was something more that encouraged me in my new quest. After I recounted my entire experience, he told me that he did not know of anyone who had encountered and learned so much on his first ayahuasca journey.

"You can surely be a master shaman," he said.

## Magic Melodies

author unknown



The basic notion exists that ayahuasca teaches "magic melodies" known as "[icaros](#)." In fact, being a vegetalista is almost synonymous with mastering a vast repertoire of icaros - each of the different psychoactive plant spirits has its own icaro. Different types of icaros serve a variety of purposes ranging from love magic to divination to the cure of snakebite. "Shirohuehua" or fun songs, for example, animate the patient, inducing joy and hope. "Manchari" are sung to lead an abducted soul back to its owner. With the "icaro de aranita," a little spider spins a web around a man and a woman uniting them for all eternity.

Icaros are taught by the tutelary spirits of plants and animals: the raya-balsa, for example, an aquatic plant, can teach one to travel under the water. There are even icaros of perfumes, stones and resins. The "sirenas" or mermaids are often invoked in ayahuasca sessions. They appear, singing beautiful icaros, accompanied by string instruments. Their icaros can give one power over the underwater world, particularly over the Bufo or pink river [dolphin](#). These creatures are feared and seen as mighty sorcerers, yet they are also invested with sexual allure. Men are said to feel an intense pleasure during coitus with dolphins, and are sometimes unable to separate themselves.

Icaros are used only during ayahuasca sessions. There is a hierarchy among shamans depending on the number and power of the icaros they



know. The icaros sung in Spanish are not as powerful as those in jungle Quechua; mixtures of Queschua with Cocama and Omagua are particularly potent. Yet each shaman has a principal icaro which represents the essence of his power.

In the highly sensitized state of ayahuasca intoxication, the icaros help structure the vision. They can also modify the hallucinations themselves. Luna reports: *"There are icaros for increasing or diminishing the intensity and color of the visions, for changing the color perceived, and for directing the emotional contents of the hallucinations."*

Vegetalistas are masters of synaesthesia. Through using the most interesting acoustic effects produced by whistling and singing, the geometric designs can be seen acoustically. The icaros refer to a medicine as "my painted song," "my words with those designs," or "my ringing pattern."

The icaros are the quintessence of shamanic power. A good vegetalista is able to "orchestrate" beautiful or transformative visions through his magic melodies. Competitions sometimes arise between maestros to "monopolize" the visions of those present - a kind of competitive "jam session" where they unleash all their tricks.

Luna has included musical transcriptions of eight icaros culled from the repertoire of his informant, Maestro Don Emilio, in Appendix II of his book. Luna describes some of the icaros as having great unearthly beauty and urges ethnomusicologists to record them soon, as they are an evanescent feature of shamanic culture, that is fast disappearing. True ayahuasqueros, he claims, are dying out and their roles are being assumed by charlatans. The key to recognizing a true maestro is: does he know the magic melodies?

## Shamanic Death Song

From [Luis Eduardo Luna, 1991:10,13,14,17,48](#)



Social Inventions No. 26, page 37, told of a Shamanic [three-dimensional language](#) revealed through the use of [DMT](#). Here is an account with some similarities, based on the use of [ayahuasca or yage](#), from Thomas Pinkson, a psychologist and business consultant, adapted from *Psychedelic Monographs and Essays* No. 6 - an article entitled *Amazonian Shamanism*. See also *The Book of Visions* (Virgin Books, 1992, page 316) re. musical midwifery for the dying.

"Plants of the jungle did appear before me and speak. The problem was that I did not understand their language."

In my first experience with ayahuasca in the Amazon jungle, plants of the jungle did appear before me and speak, just as the shamans report happens with them. The problem was that I did not understand their language! I knew they were giving me information but I wasn't conversant in their language and so didn't get it. It takes a period of time to learn the language of the plants. Most shamans were introduced to the plants through their own illness or wounding. They were injured in some way when they were young and were introduced to ayahuasca through a healing ceremony. It was not a teacher for them until a number of sessions took place over time. Then the spirit of the plant opened up to them and began to relate to them as a teacher. Part of this process was learning the language. Another part is enduring the repeated vomiting. It is not easy.

I am especially interested in the "intelligence" of the power plants like ayahuasca. It is prelinguistic intelligence connected with transcendent realms of knowing that do not fit easily into western thought categories.

"All levels of existence have vibration, or sound underneath their surface manifestation"

One ayahuasca vision showed me how all levels of existence, including material and non-material levels as thoughts or feelings, have vibration, or sound underneath their surface manifestation. If one can reproduce the sound, vibration, or "song" of that which you are working with, you can enter into it and change it around! The shaman does just this using themselves as an instrument to effect the joining.

This information came in handy in a recent experience working with life threatening illness. Through this work I see that real healing always takes place through joining. When we are able to dissolve separation to experience our oneness, healing is the result. My ayahuasca experience showed me one way, a most ancient way to gain entry and create joining. Once you are "in," the question becomes what do you want to do; what is your intentionality, your purpose in being there to begin with. I have explored this experience of joining through chanting, drumming, prayer, ceremony meditation, and most recently through song. I want to share one of my recent explorations on this realm with an AIDS patient.

He was a 40-year-old artist, very bright and animated. When I first met him, he was terribly frightened of being alone, of death and that he was going to be put in a black box forever. He was paralysed by his fear and in tremendous pain,

taking enough morphine to kill three or four people but it was still not working for him. He was full of anger and felt abandoned by friends and family. He'd also alienated the medical staff in one hospital to the extent that they would not let him in without a guard for the nurses. Underneath all this he was a wonderfully sensitive person with deep integrity who wanted to find inner peace, so he could die with dignity and without fear. I worked with him for six months, visiting him at home or in the hospital up until the day before his death.

"I visualised myself as a section of pipe hooked up to  
the Great Generator, just a channel for a healing love force"

On what was to be our last visit I watched him laboring to breathe with an oxygen mask on his face, exhausted from the ravages of disease and disoriented by pain medication and sedation. I focused all my attention on opening my heart and extending love. I visualised myself as a section of pipe hooked up to the "Great Generator," just playing my part in the link-up process. The pipe gets blocked when we think we are doing it all. But when we get ego mind out of the way we really can be a channel for a healing love force.

"Then to my total surprise, he took off his oxygen mask  
and began to sing along with me"

While silently holding his hand and sending him love, I began to enter a trance state. Up from the depths of my mind came the words of a song that I'd learned in Mexico years before while on a pilgrimage with the Huichol Indians. I adopted it as my "death song" and had used it once before as a dear friend was dying. Now it felt like the song wanted to be sung again. My first response was not to do it. "How will he receive it?" I worried. Then I remembered the ayahuasca teaching from the Amazon about joining through sound. The guidance grew stronger. "Just sing it, just share the song," It said. "Just send it to him, without any pressure or attachment. Sing it to him with love and let it go," said the inner instructions. So softly I began to hum. Slowly the humming shifted into singing, soft at first, then louder. As I sang louder, I could hear him trying to hum along. Then to my total surprise, he took off his oxygen mask and began to sing along with me. He had barely enough strength to breathe, but somehow found strength to join me in singing. Singing together our voices became one as we both sang louder. Then a phase shift occurred and there was no separation between us; we were one! His eyes came to life, his face now radiant. For the first time since I knew him he was joyful. He was experiencing what he had been so desperately seeking so that he could die in peace - release from fear and union with spirit. It was a transcendent experience for us both. Our hearts and souls joined together in a timeless moment of absolute bliss. This was the culmination

of our work together. We stayed in silence for several minutes enjoying the awe of what had just touched us both so powerfully.

Shortly thereafter, it was time for me to leave. Previously he would become very anxious whenever I would leave after one of our sessions. 'Make sure you come back. You are coming back, aren't you?' he'd ask worriedly. This time he released effortlessly. We gave each other a long hug and said goodbye. He smiled as I left the room and died the next day. The teachings from the "Elders" had served us well.

## An Indo-European Plant Teacher

by Gracie and Zarkov

Number 10

### INTRODUCTION

Encounters with entities who teach or guide are a characteristic feature of hallucinogenic ayahuasca trances. For discussion purposes, we have granted ontological status to these entities without regard for the epistemological or metaphysical implications of that status.

We have been interested in these phenomena for several years, but the South American vine, *Banisteriopsis caapi*, which is the basis for ayahuasca, is not readily available in North America. The DMT-containing admixture plants, *Psychotria viridis*, and *Diplopteris cabrarana*, which produce the vivid hallucinations, are even harder to obtain. Therefore, we have been investigating combinations of synthetic DMT with various beta-carboline containing plants, not only *B. caapi*, but also *Passiflora incarnata* and *Peganum harmala*.

### PEGANUM HARMALA

*P. harmala*, or Syrian Rue, is the plant from which harmine was first isolated, as well as a source of harmaline and tetrahydroharmine. Total beta-Carboline content runs almost 4% by weight in the seeds of Syrian Rue. These alkaloids occur in roughly the same proportions as in *B. caapi*. Ten grams of Syrian Rue seeds provide about 400mg of total beta-Carbolines, about that amount in a typical dose of ayahuasca.

Syrian Rue grows in semi-arid conditions. It originated in Central Asia, and is held in high esteem throughout Asia Minor as a medicinal, aphrodisiac and dye plant. There is no solid historical evidence of ritual or religious use. It is sometimes known as 'ruin weed' since it often grows on the tells covering the ruins of ancient cities in the Near East. It now grows wild in Eurasia and has recently been spread to Texas, Nevada, New Mexico and Southern California. Dye quality seeds are available from several West Coast seed services for about \$50.00 per pound.

## PREPARATION

We prepared our hallucinogenic brew in a manner similar to that used to prepare ayahuasca. Fifty grams of seeds were finely ground in a spice mill. The powdered seeds were added to 4 quarts of water and boiled in a slow cooker overnight. The resulting liquid was poured off and saved, and 4 quarts of fresh water were added to the residue. This second wash was also boiled for 12 hours. Both washes had a noticeable yellow color, indicating the possible presence of harmine. Both washes were strained while hot through a cloth coffee filter and then reduced to a final volume of 500ml. Synthetic N,N-DMT-HCl was boiled in during the final reduction (not boiling in the DMT adversely affects the brew's potency).

## THE HIGH

We drank the brew on empty stomachs. First effects were noticed in about five minutes. Physical side effects include tingling extremities, slight tremor, lassitude and very slight nausea. The mental effects of the come-on are similar to the initial effects of smoked DMT but are milder and in slow motion. The anti-depressant effects of the beta-Carbolines are quite striking; a strange calm elation is felt.

The DMT-like effects peak in about 25-30 minutes with strong visual disturbances. We were in a darkened room and the closed-eye geometric patterns were very vivid. We felt a 'presence' in these patterns which we could bring into direct contact by a combination of repeated nonsense babbling (which turned into glossolalia) and direct address to the 'entity,' e.g. 'Who are you?' 'Show yourself!' 'Do you want to talk?' etc.

## THE PLANT TEACHER

On both occasions, we contacted a 'teacher' who identified himself with the Syrian Rue plant. During our discussions with him (which were out loud; subvocalizing was ineffective) the teacher showed us visions, answered questions and provided specific health, emotional and psychological advice. The 'voice in the head' phenomenon was not as strongly constituted as on high dose mushrooms. However, the vividness, clarity and understandability of the visionary illustrations which often accompanied the conversations were striking. Intense feelings (which shifted with the visions), changes in tone of voice and manner of speaking, including glossolalia (as recorded on tape) and strong contact highs were additional phenomena noted. The plant teacher had a definite personality which was strongly male, very friendly, humorous, with an interest in story-telling bordering on the garrulous.

We have independent confirmation of contact phenomena by an associate who tried the same combination.

## THE VISIONS

Representative visions and raps included:

- Plant diagrams and information on watering, plant diseases and placement of the Syrian Rue plant in our garden.
- A diagram of a human heart, showing the auricular node and the neurology of the heartbeat.
- Art and artifacts from the Old European civilization C. 10,000 BC, e.g., Catal Huyuk; including pottery and statuary.
- A vision of the Goddess, holding the plant teacher and the human contactee intertwined in Her hands.
- An amazingly vivid and intense 'movie' of the last scene from Robert A. Heinlein's *Starship Troopers*, showing the destruction of an insect planet by human warriors.
- The ruins of Persepolis, then, upon request, Persepolis in its original polychrome, sunlit splendor.
- A vision of the plant teacher as a Mongol warlord, in golden armor, astride an armored and caparisoned woolly mammoth.
- A vision of Gracie's mother at Gracie's age, from the inside, that is, Gracie experienced her mother from her mother's point of view.
- Various pieces of psychological and relationship advice, including insights into both our childhoods.

The visions faded about three hours after ingestion with the presence slowly fading in the fourth hour. The total trip lasts about 6 hours.

## DOSAGE

This brew can be *very intense* and we could not recommend it to anyone who has not had significant experience with similar visionary states such as high dose mushrooms (5gm+, smoked DMT (40mg+) or mescaline (500mg+). Individual sensitivity to the beta-Carboline/DMT combination varies greatly, so we recommend that one 'sneak-up' on the effects. While our nominal dose would be 10 grams of seeds with 40 mg of DMT, 30 mg of DMT will definitely allow for contact. Five grams of seeds with 20 mg of DMT seems to be the threshold dose. The intensity of the visual effects seems most dependent upon the dosage of DMT. The length of the effects and the depth of the contact seem most dependent upon the dose of Syrian Rue. Our personal preference is 7 grams of seeds with 30 mg of DMT, with a booster dose of 5 grams Rue and 20 mg DMT after one hour.

## WARNING

THE INTERACTION OF CERTAIN FOODS AND DRUGS WITH THE MAO INHIBITION BROUGHT ON BY BETA-CARBOLINES CAN BE FATAL!! The following substances *must not* be ingested within 48 hours before and after taking the brew:

- All amphetamines or related compounds , such as MDA, MDMA, phenylpropanolamine, ephedrine, etc. [add 'smart drugs' to this category.]
- Any foods containing tyramine, or where enzymatic processes have been used: e.g., yoghurt, sour cream, aged cheeses, wines, especially port or Chianti, beer, fermented sausages (pepperoni), soy sauce, etc.

- Certain other foods, including: shellfish, bananas, liver, avocados, broad beans, chocolate, coffee and others.

This list is not all-inclusive. Please do [further research](#) before attempting to experiment! The dangerous interaction usually precipitates a hypertensive crisis and certain people are especially sensitive to the effects, particularly those with heart abnormalities or high blood pressure. We ourselves have had a few close calls while investigating the beta-Carbolines.

Good physical health and the advice of a 'hip' physician are helpful, nevertheless, exercise caution if you become interested in these combinations.

## COMPARISON WITH AYAHUASCA

While our direct experience with *B. caapi* and DMT admixtures is very limited, we have these preliminary comments. The Syrian Rue experience is less heavy, and the entity more casual, garrulous and intimate. The *caapi* entity seems more formal, more experienced with human contact, especially in health and psychology, and seems to be a more powerful teacher.

## CHEMICAL ANALYSIS

The chemical analysis of ayahuasca can be found in Stafford, *Psychedelics Encyclopedia*, and Schultes and Hoffman, *The Botany and Chemistry of Hallucinogens*. A more detailed analysis of the brew is in McKenna, et. al., *Journal of Ethnopharmacology*, 10 (1984), 195-223.

## CONCLUSION

A full account of our various experiments with beta-Carbolines and DMT will be in our forthcoming book: *Notes from Underground: Psychedelic Perspectives for the Next Millennium*, which will be published by High Frontiers Press sometime early in 1992.

We'd like to acknowledge the information and moral support provided by Dennis, [Terence](#) and Kat McKenna, which made it possible for us to structure the experiments so as to make contact on our first attempt.

Finally, the plant teacher said that it would like to communicate with any human willing to take the brew.

Stay High and Stay Free!  
[Gracie and Zarkov](#)

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Watch for the book in 1992.

From the AHF BBS (213) 454-2874

[Press a key...](#)

**From *The Natural Mind* by Dr. Andrew Weil, M.D.**

Here ... is a description by a Peruvian youth who was captured by Amahuaca Indians of the preparation of *ayahuasca* by the tribal medicine man. The Amahuaca made this powerful hallucinogenic drink (also known as *yagé* and *caapi*) from the thick stems of a woody vine (*Banisteriopsis caapi*) and the leaves of a shrub (probably *Diplopterys cabrerana*): ...the serious preparations started, accompanied by almost continuous chanting. First the vine was cut into one-foot long pieces with the stone ax and pounded on a flat stone with a large wooden mallet until it was well mashed.

The old man chanted:

"*Nixi honi* [i.e., the vine whose extract produces visions]  
vision vine  
boding spirit of the forest  
origin of our understanding  
give up your magic power  
to our potion  
illuminate our mind  
bring us foresight  
show us the designs of our enemies  
expand our knowledge  
expand our understanding  
of our forest."

A layer of mashed vine pieces was then carefully arranged in the bottom of a large new clay pot. On top of this was laid a layer of the leaves in the shape of a fan. And as he did this [he] chanted:

"Bush with markings of the serpent  
give us your leaves  
for our potion  
bring us favor  
of the boa  
source of good fortune."

Then alternating layers of mashed vine and leaves were put in place until the pot was more than half full. Clear water from the stream was then added until the plant material was well covered.



A slow fire was started under the pot and the cooking was maintained at a very slow simmer for many hours until the liquid was reduced to less than half.

When the cooking process was completed the fire was removed and, after cooling, the plant material was withdrawn from the liquid. After several hours of further cooling and settling, the clear green liquid was carefully dipped off into small clay pots, each fitted with a tight cover.

The entire process took three days, being done with utter calmness and deliberation. The interminable chants accompanied each step, invoking the spirits of the vine, the shrub, and the other forest spirits.

This carefully and reverently prepared extract provided the potion for many subsequent *ayahuasca* sessions in the peaceful and secluded forest glade, sessions that progressed to incredible vision fantasies.

This kind of ritual seems to protect individuals and groups from the negative effects of drugs, possibly by establishing a framework of order around their use. At least, people who use drugs ritually tend not to get into trouble with them, whereas people who abandon ritual and use drugs wantonly tend to have problems.

...Here is his report of an *ayahuasca* session called by the chief, who was about to die:

It was a select group of twelve that went to the secluded glade in the forest. It included some of the older men and several of the best hunters. The rituals and chants were similar to previous occasions, perhaps a little more elaborate. From the preparatory chants of the fragrant smoke and evocation of the spirit of the *honi xuma* [i.e., of the vine that provides the drug] it was evident that Chief Xumu was attempting in this session to fix in my consciousness all the important or essential circumstances of their tribal life. There seemed to be an intense feeling of rapport among the group, all dedicated to the purpose of the old man.

I was aware of the fragile hand that poured the magic fluid and passed the cups around to each. We drank in unison and settled into a quiet reverie of joint communion, savoring the fragrant smoke in the stillness of the silent forest. A quiet chant held our conscious thought together as the potion took effect. A second cup was passed to intensify the reaction.

Color visions, indefinite in form, began to evolve into immense vistas of enchanting beauty. Soon subtle but evocative chants led by the chief took control of the progression of our new visions. Embellishments to both the chants and the visions came from the participants.

Soon the procession of animals began, starting with the jungle cats. Some of these I had not seen before. There was a tawny puma, several varieties of the smaller spotted ocelot, then a giant rosetta-spotted jaguar. A murmur from the assembly indicated recognition. This tremendous animal shuffled along with head hanging down, mouth open and tongue lolling out. Hideous, large teeth filled the open mouth. An instant change of demeanor to vicious alertness caused a tremor to run through the circle of phantom-viewers.

From a memory recess in my brain there emerged with the stimulation of the cats an experience from my past. On a trip to the Rio Putumayo a year before coming to the Jurua to cut *caucho* [rubber], I had come face to face on a forest path with a rare black jaguar. It had been a terrifying experience, but I had dominated the flashing eyes of the beast and we had gone our separate ways without violence.

This mighty animal now intruded on our visions and a shudder passed through us all. As before, the demon of the forest went on his way. Other animals, snakes, birds passed in review, each with some significant characteristic important to the Huni Kui [the tribe] in dominating the forest.

Then came scenes of combat with the hated enemy, the Guacamayos ... a procession of the feared white-robed and hooded Bolanxos, and encounters with Kariwa and Kiruana, the hated invading rubber cutters. In one vision a village was in flames, the people scattered in panic into the forest. Here Xumu, then a much younger man, killed a rubber cutter in violent hand-to-hand fighting.

Scenes in the new village, where we now lived, gradually brought the visions to an end. We awoke to shafting sunlight and morning bird song penetrating both to our consciousness and to the place of our visions.

As I have explained before, it is impossible to describe satisfactorily the content and depth of feeling that captures the mind. During the visions I was aware within myself of a great feeling of empathy for these people in their struggle to dominate the forces of nature for their daily living and to defend themselves against their enemies.

A calabash of thick fruit gruel passed around by one of the guards restored our bodily sensations to the daily world of our existence, and in a subdued mood we returned to the village.

Everyone seemed aware of the source of the black jaguar sequence of visions. It left a strong impression on them and resulted in my being given the name Ino Moxo, Black Panther.

Evidently, these Indians experience the collective unconscious as an immediate reality, not just as an intellectual construct. It is significant that this experience of shared consciousness holds a most important place in the society. In fact, as a sacramental ritual, it is the basis of tribal unity because it proves and confirms the supposition that every person in the tribe is the same as every other person in the most fundamental way. I believe also that this kind of unconscious communication is the channel through which the wholeness of a healer can be transmitted to a sick person.

Of course, the drug does not cause this effect. It is a natural capacity of man's unconscious mind. Nor is there anything special about these Indians, except their relative lack of attachment to ego and intellect. Not only do I think each of us can share consciousness, I think all of us are already doing it all the time. We do not have to learn to be telepathic; we just have to notice that we already are by letting telepathic events into our waking awareness.

Extrasensory perceptions are not unusual talents possessed by specially gifted individuals. They are normal unconscious events, and scientists who attempt to document them by laboratory experiments will never get to experience them directly. Lama Govinda, member of a Tibetan Buddhist order, says of Tibetans:

...[They] rely a great deal on their dream consciousness, and they are seldom proved wrong in their judgement.

Besides dreams they have many other methods of contacting the deeper layers of their mind: meditation, trance, certain forms of oracles, and various natural and "supernatural" (psychic) portents. All these methods have been tried out for millenniums, and their results have been found sufficiently satisfactory to guide people in their daily live. Tibetans would be greatly surprised if one would doubt these facts, which are matters of practical experience and have nothing to do with beliefs or theories. To them the attempts of modern psychologists, who try to "prove" extrasensory perception by scientific methods, would appear crude and laughable, one might just as well try to prove the existence of light which is visible to all but the blind. The circumstances under which these modern experiments are carried out are in themselves the greatest hinderance to their success. In their attempt at "objectivity" they exclude the emotional and the spiritually directive elements of the human mind, without which no state of real absorbtion or concentration can be created. **Their very attitude bars the doors of psychic perception.**

## Ayahuasca Reading

Read by [Peter Lamborn Wilson](#) on [WBAI 99.5FM NYC](#) sometime in 1994 during one of his Ayahuasca shows (same as the [icaro](#) tape). In this audio transcription unknown words are spelled phonetically and marked with (sp) when they first appear.

## **Ayahuasca Drinkers among the cha-ma (sp) Indians by Heinz ku-sel (sp)**

see what i mean?

Originally appeared in the Psychedelic Review, 1965

Read from reprint in the Psychozoic Press

I lived for seven years traveling and trading in the upper Amazon region and often heard stories about the effect of ayahuasca. Once on a long canoe trip down the river my indian companion had chanted the song of the Goddess of Ayahuasca. Ayahuasca, a Quechua word meaning 'vine of death' is the collective name for various climbing tropical lianas and also designates the tea prepared from the leaves of the vine, either by itself or in combination with other leaves. Indians and the Mestizos alike visit the ayahuasquero or witch-doctor when they are ailing or think they need a general check-up, or want to make an important decision, or simply because they feel like it. Among the scattered half-casts and natives of the swamps and rainforests of the Ucayali region the ayahuasca cult plays a significant role in their religious medical practices and provides them with a good deal of entertainment. Repeatedly I heard how in a vision induced by drinking the tea prepared from the liana the patient had perceived the specific plant needed for his cure - had later searched and found it in the jungle and had subsequently recovered. *To the enigmatic mind of the Indian ayahuasca opens the gate to the healing properties of the forces of nature at whose mercy he lives.*

*A recurrent theme whenever the natives refer to the results of the drug is the vision of the 'Procession of Plants,' with garlic, 'the king of the good plants' leading the way. Garlic, tobacco, quinine and oh-hey (sp), a tree latex, are at the head of a long line of friendly elf-like plants which, in ayahuasca visions, bow to mankind, offering their services.* [ [Hear the italics in pseudo-RealAudio](#)] The Campa Indians, sturdy fellows, who today specialize in drawing mahogany and cedar logs for the sawmills in Iquitos undergo a purge of ayahuasca before they enter the flooded areas of the forest to float out the logs and assemble them into tremendous rafts. For a cure of that nature they prepare themselves by a prolonged [diet](#), avoiding meat, salt, alcohol and sugar.

Aside from the main use of the drug for curing or keeping the consumer in good general condition, ayahuasca will, according to its users, induce clairvoyance and may for example solve a theft or prophesy the success or failure of a given enterprise. A man might be planning a trip to a certain river where he knows of a good place to tap rubber, but to be sure of good results he will consult ayahuasca first. After that, more than likely, he will abandon the enterprise altogether and set off in another direction

to pan gold, hunt peck-oh-re (sp) or do something else. In these unhurried hours and days I arrived at an insight into the native's fantastic beliefs and images, the richness of which is equaled only by the growth of the surrounding vegetation.

Their superstitions, ideas and images freely cross and recross the borderline of reality in strangely patterned ways. Their stories have one thing in common - man, plant and animal are one, forever woven into an inextricable pattern of cause and effect. Later I found that *ayahuasca* visions are fabrics that illustrate endless combinations of this pattern. Man, plant and animal also passively undergo the irradiations of each other. Irradiations of powers that to us are mostly non-existent. Somehow sometimes they even acquire each other's characteristics. Once, while drifting in a canoe the Campa indian with me disturbed the silence by imitating the voice of the kuto-mono (sp), a copper colored monkey. A kuto-mono from the shore answered him, a third joined in. After a while the whole shoreline seems to come alive with kuto-monos. The natives use this ability to imitate voices to such a degree that hunting takes on the character of treacherous assassination. Though hardly in the way of an equivalent, the animal world puts out a bird that I heard one night on the pa-cha-tey-ah (sp) River. It filled the darkness with an ascending scale of glass clear notes. Quite likely it is a beautiful scale but nevertheless it resembles the hysterical laughter of an insane women. It shocked me. I felt upset, mocked, laughed at.

Everything calls in the jungle. Once a Campa indian in my boat when we were drifting far from the shore was called by *ayahuasca*! He followed the call and later emerged from the forest with the a sampling of the fairly rare liana that today is cultivated by the ayahuasquero in secret spots. I myself certainly did not hear the call. If this jungle life and its irrational mutual dependency forms a picture of general confusion, *ayahuasca* is the magic mirror that reflects this confusion as something beautiful and attractive. For whomever I listened to, all manifested the enjoyment of a wondrous spectacle that was pleasing to the senses. If fearsome visions occurred they said that the ayahuasquero could easily dispell them by shaking a dry twig near the ear of the affected drinker; or by blowing the smoke of a cigarette on the crown of his head. The aesthetic climax of the spectacle was, they claimed, the 'vision of the goddess with concealed eyes,' who dwelt inside the twining tropical vine. Many times I listened to these tales but it never crossed my mind to try the liana myself. It belonged definitely to the local indian lore, to something sordid, outside of the law, something publically frowned upon like the binding up of the heads that the cha-ma (sp) practice on their babies; or like burying one twin alive as they also do; or so many other equally fantastic or ghastly things.

In 1949 I had my headquarters in a white washed brick house in pu-cul-pa overlooking a wide curve of the Ucayali. Pu-cul-pa at that time was a

village of about 200 homes, a Catholic church, an American Protestant mission, a Masonic temple and two primitive hotels. The place had gained some importance by being at the end of the only road precariously connecting Lima and the Pacific with a navigable river of the Amazon system. It also had an airport which could be used when the ground was dry. After the war and the falling of prices for rubber, the importance of the road decreased and Pu-cul-pa fell back into the stagnation of a Peruvian jungle settlement. At that time I realized that my days in the jungle were coming to an end and in spite of being somewhat skeptical about the possible effects of the drug, I decided to try it.

I drank the bitter salty extract of the vine three times. It seemed too much trouble to look for a venerated great ayahuasquero like Juan in-uma (sp) who lived up the river near masi-eh-sia (sp). There were a number of less widely esteemed fellows in pu-cul-pa such as no-lore-bey (sp) who was recommended to me as the most reliable of the witch doctors in the village. His hut was the last upstream in the long row of buildings above the steep shore of pu-cul-pa. It was there that I found myself sitting on an empty gasoline crate while other people squatted on the floor. I drank the required dose, about a quart, and nothing happened. The only noticeable effect was an increased auditory sensitivity which is the reason why the drug is usually consumed in secluded places at night. A neighborhood rooster crowed recklessly which upset me considerably for it seemed to happen *right inside my head*. The people in the hut were disturbed also - they sighed and shifted their positions uneasily. No-lore-bey blamed the ineffectiveness of the drug on the fact that it had not been freshly prepared.

Another evening the guide who carried my blanket led me to a hut far outside the limits of the village. The hut, a typical structure of a floor on stilts without walls covered by a thatched roof, belonged to sal-dani-ah (sp), a mestizo I did not particularly like who had many patients in the village. I lay down on the raised floor of beaten palm bark, overlooking the clearing, and sal-dani-ah handed me a bottle of ayahuasca. I started to drink and heard him singing behind a partition where he was tending his patients. I listened carefully to the startling song that is always sung in ken-cha (sp), the language of the highland indians which only old people in the Ucayali region speak. The song starts with a shrill musical question and continues with a series of answers intermixed with hissing sounds and syncopated with guttural noises produced with the tongue against the palate. I drank the whole dose sal-dani-ah had prepared for me and felt slightly dizzy and nauseated. After a while I climbed down from the raised floor using the ladder, made as usual by hacking footholds into an upright log. The clearing and surrounding jungle looked as though covered with white ashes in the strong moonlight. From the hut behind me I heard sound of voices speaking monotonously. I heard sal-dani-ah intermittently singing the song or administering his cures. One of the procedures used to relieve a pain is actually to suck the pain out of the hurting member.

When this has been often enough the pain is supposed to be located in the doctor's mouth and removed from there by spitting. Again my stimulated hearing reported those awful noises so intensely that at times they were hard to endure. The next day sal-dani-ah attributed this failure to the fact that I has a slight cold. I was more skeptical than ever. After all, if unlike those people, I was not able to hear the call of the plant, or to walk noiselessly through the jungle maybe I lacked also the required acuteness of senses to meet the iridescent goddess.

I am glad that I went a third time. I made another appointment with no-lore-bey for a saturday night. I walked out to his place at the edge of the forest at about 10pm. I realized that his one room house that stood in darkness and silence was crowded and waited outside till he emerged. I told him that I would rather not join the crowd and he obligingly showed me a good-sized canoe pulled up for repairs and resting about twenty feet from the cane wall of his shack towards the edge of the jungle. I wrapped myself in a blanket and lay down comfortably; my shoulders against the cedar walls of the dugout - my head resting on the slanting stern. I felt relaxed and full of expectation. No-lore-bey had appeared eager and confident. A small barefooted indian with something queer and slightly funny about his face he showed a nervousness that did not go with his sturdy build. He seemed to be never quite present as if continuously distracted by frequent encounters with his vegetable gods and devils. His eyes were not steady but pulled in different directions. While something fearful, there was something very happy about this man, as if a hidden gaiety were buried under his worried features. He believed himself smart and powerful. He lived a glorious life, even if sometimes he seemed to go to pieces in his effort to walk back and forth professionally between two equally puzzling worlds. I remembered seeing him once in the como-sari-ah (sp) in conflict with one of them (one of those equally puzzling worlds), accused again of leading a disorderly life and practicing quackery. He was standing in his formerly green trousers before a wooden table and the Peruvian flag answering the rude guardia-seville (sp) with a humble smile - his eyes going apologetically in all directions.

He soon appeared with a gourd full of liquid he had carefully prepared by stewing for hours the leaves of the vine with those of another plant who's name possibly was his secret. He squatted at the canoe and whispered, his eyes going sideways, 'Gringo, today you will experience the real thing. I will serve you well. We will have the true intoxication. You will be satisfied, wait and see..' and he left me alone. After a while a girl approached me from the hut and asked for a cigarette. She lighted it, inhaled, and for a moment I saw her wide face surrounded by hard black hair, then she walked noiselessly back into the hut. A two-eye-oh (sp) bird began to call repeatedly high above my face. The whistling and melodious sound at the end of his call seemed to touch me like a whiplash. A truck loaded with cedar boards left the village and on the distant highway accelerated madly and shifted gears. By that time I knew the drug was

working in me. I felt fine and heard no-lore-bey whispering near my ear again, 'Do you want more? Shall I give you more? Do you want to see the Goddess well?' And again I drank the full gourd of cool bitter liquid.

I cannot say how often no-lore-bey was present whispering and drinking with me, singing the song near my ear and far away, treating his patients and making those awful primitive noises that I despised. There was another sound that upset me more than anything, like something round falling into a deep well, a mysterious, slippery and indecent sound. Much later I found out that it was produced by normally innocuous action of no-lore-bey ladeling water out of an old oil barrel by means of a snall gourd.

I yawned through what seemed to be an interminable night till the muscles of my face were strained. Sometimes I yawned so hard that it seemed to me as loud as the roaring of the sea on a rocky coast. Things got so gay, absorbing and beautiful that I had to laugh foolishly. The laughter came out of my insides of its own accord and shook me absurdly. At the same time I cried, and the tears that were running down my face were annoying, but they kept running madly and no matter how often I wiped my cheeks I could not dry them.

The first visual experience was like fireworks. Then a continuously creating power produced a wealth of simple and elaborate flat patterns and color. There were patterns that consisted of twining repeats and others geometrically organized with rectangles or squares that were like Maya designs or those decorations which the cha-ma paint of their thin ringing pottery. The visions were in constant flux. First intermittently, then successively the flat patterns gave way to deep brown, purple or beige depths like dimly lighted caves in which the walls were too far away to be perceived. At times snake-like stems of plants were growing profusely in the depths, at others these were covered with arrangements of myriads of lights that, like dewdrops of gems, adorned them. Now and then brilliant light illuminated the scene as though by photographic flash showing wide landscapes with trees placed at regular intervals or just empty plains. A big ship with many flags appeared in one of these flashes. A merry-go-round with people dressed in brightly colored garments in another. The song of no-lore-bey in the background seemed to physically touch a brain-center, and each of his hissing, guttural syncopations hurt and started new centers of hallucinations which kept on moving and changing to the rhythm of his chant. At a certain point I felt helplessly that no-lore-bey and his song could do ANYTHING with me. There was one note in his song that came back again and again which made me slide deeper whenever it appeared, deeper and deeper into a place where I might lose consciousness. If, to reassure myself, I opened my eyes, I saw the dark wall of the jungle covered with jewels - as if a net of lights had been thrown over it. Upon closing my eyes again I could renew the procession of slick, well-lighted images. There were two very definite attractions. I enjoyed the unreality of a created world. The images casual, accidental or

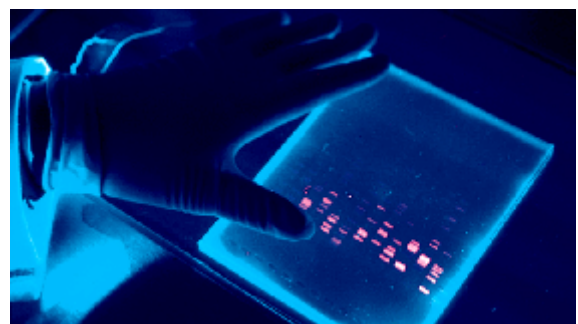


imperfect but fully organized to the last detail of highly complex, consistent, yet forever changing, designs. They were harmonized in color and had a slick sensuous polished finish. The other attraction of which I was very conscious at the time was inexplicable sensation of intimacy with the visions. They were mine and concerned only me. I remembered an indian telling me that whenever he drank ayahuasca he had such beautiful visions that used to put his hands over his eyes for fear someone might steal them. I felt the same way. The color scheme became a harmony of browns and greens. Naked dancers appeared turning slowly in spiral movements. Spots of brassy lights played on their bodies which gave them the texture of polished stone. Their faces were inclined and hidden in deep shadows. Their coming into existence in the center of the vision coincided with the rhythm of no-lore-bey's song and they advanced forward and to the sides, turning slowly. I *longed* to see their faces. At last the whole field of vision was taken up by a single dancer with inclined face covered by a raised arm. As my desire to see the face became *unendurable* it appeared suddenly in full close-up, with closed eyes. I knew that when the extraordinary face opened those eyes I experienced a satisfaction of a kind I had never known. It was the visual solution of a personal riddle.

I got up and walked away without disturbing no-lore-bey. When I arrived home I was still subject to uncontrollable fits of yawning and laughter. I sat down before my house. I remembered that a drop of dew fell from the tin roof and that its impact was so noisy that it made me shudder. I looked at my watch and realized it was not yet midnight. The next day, and for quite some time I felt *unusually* well. Three years later in a letter from pu-cul-pa I heard that no-lore-bey had been accused of bewitching a man into insanity and had been jailed in Iquitos.

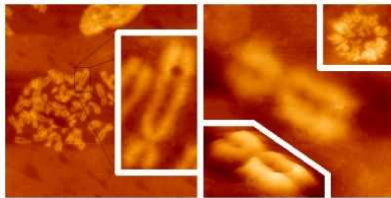
## Shamans and scientists

By [Jeremy Narby](#), anthropologist with Swiss NGO *Nouvelle Planète* and author of [The Cosmic Serpent, DNA and the Origins of Knowledge](#). From [Intrinsic Value and Integrity of Plants in the Context of Genetic Engineering](#) (PDF)



In 1999, three molecular biologists travelled to the Peruvian Amazon to see whether they could obtain bio-molecular information in the visions they had in sessions orchestrated by an indigenous shaman. They had no previous experience of [ayahuasca shamanism](#) or of the Amazon, though they did have an interest in alternative healing traditions and shamanism.

Their age ranged from the late-30s to mid-60s. One worked as a scientist in an American genomics company. Another was a professor at a French University and a member of the National Center for Scientific Research (CNRS). The third taught in a Swiss University and was a director of a research laboratory.



None of the scientists spoke Spanish, and the indigenous ayahuasquero did not speak English or French, so I translated for them. The first thing to report is that the scientists and the shaman had many long conversations. They did not cease to have things to say to one another.

The shaman had been studying plants, as an ayahuasquero, for 37 years. He answered the biologists' questions for days on end. He also conducted night-time ayahuasca sessions, in which the biologists took part. They saw many things in their visions, including [DNA](#) molecules and chromosomes.

The American biologist, who normally worked on deciphering the human genome, said she saw a chromosome from the perspective of a protein flying above a long strand of DNA. She saw DNA sequences known as "CpG islands," which she had been puzzling over at work, and which are found upstream of about sixty percent of all human genes. She saw they were structurally distinct from the surrounding DNA and that this structural difference allowed them to be easily accessed and therefore to serve as "landing pads" for transcription proteins, which dock on to the DNA molecule and make copies of precise genetic sequences. She said the idea that CpG island structure enables them to function as landing pads had not crossed her mind previously, and that genomic research would soon be able to verify this hypothesis.



The French professor had been studying the sperm duct of animals for many years, first in lizards, then in mice. When a sperm cell comes out of the testis and enters the sperm duct, it is incapable of fertilizing an egg. It only becomes fertile once it has travelled through the duct, where about fifty different kinds of proteins work on it. The professor and his team had spent years trying to understand which protein makes the sperm cell fertile. Understanding this could have implications for the development of a male contraceptive. He brought three questions to one of the ayahuasca sessions. First, was there a key protein that makes sperm cells fertile?

Second, why had it not been possible to find the answer to that question after years of research? And, third, was the mouse the appropriate model for studying fertility in men? He received answers from a voice that spoke in his visions. In reply to the first question, the voice said: "No, it is not a key protein. In this organ, there are no key proteins, just many different ones which have to act together for fertility to be achieved." To the second question, it said: "I already answered that with your first question." To the third question, it said: "This question is not important enough for me to answer. The answer can be found without ayahuasca. Try to work in another direction."

The Swiss scientist wanted to consult the shamanic sphere about the ethics of modifying plant genomes. She wanted to know if it was appropriate to add genes to plants to make them resistant to diseases. It so happens that [tobacco](#) is an important plant for both genetic engineers and Amazonian shamans. Shamans from many different indigenous societies say they speak in their visions with the "mother of tobacco," or the essence of the plant. The biologist reported that she spoke during an ayahuasca-influenced meditation with an entity that the shaman subsequently identified as the mother of tobacco. This entity informed her that tobacco's fundamental role was to serve all living beings. It also informed her that manipulating tobacco's genome was not a problem in itself, so long as the plant could play its fundamental role in an adequate environment, and so long as it was in keeping with that environment. The biologist saw, in a vision, a resplendent plant growing in a desert thanks to an extra gene which allowed it to resist drought. She came away from this experience with the understanding that genetic manipulations were best gauged case by case, in a way that takes into consideration the scientist's intention as well as the way in which the modified plants will be used by society.



In interviews conducted in their respective laboratories four months after the Amazonian experience, the three biologists agreed on a number of points. All three said the experience of ayahuasca shamanism changed their way of looking at themselves and at the world, as well as their appreciation of the capacities of the human mind. They all expressed great respect for the shaman's skill and knowledge. They all received information and advice about paths of research they were on. The two women reported contact with "plant teachers," which they experienced as independent entities; they both said that contacting a plant teacher had shifted their way of understanding reality. The man said that all the things he saw and learned in his visions were somehow already in his mind, but that ayahuasca had helped him see into his mind and put them together. He did not think he had experienced contact with an independent

intelligence, but he did think ayahuasca was a powerful tool for exploring the mind.

The scientific information and imagery accessed in ayahuasca visions by the three biologists were certainly related to the information and images already in their minds. They did not have any big revelations.

"[Ayahuasca](#) is not a shortcut to the Nobel prize," the French professor remarked. They all said that ayahuasca shamanism was a harder path to knowledge than science, and as scientists, they found specific difficulties with it. For example, getting knowledge from an ayahuasca experience involves a highly emotional, subjective experience that is not reproducible. One cannot have the same ayahuasca experience twice, nor can somebody else have the same ayahuasca experience as oneself. This makes it almost contrary to the method of science, which consists of designing objective experiments that can be repeated by anyone, anywhere, anytime.

The scientists said that more research was needed; and that this would require preparing questions carefully, and working with qualified shamans in well-defined conditions. And they are all planning to return to the Amazon at some point to continue working on this.

They conducted this preliminary experiment over two weeks. Afterward they visited a school for bilingual, intercultural education, where young women and men from fourteen indigenous societies are learning to teach indigenous knowledge and science, in their mother tongue and in Spanish. They are Aguaruna, Shipibo, Huitoto, Ashaninca and so on. The school's goal is to train indigenous primary school teachers. Each people has elected an old "indigenous specialist" to work at the school as the keeper and teacher of its knowledge, language and lore.

The scientists met with the school's director and with the old indigenous specialists. They spoke positively about their recent experience with an indigenous shaman. But several of the specialists warned them about the abuses that can occur with ayahuasca shamanism. They said that sorcerers worked with ayahuasca and shot darts into people to cause disease. They said ayahuasca was double-edged. "The plant can show you things that will harm you," said one. They emphasized that using ayahuasca required the presence of a well-trained and talented ayahuasquero.

The specialists asked the scientists about science: What was its nature? Where did its center lie? One of the scientists replied that science was fragmented into many disciplines and was practised in many countries. He went on to say that he thought it was very important that young indigenous people learned about science, because it was currently the dominant form of knowledge around the world. In reply, one specialist said he thought this was true, but he also thought that the scientists



might consider sending their children to the Amazon to learn about indigenous knowledge. That way, he said, they too would benefit from a complete education.

Once everybody had spoken, the Aguaruna director of the school thanked us for our visit and said: "Here in the Amazon, our knowledge has been taken many times by others, but we have never received any benefits from it. Now we would like to see some returns." He said that an agreement regarding the compensation of indigenous knowledge should be established before any further research was conducted. This experiment seemed to show that scientists can learn things by working with indigenous Amazonian shamans. Some observers have suggested that shamanism, as classically defined, is reaching its end. But bringing shamans and scientists together seems more like a beginning.



*Beings of the Vegetation* by [Pablo Amaringo](#) from the [Gallery of Usko-Ayar art](#)

# **The Cosmic Serpent**

## **DNA and the Origins of Knowledge**

Q&A with Jeremy Narby by Todd Stewart

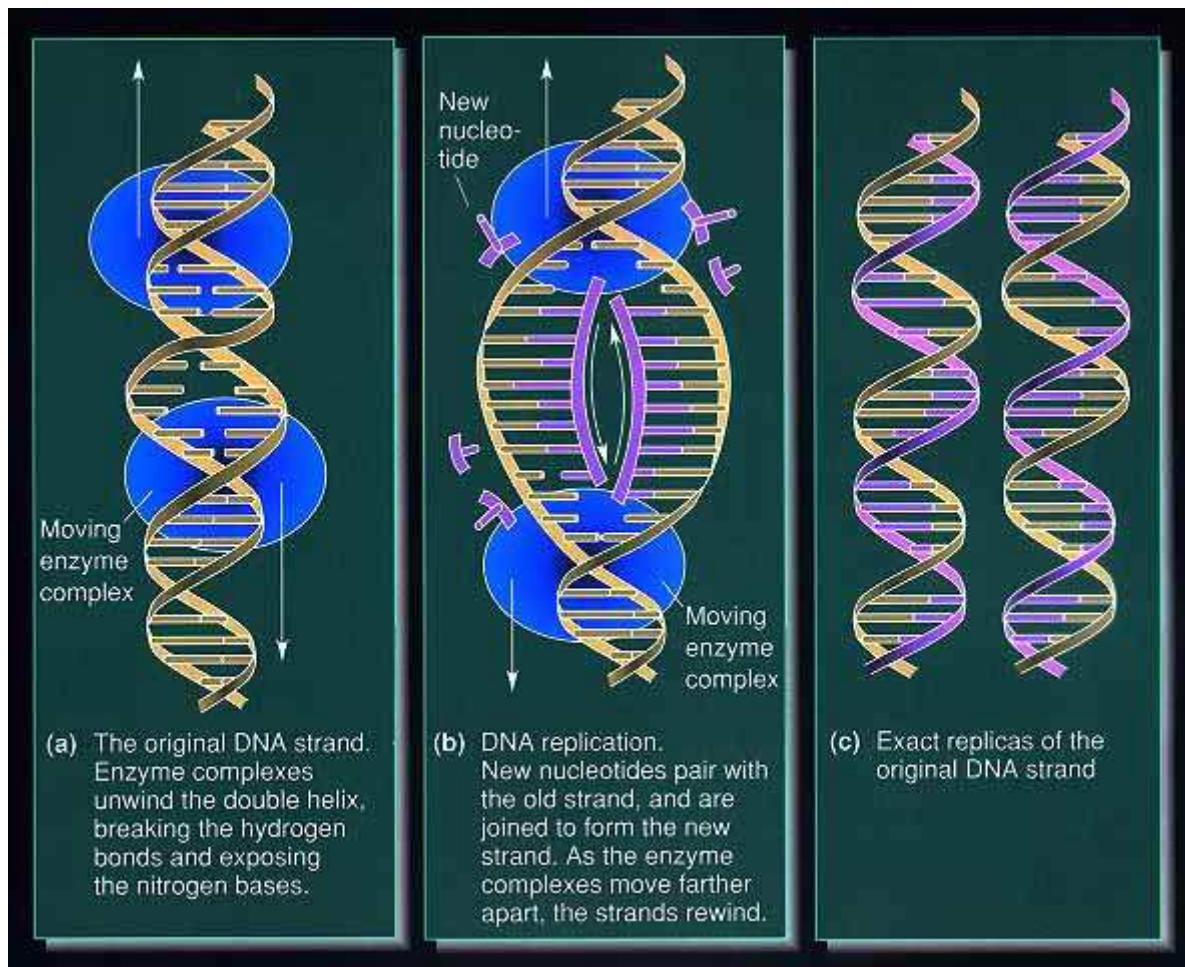
**Could you sum up your book "The Cosmic Serpent, DNA and the Origins of Knowledge"?**

Research indicates that shamans access an intelligence, which they say is nature's, and which gives them information that has stunning correspondences with molecular biology.

**Your hypothesis of a hidden intelligence contained within the DNA of all living things is interesting. What is this intelligence?**

Intelligence comes from the Latin *inter-legere*, to choose between. There seems to be a capacity to make choices operating inside each cell in our body, down to the level of individual proteins and enzymes. [DNA](#) itself is a kind of "text" that functions through a coding system called "genetic code," which is strikingly similar to codes used by human beings. Some enzymes edit the RNA transcript of the DNA text and add new letters to it; any error made during this editing can be fatal to the entire organism; so these enzymes are consistently making the right choices; if they don't, something often goes wrong leading to cancer and other diseases. Cells send one another signals, in the form of proteins and molecules. These signals mean: divide, or don't divide, move, or don't move, kill yourself, or stay alive. Any one cell is listening to hundreds of signals at the same time, and has to integrate them and decide what to do. How this intelligence operates is the question.





**DNA has essentially maintained its structure for 3.5 billion years. What role does DNA play in our evolution?**

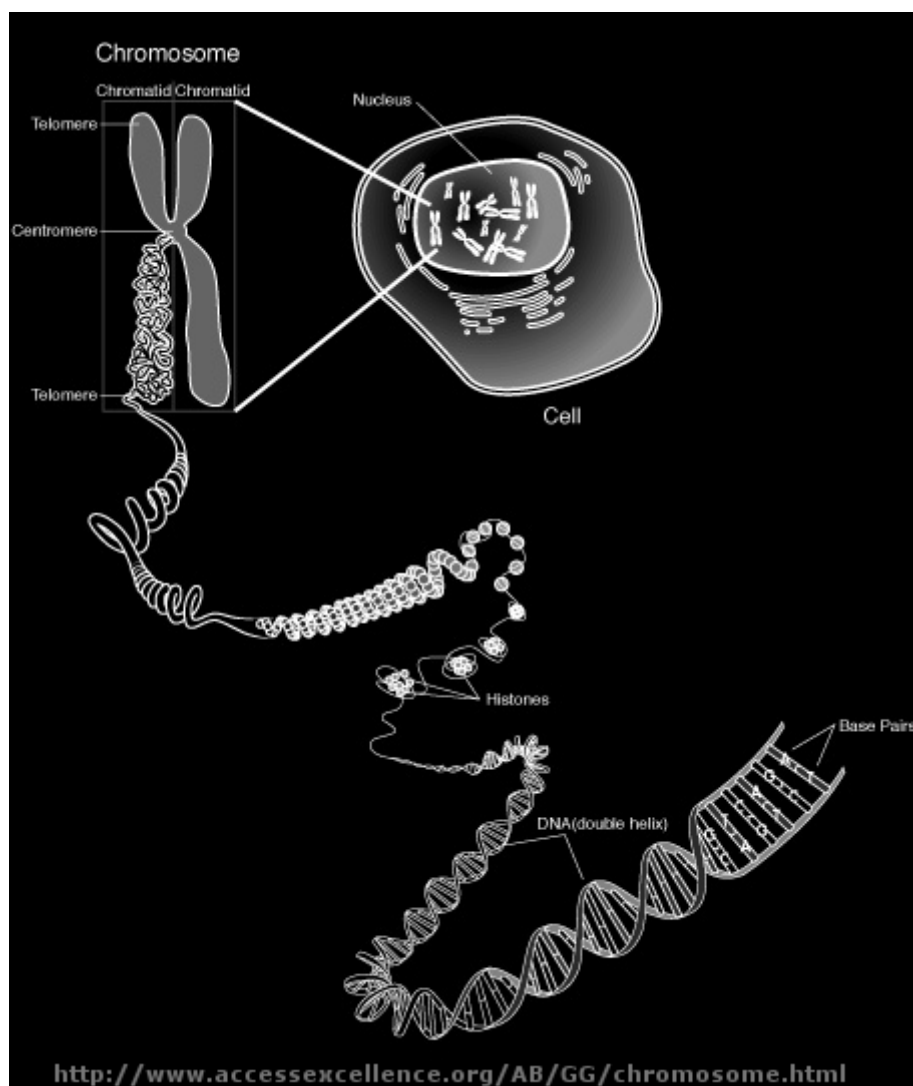
DNA is a single molecule with a double helix structure; it is two complementary versions of the same "text" wrapped around each other; this allows it to unwind and make copies of itself: twins! This twinning mechanism is at the heart of life since it began. Without it, one cell could not become two, and life would not exist. And, from one generation to the next, the DNA text can also be modified, so it allows both constancy and transformation. This means that beings can be the same and not the same. One of the mysteries is what drives the changes in the DNA text in evolution. DNA has apparently been around for billions of years in its current form in virtually all forms of life. The old theory—random accumulation of errors combined with natural selection—does not fully explain the data currently generated by genome sequencing. The question is wide open.

**The structure of DNA as we know it is made up of letters and thus has a specific text and language. You could say our bodies are made up of language, yet we assume that speech arises from the mind. How do we access this hidden language?**

By studying it. There are several roads to knowledge, including [science](#) and [shamanism](#).

**The symbol of the Cosmic Serpent, the snake, is a central theme in your story, and in your research you discover that the snake forms a major part of the symbology across most of the world's traditions and religions. Why is there such a consistent system of natural symbols in the world? Is the world inherently symbolic?**

This is the observation that led me to investigate the cosmic serpent. I found the symbol in shamanism all over the world. Why? That's a good question. My hypothesis is that it is connected to the double helix of DNA inside virtually all living beings. And DNA itself is a symbolic [Saussurian](#) code. So, yes, in at least one important way, the living world is inherently symbolic. We are made of living language.

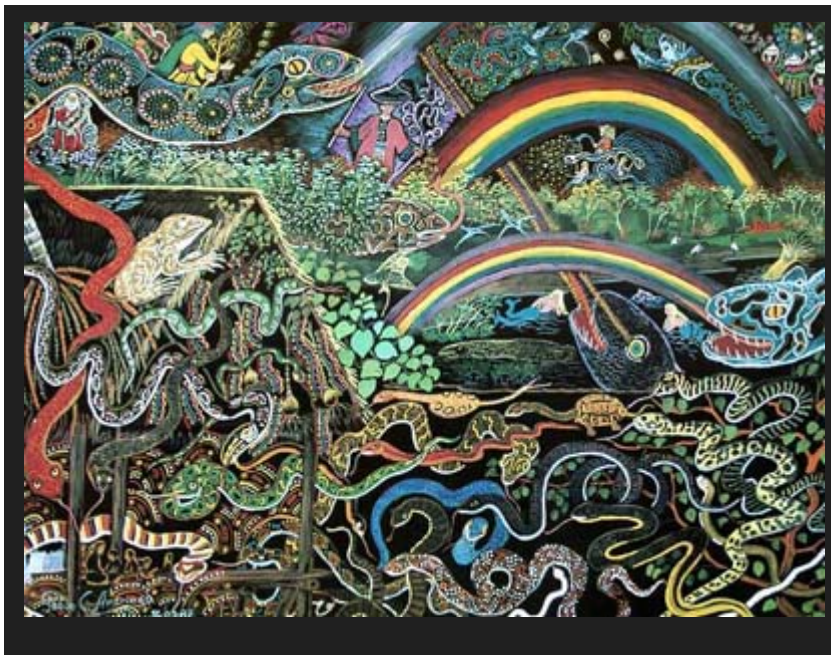


**You write of how the ideology of "rational" science, deterministic thought, is and has been quite limiting in its approach to new and alternative scientific theories; it is assumed that "mystery is the**



**enemy." In your book you describe how you had to suspend your judgement, to "defocalize," and in this way gain a deeper insight. Why do you think we are often limited in our rational, linear thought and why are so few willing and able to cross these boundaries?**

I don't believe we are. People spend hours each day thinking non-rationally. Our emotional brain treats all the information we receive before our neo-cortex does. Scientists are forever making discoveries as they daydream, take a bath, go for a run, lay in bed, and so on.



### **Vision of the Snakes**

By [Pablo Amaringo](#)  
[Gallery of Usko-Ayar Art](#)

**What are the correspondences between the Peruvian shamans' findings and microbiology?**

Both shamans and molecular biologists agree that there is a hidden unity under the surface of life's diversity; both associate this unity with the double helix shape (or two entwined serpents, a twisted ladder, a spiral staircase, two vines wrapped around each other); both consider that one must deal with this level of reality in

order to heal. One can fill a book with correspondences between shamanism and molecular biology.

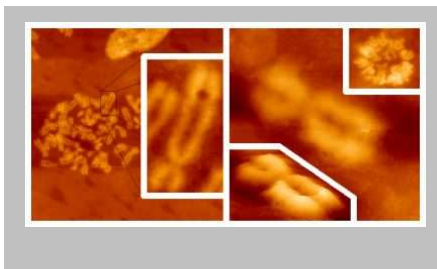
**Do you think there is not only an intelligence based in our DNA but a consciousness as well?**

I think we should attend to the words we use. "Consciousness" carries different baggage than "intelligence." Many would define human consciousness as different from, say, animal consciousness, because humans are conscious of being conscious. But how do we know that dolphins don't think about being dolphins? I do not know whether there is a "consciousness" inside our cells; for now, the question seems out of reach; we have a hard enough time understanding our own

consciousness—though we use it most of the time. I propose the concept of "intelligence" to describe what proteins and cells do, simply because it makes the data more comprehensible. This concept will require at least a decade or two for biologists to consider and test. Then, we might be able to move along and consider the idea of a "cellular consciousness."

**The implications of some of your findings in *The Cosmic Serpent* could be quite large. How do you feel about the book and what it says? Why did you write the book?**

I wrote the book because I felt that certain things needed saying. Writing a book is like sending out a message in a bottle: sometimes one gets replies. Judging from the responses, a surprising number of people have got the message loud and clear.



**How can shamanism complement modern science?**

Most definitions of "science" revolve around the testing of hypotheses. Claude Levi-Strauss showed in his book *The Savage Mind* that human beings have been carefully observing nature and endlessly testing hypotheses for at least ten thousand years. This is how animals

and plants were domesticated. Civilization rests on millennia of Neolithic science. I think the science of shamans can complement modern science by helping make sense of the data it generates. Shamanism is like a reverse camera relative to modern science.

**The shamans were very spiritual people. Has any of this affected you? What is spiritual in your life?**

I don't use the word "spiritual" to think about my life. I spend my time promoting land titling projects and bilingual education for indigenous people, and thinking about how to move knowledge forward and how to open up understanding between people; I also spend time with my children, and with children in my community (as a soccer coach); and I look after the plants in my garden, without using pesticides and so on. But I do this because I think it needs doing, and because it's all I can do, but not because it's "spiritual." The message I got from shamans was: do what you can for those around you (including plants and animals), but don't make a big deal of it.

**Taking Ayahuasca**

by Peter Gorman

**Reprinted from Freakbeat Magazine #8, April 1993**  
**HTML Version Produced by [Gnostic Garden](#)**

In July, 1984, I made the first of several trips to Peru, this one with two friends from New York, Chuck Dudell and Larry Lavallo. We spent some weeks hiking in the Andes and had eventually made our way to the jungles of Amazonia where we'd spent several weeks on the Ucayali River searching for a guide to take us off the river and into the jungle on foot. We'd been unsuccessful and had returned to Iquitos, ready to leave the area, when we ran into Moises Vienna, a small tough jungle guide.

He turned out to be a remarkable character. The former head of the Peruvian Jungle Forces Training School, he'd served as an instructor for the US Special Jungle Forces, had mapped out much of the modern border of Peru and assisted in guiding several notable Amazon expeditions, including Cousteau's.

He offered to take us into the jungle and suggested we try the hallucinogen ayahuasca. "It's the fastest way to get to know the jungle", he told us. Though all of us had experience with hallucinogens none of us were familiar with ayahuasca. Moises, who claimed no knowledge of drugs outside the jungle, doubted it would be like anything else we'd taken. "The properties of ayahuasca change from area to area in Amazonia", he said, "but many of the primary effects are the same. You might have heard about it as Yagč. It will make the jungle your friend. Your night vision will be improved and that will make your trip easier. And if the drug is friendly to you, you will be permitted to visit any part of the world you wish to see."

The first brujo Moises brought us to refused to make the ayahuasca for us. She was a beautiful Shipido woman, strong and old, but she told Moises that we were dilettantes who had no business using the drug at all, much less using her as our ayahuasca seer. No amount of pleading on Moises part would change her mind. She said there were many more worthy candidates for the drug than us.

We travelled by dugout on a small river for two hours, made camp, then walked through the jungle to a second brujo's, sorcerer's house an unwallled platform with a small medicine but built near a clear stream. Alphonses, the brujo, wasn't at home. His two wives were though, along with several of his children. Alphonse's main wife, a surprisingly fat woman for someone living on a jungle diet of game and wild fruits, told Moises that it was too late in the day for preparing the drink. It was nearly noon and Alphonse was gathering manioke and roots and might not return for several hours. Why didn't we return in the morning when Alphonse could start the preparation properly at sun-up? Moises cajoled the woman, joked with her and finally demanded the drink be made. She begrudgingly agreed to pass the message along when her husband returned. In return for his demands he left some presents with her; a bottle of agua diente, a local liquor, black tobacco cigarettes and some shotgun shells.

After hiking for some time through the dense brush while Moises began our introduction to the jungle interior, we found ourselves back at Alphonse's camp, find this time the brujo was home. A strong, thick bull of a man, Alphonse pat by a great cast-iron pot, tending the fire burning beneath it. He wore raggedy clothing and an old painter's cap. His feet were bare, covered with small scars and thick calluses. He had a radiant smile which split his face in half and showed the only full set of teeth in Peru. The ayahuasca was being made, he said, but he was afraid it wouldn't be at full potency owing to the late hour at which it was started. Still, he laughed, it would be more than strong enough for gringos. He told us to return to his camp at eight that night.

Chuck, Larry and I looked at each other. Our camp was miles from this place. How were we going to walk through the dense jungle at night when we found it nearly impassable during the day?

Moises must have read our thoughts: We can make a road of jungle larches from ire sap If you're afraid of the dark". he laughed.

Thai night we set off for Alphonse's. There was no moon and we had no lights except our flashlights. Since none of us was willing to have Moises make his, jungle torches we travelled in near utter darkness. We walked carefully, crossing several single-log bridges flung over deep gorges. We managed to avoid boggy areas and didn't stick ourselves on the several types of spiny trees common in that area.

We arrived at Alphonse's home in less than two hours. He greeted us casually but spoke exclusively to Mosses. He said the ayahuasca was prepared as best as could be under the circumstances: we walked from his medicine hut to his platform house and climbed a ladder to the split bamboo floor. Both of his wives and their children were already asleep, under mosquito netting which covered their hammocks.

The night bugs were awful and our repellents were worthless. Alphonse laughed and promised that the ayahuasca would eliminate the bothersome insects. Mosses reiterated what he's said earlier in the day, that we would be able to see whatever we wanted if the drug was friendly to us, and added that we shouldn't be afraid if we got ill at some point during the ceremony. Alphonse suggested an hour of silence and we sat quietly, listening to the occasional rustle of night animals in the brush and cries of ocelots deeper in the jungle.

When the hour was up Alphonse retreated to a corner of the house and returned with a small pot of dark liquid. He also brought a serving gourd, the ague diente we'd given his wife, a bottle of camphor and another of gasoline, the black tobacco cigarettes and a fan made of leaves which had a percussive quality when shaken. He placed the objects in a cleared area of the platform and began chanting; we formed a circle around the things while Mosses extinguished the candles which had lit the platform.

Mosses didn't join the circle, "Someone has to watch out for you guys", he joked. It was unsettling to realise that we were on our own but he reassured us that this was how it was always done.

Alphonse lit a candle and from it a black tobacco cigarette. He continued to chant, intermittently blowing cigarette smoke into the little pot. He filled the gourd with a thick yellow-brown liquid and passed the gourd to Chuck. Chuck drank; he made a face as he did, as though he had just bitten into sour fruit, then passed the gourd back to Alphonse. I suddenly found myself anxious. What did I know of these people anyway? What if they meant us harm? It wouldn't be difficult to make a few gringos disappear in the Amazon; it probably happened all the time. Or, short of that, how were we to handle it if the hallucinogen produced a negative effect?

Of course, when it was my turn I ignored my fears and drank: I raised the gourd to my lips, to a good experience and put it to my lips. The ayahuasca was not a good tasting drink: sour, like burned grapefruit juice infused with dark, dank smoke. I almost choked.

Alphonse drank when the three of us had finished, then passed the bottle of ague diente, then gasoline. In the jungle gasoline is thought of as a powerful potion and often sipped during ceremonies. Afterwards, the cigarettes were passed. I was wondering what would happen next when suddenly, without warning, Alphonse leaned over the edge of the platform and began to vomit: I had never heard a sound like the sound he made. Instead of dry heaving, his vomiting sounded like a rushing river washing through the jungle. Louder and louder until it had the clarity of a mad spring. It drowned out all other jungle sounds, moving, powerful and thrilling; long after he could conceivably have anything left in his stomach his sounds echoed off the jungle walls.

And then suddenly I realised that I too was beginning to heave. I lunged for the side of the platform: my own sickness was much more ordinary, as though I'd eaten bad food. When I finished however, Alphonse was still not through. His rushing river was calming, the boiling in his

stomach settling. I looked to Moises to confirm what I had been hearing. "He's a man of great power. He doesn't do anything in a small way", he laughed. Chuck and Larry were as wide-eyed as I.

Through with being sick. Alphonse began chain-smoking the awful cigarettes and had us do the same. We were instructed to make ourselves comfortable and took positions near one another on the platform. Only Moises stayed alert, assuring us he would maintain watch over our external world; "Just relax and don't try to see or do anything. Enjoy the night."

Alphonse began shaking his maroella fan, setting up a rhythm he followed with an eerie chant full of obscure Spanish and Latin phrases, Indian dialect and local words. It was somehow a clear and beautiful song, repetitious, thrilling, powerful.

The night grew peaceful. The mosquitos stopped bothering me. And then, suddenly, an image appeared before me, within me: a bird flying over snow-capped mountains, a huge brown bird with dense wings tipped in white. I was looking at the bird from a great distance one moment: the next I felt as though I was merging with it. I began to see from the bird's perspective: my sharp eyes picked out the most minute details from the landscape. I flew over a range of mountains, searching for something - I had no idea what. I only knew that we were travelling with such speed, such airlessness that in moments we had travelled halfway around the world. Oceans passed beneath us, islands were inspected and passed and great stretches of land appeared and disappeared behind us in what seemed an instant.

I found us slowing, peering into a stream: I could see blue and green scaled fish in the shallow water moving slowly from our perspective. We were thousands of feet above a mountain stream and I could look into the stream and pick out fish scales: the colours were unimaginably rich! And then, suddenly we, the bird and I, seemed to tip off the face of the earth. Down we raced! Nearly visionless we plummeted toward the stream! I don't remember any feelings of fear: I knew we were hungry and wanted a fish; we split the water with the tiniest of splashes and in an instant were headed skyward again, the fish in our beak split in half, unchewed, the pieces sliding into my stomach whole.

I thought it an unusual way to eat: the moment I did, the minute I thought of myself apart from the bird I was back in Alphonse's house, sitting on a platform with my friends. How sad I was! that my flight was over. I tried to bring the image back, tried to fight my loss, but nothing except blackness filled my mind. No images, nothing. I wanted desperately to see with my new perspective!

Only when I let my desire go did the image return: suddenly I would be flying again, with the bird or some moments just below it, admiring the arrangement of feathers and realizing that each feather moved independently of the others; each hair on each feather seemed to be controlled by an act of will, by separate muscle. I'd never thought of a bird as so complex before; and then, of course, the moment I thought that way I was back at Alphonse's home with that incredible longing in my stomach.

Twice during the night I was able to direct the flight of the beautiful bird: the first was to see my wife, who was at that time in California. Instantly on thinking of her I was in her room, hovering on her ceiling. I watched her making love with someone new and nausea flooded me - there was a saving grace in the jealous rage - my ego brought me back to the jungle cap, away from the unexpected sight.

The second image was of our apartment in New York and of our friends who were staying there: there was a comforting quality in the scene, two friends sitting in my living room, reading. I noted the clothing they wore and a new arrangement of furniture in my notebook; I wondered whether I would be able to verify the vision at another time; it was so improbable, of course, that what I was

seeing was really a vision and not a hallucination, but later, from Iquitos, the verification over the phone was frighteningly accurate.

At one point, when I thought the vision of my bird was returning something happened, and instead of soaring, I found myself instead reduced in size and moving about a birch tree. The start of the image was like looking through a camera lens or a pair of binoculars: I saw the birch at the end of a darkened cone, opening up onto it, and then, I travelled through the tunnel. The vision zoomed in on one of the birch's burls and saw thousands of ants moving around. But I didn't just see ants. I saw ants in such detail that I could study the way they worked, how their bodies moved one section at a time could see them holographically red and black ants moving on the same burl, working side by side on two different tasks. I was so close to them that I could count the hairs on their legs I was unimaginably small; so tiny that the rings on the burl seemed like vast plains before me.

There were other images too, but they were less clear. Some of them appeared and disappeared with such speed that I simply hadn't time to focus on them.

And then suddenly I heard talking; the others were saying they weren't having much effect from the drink and all they were feeling was ill. I protested but was overruled and in a few minutes we prepared to leave.

I threw up once more, this time effortlessly, after I'd stepped from the platform. We thanked Alphonse and left his clearing and started back to our camp. The others grumbled that it had been an effectless night; I laughed quietly. Moises laughed too, and pointed out that none of us were using our flashlights, even over the dangerous log crossings above the river beds; it was true for all of us that night vision was fantastic.

Later that night while I slept I flew with my bird, all over the world, seeing cities and mountains; pulling fish from the sea and resting on small ocean rocks; crossing vast dunes and peering into thunder clouds. For my friends it had not been a vision drug; I felt differently.

In the morning Moises had us take a cold river wash, saying it was necessary after ayahuasca. I did as told and immersed myself in the freezing water and wholeness washed over me.

The following year, in early August, I returned alone to Peru for a longer stay in the jungle. This time Moises didn't offer me a chance as ayahuasca; he simply told me we would do it. We were going deep into the green and would need night vision and would need the things in the jungle to be friendly to me in the jungle everyone treats things as though they have an animas or spirit. Nothing is dead in the jungle; better, nothing is lifeless, though things are dying all the time. But all things are treated as though conscious, as though capable of hurting man, the most vulnerable of prey in the environment. Unless man has a subtle connection with those things, and ayahuasca is one of these connectors.

Moises, two assistants and myself took a motor launch onto the huge Ucayali two days south of Iquitos. At the river town of Herrera we veered off onto a seasonal stream, the Auchyako, and past a small jungle settlement there. Moises told me we would stay in the settlement for a few days to practice canoeing and other things and to take ayahuasca. "There is a good doctor here. Very powerful. He's even got an apprentice."

We stayed on the doctor's land in a small hut and Moises made arrangements for going ayahuasca the following night.

On the day of the drink I was instructed not to eat past noon. I passed the day on the river always within earshot of the doctor and his apprentice as they cut wood for the fire to cook the ayahuasca vines. Above the trees wisps of smoke rose. Each time I saw it my anticipation rose: even without allies I knew this would be special.

When it was time to move to the doctors home I nearly flew through the jungle. The ceremony was taking place at his primary home and there was a well beaten path to follow from our hut. The doctor was Julio Jerena, a practitioner from Pulcallpa, and his apprentice was Salis Navarro, a strong bright young man with black eyes and a well-muscled physique, Julio was lithe and strong, probably nearing seventy. With him lived three wives, one of them old, one middle aged and the third probably no more than fifteen. Some of the children from each lived with him, so there were women of all ages moving around the platform hut, though they disappeared before we began. I'm told that women sometimes take ayahuasca, but haven't seen it myself.

There were seven of us for the ceremony: the two doctors, myself and Julio's patient. The patient told us the story of his wound: he'd been bitten by a lorro machaco, a very poisonous snake, and originally treated in Iquitos in a hospital there. The infection had gotten very bad and the hospital suggested amputation of the infected leg, the man had refused and made his way instead to Dr. Jerena's home, where he had been living for some weeks. His leg, in my flashlight, was a mass of purple and blue scar, but he seemed able to walk about comfortably enough and thought he would be completely healed in a few weeks.

An old man joined us from the jungle night. He claimed to be a patient of the doctors as well. He told how the doctor had performed an operation on his stomach recently: the doctor had cut him open with a knife, removed his stomach, washed it in the river, replaced it and sewn up the wound. I said that I saw no scar and asked how long ago the operation had taken place. He answered that it had been two days ago. He said the doctor's scars always healed quickly.

Everyone laughed when I looked at him skeptically: they said my believing or not believing didn't change the facts.

The night had grown pitch. A sliver of moon hung askew in the Southern hemisphere, smiled down at us over the canopy of trees to our left. I was told to just make myself comfortable on the platform while Salis and Julio began to collect their things.

A green sheet of plastic was placed on the split bamboo floor. The maroella leaf fan was brought from the hut; Moises provided a bottle of agua diente and black tobacco cigarettes. A book of Latin incantations - a coveted item from the way it was handled - was produced by Salis and a candle and a small brown bottle filled with ayahuasca by Dr. Jerena.

Salis was the primary performer of the ceremony. He permitted photographs prior to the drinking and allowed me to tape the ceremony as it progressed.

The chanting was begun: the four of our drinking made a small circle on the plastic sheet while the others formed a larger circle around us, in the shadows. We drank, passed the cigarettes, sipped the agua diente and a little gasoline and waited. Vomiting came easily though I was disappointed that neither doctor regurgitated with the style and quality which Alphonse had.

Latin words mixed with mountain Quechua, obsolete Spanish and modern Castilano. Some of the chant, in fact the only part I've been able to translate went like this:

Dominating, the occult science;  
Dominating, the occult spirits;  
Calling the occult spirits.  
Calling what moves under the current  
Calling the spirits in these moments,  
White magic,  
Green magic,  
Red magic,  
Black magic,  
Vampires of the demons,



Cover us with your shadows,  
In these moments I want to be granted my desires,  
Gualpamine na na na  
Cuidamine na na na  
Cuidamonge na na na  
Fly, fly little body that was born free;  
Fly, little body that was born free,  
The stomach, green green medicine  
Suenavenge, comeran, they will eat,  
Fuerte, fuerte, strong, strong little body,  
Calling what moves under the current  
Calling the spirits in these moments.

There were no visions this time, no birds to fly with. There was instead a great pulling apart of my spirit, as though the chanting of my doctors, different but not incompatible, was a wedge being used to split me in half. Part of me made sense of the splitting in a way I cannot describe; another part of me was terrified that should I be allowed to split to render me in halves I would not be able to seal myself back up. Forces pulled at me and jokes were later made that I was occasionally delirious, though I can't find any evidence of that on my tapes. I did walk to the river, fifty yards, at one point, and listened to the music of the night, unmolested by mosquitoes and unaided by flashlight. The water of the river had a rhythm similar to the chanting but I dared not to go in - though I wanted to - too many caymen with golden eyes stared at me from across the bank.

The morning after the ayahuasca Moises sent me out to bathe, to make myself whole again. Afterward we spoke about the experience: he explained that I wasn't to be disappointed that the experience was different this second time: when I needed the sight of the bird I would have it. When I needed to become intimate with the jungle the ayahuasca would guide me that way. What I needed I received, that he was sure of.

Funny, but for the next few weeks I didn't need my flashlight except to read; I could sense the dangers of the jungle at night without seeing them. I could spot animals in the brush as though I had lived in the jungle all my life. And at night sometimes, when I needed to discover something, I could fly with my bird.

I've used ayahuasca since, for a number of reasons; I've had different effects each time, some seemingly more potent trips than others; I suspect Moises is right when he said it gives you what you need.

*by Peter Gorman.*

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# AYAHUASCA: THE MEDICINE OF LOVE



photo courtesy: [www.shamanism.co.uk](http://www.shamanism.co.uk)

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## AYAHUASCA: MEDICINE OF LOVE

By Ross Heaven

(Written for *Discovering Herbs* magazine, June 2002)

Shamanic healing often employs plants to good effect, though it is rarely about herbalism, per se. Indeed, most shamans are explicit that the pharmacological properties of the plants they employ are of far less importance than the spirit which is held by the plant. It is the spirit which heals, while the plant itself is secondary, acting only as the home of the plant-spirit.

The point is illustrated by Amazonian shaman, Javier Arevalo, who serves his small community of 50 families in Nuevo Progreso, on the Rio Napo river of Peru, working with the visionary vine of the jungles, ayahuasca.



**Amazonian shaman, Javier, prepares ayahuasca at a recent UK camp led by Eagle's Wing (Photograph courtesy [www.Shamanism.co.uk](http://www.Shamanism.co.uk))**

Ayahuasca is a powerful purgative and curative mixture which is used by the shamans of the Amazon to commune with the spirits, who then oversee the

healing of the person who drinks the ayahuasca brew.

The mixture itself, blended in careful measure, contains ayahuasca vine (*Banisteriopsis Caapi*) and leaves of the chacruna plant (*Psychotria Viridis*), often with datura and pure jungle tobacco, which cause the purging qualities that ayahuasca is famous for. The vine contains harmala and harmaline and other alkaloids, while the leaf contains the alkaloids which induce visions. The final mixture is also known as ayahuasca, from the Quechua words, *aya* meaning spirit or dead, and *huasca* meaning rope or vine. Hence, the brew is often referred to as the 'vine of souls' or the 'rope of the dead'.

It is prepared by cutting the vines into short lengths which are then scraped and cleaned and pounded to a brown pulp. The vines, along with chacruna leaves and other ingredients are then placed in a cauldron, water is added, and the entire mixture is boiled for 10-12 hours, overseen at all stages by the shaman, who will continuously blow sacred tobacco smoke into and over the brew. When ready, the mix becomes a muddy, pungent liquid with a foul, acrid taste.



(Photograph courtesy [www.Shamanism.co.uk](http://www.Shamanism.co.uk))

Once ingested, the mixture produces initial feelings of warmth which spread up from the stomach, creating a sense of well-being and a sensation of skin elasticity, almost as if the skin has become rubber-like and pliable and no longer separate from the air around it. After this first phase, which may last 30-60 minutes, the visionary effects begin, which are often dramatic.

Harvard ethnobotanist, Wade Davis, in his book, *One River* 1, described the sensation as akin to being "shot out of a gun barrel lined with Baroque paintings, and landing in a sea of electricity". Visions of snakes and vines in bright primary colours are very common but, for the trained shamanic eye, information on the illnesses and diseases which inhabit his client's bodies are also expected. It is these visions which enable him, and the spirit of ayahuasca, to heal his clients.

During the visionary phase, purging may also take place through vomiting or diarrhoea. This is often emotionally uncomfortable for Westerners who are brought up to control their bodily functions and not to 'let go' of themselves, but it is welcomed by the people of the Amazon since it is this purge which removes the 'poison' that can lead to illness, and clears the system both physically and spiritually. Of course, the shaman must never purge since he is a master of (or partner to) the vine and must control the healing ceremony. Javier is a Maestro (a master) of ayahuasca (also known as *anayahuascero*) and has spent 14 years understanding the ways and the spirit of this and other plants, which he refers to as the "jungle doctors".

The training of an *ayahuascero* is arduous, involving abstention from certain

foodstuffs, from alcohol and from sex, since the spirit of ayahuasca, while angelic and protective, can also express very human emotions, such as jealousy and anger, and can turn vengeful, with unpleasant consequences for those who approach it in an impure manner. Training as an ayahuascero also involves long periods of time spent in jungle isolation, "dieting" the plants, which means regular (often nightly) ingestion of ayahuasca, along with many others which are considered healers.

He must also follow a special diet which denies him sugar, salt, alcohol, pork and other foods. In fact, the diet consists largely of rice, fish and rice water - and even that might be considered lavish since all of the food must be found locally or carried into the jungle, where the shaman must remain for months at a time. The harshness of this training regime is exemplified by one Amazonian shaman whose mentor once gave him tobacco to diet, in a mix so strong that it bordered on toxic. After consuming the fermented tobacco drink, the shaman retired to a jungle cabin where he lay in a coma-like state for three days.

"When you take this drink, you'll either live or you'll die", his mentor told him. "If you live, you will know tobacco" 2. "Every plant has a spirit", says Javier. "The shaman goes into the forest as part of his apprenticeship and spends years taking plants and roots. He takes ayahuasca too and the spirit tells him what it cures. Then the shaman tries another plant, each time remembering which ailment is cured by that.

"As the spirits, or plant doctors, who teach us are pure, they are made happy when we are pure too. So a shaman must diet in order to attract them. That means they should not eat salt, sugar or alcohol, and they should abstain from sex.

"You learn all this in the wilderness. The spirits there are the angels of each plant, to which you add your own will to heal the client. This is the will of Christ" 3.

Javier's own training has taken place under the tutelage of his grandfather, a *Banco* (master shaman), who, under the protection of ayahuasca, is able to spend up to eight hours beneath the waters of the Amazon rivers, communicating "with the biggest fish of the river", according to Javier. Once, he also saw a mermaid there, who is now a guardian and tutor to the old shaman. Soon Javier will begin his own "river training" on his own path to becoming a *Banco*.

The use of ayahuasca is completely egalitarian, according to Javier; its healing spirit being available to anyone who partakes of the drink, though it is often the shaman who carries out the healing, per se, once the spirit of ayahuasca has revealed the nature of the illness to him.

I watched Javier work on the healing of a young woman in the Amazon jungle a few years ago. Ginny was a woman of 35 who had suffered a brain tumour for many years and had been given only a few months to live by her Western doctor. Confined to a wheelchair, the chemo- and other therapies she had received had left her legs swollen, her skin in poor condition, and much of her hair had been lost. Javier had intended to remain with us only to officiate over one ayahuasca ceremony, but as he drank the mixture, his own visions revealed to him that he could heal Ginny, and so he stayed with our group for four more days.

During this time he worked exhaustively with Ginny, going into the jungle to gather fresh herbs which he used in lotions and tonics for her legs and hair. After

four days of this, the swelling in her legs had completely gone and her hair was visibly growing back. Even more remarkable, Ginny was able to walk with the aid of a cane and, two years later, is still enjoying life, despite the prognosis of her doctors. Javier had achieved this primarily by communing with, and finally extracting, the spirit of Ginny's illness, through a combination of journeying to the spirit by consuming ayahuasca and, finally, sucking the spirit-poison from her body.

Laboratory tests reveal no significant healing properties for ayahuasca, only hallucinogenic qualities, so it is surprising to Western scientists and clinicians that such results are possible. For Javier, the explanation is simple: the spirit of the plant is a healer and it has, he says, had similar remarkable results in curing Western visitors with ailments including cancers and HIV, as well as alcoholism, drug addictions and other more emotional problems.

"I had a patient who was HIV positive and had been in hospital a fortnight", said Javier. "That night we drank [ayahuasca, and] I saw in my vision that HIV was like the devil destroying him and that he was getting worse.

"He stuck to the [ayahuasca] diet for two months [and] he also took bitter tasting herbs which cure internal wounds. After three times [three ayahuasca sessions] he was better and, when tested, proved HIV negative" 3.

The Pulitzer Prize-nominated author, John Perkins, who has written extensively about ayahuasca usage among the Shuar Indians of Ecuador, has confirmed other 'miraculous' healings. "During the ten years we have been taking people to meet the shamans, there have been a number of remarkable stories", he says 4 - among them, cures for deafness, depression, weight loss, as well as endless accounts of life changes and new visions for a different personal and social future.

Against this backdrop of radical and positive change, it is depressing for Javier to reflect that the rainforest, home to so many healing plants - millions of them still unknown to Western medicine - is being destroyed so quickly by the 'developed' nations, with so little consideration of the consequences of this action. Every three seconds in the Amazon rainforest, one entire species is wiped out forever as a result of this development in order that Westerners might eat more burgers and drive more cars - the very things (pollution and fast food) which are, in many cases, causing disease in the first place, according to Javier.

People create such 'madness' as a result of confusion and to be noticed, he says. Ultimately, they are searching for love and belonging but, in the West, they believe that this comes through status, rather than the more direct route of loving intent. Javier's point was underlined a few years ago, when he worked with a group of Westerners of which I was a member. Immediately prior to the ayahuasca ceremonies, Javier asked the group what they really wanted from their lives. Most answered with spiritual or 'cosmic' answers and spoke of world peace and saving the planet, etc. Javier looked bemused and confused.

He asked again and this time, after a little more thought and a good deal more honesty, people said what they really wanted was love. This Javier could understand. The requests were real and immediate - but it was as if people had not felt entitled to ask for these personal things. Yet, paradoxically, these honest desires are where true healing begins, said Javier, since, if more people in the West were able to experience love, there would be no need for the madness of developed society, the search for more status and material gain and the destruction this leads to - and, consequently, no need to save the planet, which

would never be in danger.

"Love solves problems", say Javier, simply. "Ayahuasca cures through love".



**Ross Heaven after the ceremonies. Never underestimate the healing power of a cup of tea! (Photograph courtesy [www.Shamanism.co.uk](http://www.Shamanism.co.uk))**

#### REFERENCES

1. Davis, W. *One River: Science, Adventure and Hallucinogenics in the Amazon Basin*. Touchstone Books, 1998
2. Heaven, R. *Spirit in the City: The Search for the Sacred in Everyday Life*. Bantam Books, 2002
3. Charing G and Cloudsley P, *Love Magic and the Vine of the Soul*, *Sacred Hoop* magazine, Issue 36, Spring 2002
4. Heaven, R. *The Journey To You: A Shaman's Path to Empowerment*. Bantam Books, 2001