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YUSHIN HUEMENA: Visions of the Spirit World, Art, Design, Medicine and Protective Spirits in Shipibo Ritual

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Introduction

Among the Shipibo of the Peruvian Amazon, the creative spirit is known to the world through highly stylized painting, especially on ceramics. The designs, according to the Shipibo, are inspired by visions that come in the healing ritual “*jonibwuensuate*,” and the ingestion of “*oni*,”¹ known among outsiders as “*ayahuasca*.” *Banisteriopsis caapi*, with its principal active hallucinogenic ingredient, harmine, is widely known and used throughout the Amazon by many indigenous peoples². Chemically related to LSD, it produces powerful visual, auditory, and somatic hallucinations. “*Oni*” is taken by Shipibo shamans during healing sessions (“*jonibwuensuate*”). The intensely vivid visual hallucinations often include intricate, three-dimensional and powerfully-colored designs, but also other extremely realistic scenes. The experience is interpreted by the Shipibo as a journey into the underworld and confrontation with the *yushin*, a spirit that threatens to kill both the sick person and the *muraia*: (“seer”), who sings “*jonibwuensatebuehua*” (healing songs) in order to summon the *aniyushin* (“large spirit”) in helping the sick patient. When a novice *muraia*: describes the patterns among other visions, the patterns are described by more experienced Shipibo as “*quinquin jaconrau*” (“*puro medicina*”), or “pure medicine.” “This is what we paint on our faces, on our pots, on our weapons, on our houses; this protects us.” Some women who are not shamans ingest “*oni*” because it helps inspire their art and craft in painting, weaving, and pottery. The designs are often painted on the faces of newborn children to protect them from disease and death, among other things.

Geography and Cultural Ecology

The Shipibo are a Panoan-speaking tribe living in the upper Peruvian Amazon, principally on the Ucayali River, its tributaries, and associated ox-bow lakes from approximately the town of Requena up to the town of Atalaya. The Shipibo have probably inhabited this area for about 1000 years, according to Lathrap (1970). In spite of contact with Western society over the past 300 years, they have maintained a high level of cultural identity and integrity, with Shipibo being the first and principal language spoken in Shipibo villages.

The Shipibo prefer the riverine environment of the Ucayali and its tributaries, and especially the connecting ox-bow lakes, to the interfluvial forest environments. Until recently, they primarily existed via a subsistence economy, depending on fishing, hunting, gathering, and the cultivation of crops such as yucca and plantain.



Figure 1. The Ucayali flood plain north of Pucallpa, 1964

As do other Amazonian tribes, the Shipibo have a close familiarity with the plants of the rain forest, and they have identified and use several psychotropic drugs that they obtain from the forest. Principal among these is *Banisteriopsis caapi*, a liana that is found hanging from various trees. The vine is cut into small pieces and boiled in a cook pot for a day to release the alkaloid within it, which is harmine. The decoction, which has a dark brown appearance, is called “*oni*,” by the Shipibo. Its more famous name, especially since it has come to the attention of Western explorers, anthropologists, adventurers, and those collecting psychotropic experiences, is “*ayahuasca*.” This Quechua name has been translated variously as “vine of the soul” and “dead man’s vine.” According to an Ucayali legend, the potion acquired this name because, reportedly, at least one person, whether a native shaman or a gringo, died from ingesting it. Among the Shipibo, it is known (or reputed) that the Shipibo shaman (“*muraia*,” or “seer”) is overcome in the hallucinogenic trance and voyage into the underworld by the “*yushin*” (devil, or force of death) in the shaman’s fight to save or cure the patient.

The *muraia*, or shaman, is a man who has long experience with preparing and ingesting *oni*, the “purgante” (so named because it causes violent diarrhea and is sometimes used to treat someone, including children, who are known to have a heavy infestation of intestinal parasites). The *muraia* begins as an apprentice to someone who is already an experienced shaman and gradually takes larger and larger quantities of stronger and stronger *oni* until he can “control” the vision, which comes when the *muraia* is “mareado” (dizzy). As an apprentice, he also learns the songs that are used to confront the *yushin*, to call the *aniyushin* (big spirit) who can help the *muraia* fight the *yushin*, who is trying to kill both the patient and the *muraia*. The songs tell what medicines to use for the patient and gives instructions to the patient. If it is a very strong fight, the *muraia* develops severe shivering, his voice is very high, and he is in danger of dying in the fight against the *yushin*.

What does the *muraia* see? He sees the army of the *yushin* trying to kill the patient. He sees cities and wonderful things. He goes to places that he has never known and never seen.

First Encounter with the Healing Ceremony and Oni:

The circumstances of my first encounter with the Shipibo healing ceremony and the drink known among the Shipibo as *oni* occurred in 1964 after I had been working as a medical student/physician-in-training at the Hospital Amazonico “Albert Schweitzer” located on a terrace overlooking Yarinacocha, an ox-bow lake near the town of Pucallpa. The hospital had

been founded in 1960 by Dr. Theodor Binder, a German physician who had been a protégé of Albert Schweitzer at his hospital in Lambarene, Africa. Dr. Binder aspired to do the same work as Schweitzer in the Peruvian Amazon for the native Amazonians. My travel to Peru in 1964 was sponsored with a \$1,000 pre-doctoral grant from the Wenner-Gren Foundation for Anthropological Research

When I arrived at the hospital in March, 1964, I had completed three years of medical school and had done clinical clerkships in obstetrics, gynecology, general surgery, anesthesiology, internal medicine, pediatrics, and orthopedics. Within a few weeks after I arrived, Dr. Binder left for a conference in Europe, and he had arranged for an Italian-American surgeon, Dr. Michael Diana, to be in charge of the hospital in his absence. Dr. Diana spoke no Spanish, so I became the physician in charge except for surgery in the operating room, which was being used as a storage room, and which I cleaned up and organized. Dr. Diana and I, working with members of the hospital staff that I trained as assistants, performed surgery for two months, and I took care of the rest of the patients in the hospital and outpatient clinic. When Dr. Binder returned, I went to the Shipibo village of Paococha to conduct my research on concepts of health and illness among the Shipibo.

Frank Billman, a Peace Corps volunteer, was working in the village and renting a house from a family that was absent. The house was pole-and-thatch construction with walls of *caña brava*. The elevated floor was made of split bark.

In the village, I set out conducting a survey of all households to determine who was sick and who wasn't. At the same time, I had two informants, one of whom was a young man named Ambrosio and an elderly man, Pastor Ochavano, who had been chief of the village in his youth. I would meet with either or both in the afternoon to gather information about health and illness. The Shipibo concepts of human anatomy, physiology, causes of disease, and methods of treatment were extensive even though they did not correspond to Western concepts. In particular, Shipibo women had a large body of lore concerning pregnancy including the prevention of pregnancy using various herbal contraceptives (Hern, 1976). A common feature of all treatment regimes was a set of restrictions on diet and foraging activities. A person under treatment by a *muraia*: for a particular illness condition (or perceived illness condition) could not eat certain foods, and a man could not kill certain animals or cut down certain trees. Certain species, such as the river dolphin and jabiru stork, were protected. Violation of these taboos could result in specific illness conditions.

The role of the *muraia*: was to meet with the patient in the evening. The *muraia*: would take *oni*: and then both he and the patient would wait for him to have his vision. The *muraia*: would sing. The patient would sit in front of the *muraia*: to let the healing powers work. The *muraia*: would sometimes rattle certain leaves over the patient, especially over the affected part, such as the abdomen. The *muraia*: would blow smoke from his pipe over the patient, chanting certain phrases and songs. The healing session, called a *jonibwuensuate*., would take several hours and go well into the night.

Ambrosio and Pastor informed me that, after taking the *oni*: and becoming "mareado," the *muraia*: would descend into the underworld to seek out the *yushin* who was trying to kill the patient. He would sing songs to summon the *yushin* and to challenge the *yushin*. He would sing songs to summon the *anyushin* and receive the knowledge of which medicines to use. According to my informants, the *muraia*: would be able to see many things that one cannot see without taking *oni*:. Being completely ignorant of native Amazonian traditions as well as the extensive literature of ethnobotany, I did not believe this.

One day, Ambrosio told me of an invitation to visit Benito, the most active and most senior *muraia*: in the village. I went with Ambrosio to watch Benito, who was preparing a decoction of *oni*: by boiling the cut vines in a cook pot all day. Benito spoke little Spanish, and I spoke little Shipibo at the time, but we developed a friendly and even collegial relationship. I sent him the psychiatric cases since he seemed to be a good psychotherapist, and he sent me the broken arms and kids needing worm medicine.



Figure 2. Benito, the *muraia*, cooking a batch of *oni*: (*Banisteriopsis caapi*) on Sunday, August 2, 1964.

When I came to his house in course of conducting my survey, I treated several members of his family for intestinal parasites. I showed him pictures of the parasites in my microbiology book and told him that they lived in the river water and on the ground. He was quite fascinated with this information.



Figure 3. Benito, the *muraia*, looking through the pictures of *bichos* (intestinal parasites) in my microbiology book.



Figure 4. The author, putting a plaster cast on the broken wrist of a kid known in the 'hood as "Tiger"

Partly to cultivate his friendship, but also to observe the *jonibwuensuate*: first hand, I began joining Benito at his healing sessions in the evening in front of his house. At about 8 PM, when it was getting chilly and the mosquitoes were less active, Benito would sit on a mat in front of his house and lean back against an old overturned canoe. He would have on his *tari*;, a hand-woven garment that his wife had made for him. He covered his head with a *maite*;, a sort of handkerchief. And he smoked a pipe. He would take some of the *oni* from a half-gourd, smoke his pipe, sing, talk to the patient, who was sitting in front of him, swat mosquitoes, and then repeat the sequence. This went on for hours.

I did not have much in the way of protective clothing much less mosquito repellent. I found that wrapping myself in my old rubber army poncho (from the Army surplus store in Colorado) helped me keep warm enough and defeat most of the mosquitoes. I found that wearing some kind of stocking cap or a towel around my head helped keep my head warm. In time, for other reasons, my friend Ambrosio gave me a pipe that he carved out of the heartwood of a tree. The stem of the pipe was the ulna of a monkey's forearm. The tobacco, which grew wild, and which was tightly rolled and wrapped in leaves and vines, was the strongest I had ever experienced. It had a horrible taste. But the smoke helped keep the mosquitoes at bay.

One evening, Benito offered me some *oni*;. I accepted. He took a quantity of the fresh *oni* that he had prepared that day, swirled it in the gourd, and sang over it. Then he spat in the bowl and handed it to me so I could drink the *oni*;. My first thought was the sound of Benito's tubercular lungs which I had heard when doing his physical exam. But, being an aspiring and conscientious anthropologist, I drank the *oni*;. It made me want to vomit. It had the taste of what I imagined might be the taste of old, rotten tobacco, or worse. There was nothing in my experience to which I could compare it.

I did discover, however, that the taste of the *oni* was so horrible that anything would be better, and the tobacco in the pipe helped me get past it. After a while, the horrible taste of the tobacco and the residue it left in my mouth made the *oni* look tempting, so I had some more. This went on for a couple of hours as I observed Benito treating his patients, one of whom was the (youngest) wife of Pastor.

After a while, I reckoned it was past midnight and I should go home. After I bid farewell to Benito and stood up, I found that I was a little dizzy, but I could walk without too much difficulty. It was about 500 meters to the house that I was sharing with Frank. Frank was asleep under his mosquito net when I arrived and went to bed at about 2:30 AM.

Because of vampire bats, Frank kept a small kerosene tin can lantern going all night, although the effect on the bats was probably minimal, and it helped illuminate the house for the rats. I went to sleep.

At about 3:30 AM, I felt nauseated and very dizzy. I sat up in my mosquito net. I could see the flame of the kerosene lantern, and I could hear the bats flying about. I could hear Frank snoring. I was aware of everything else in the room. I could hear people walking back from fishing, talking among themselves as they passed by the house. The following contains excerpts from my field report to the Wenner-Gren Foundation after I returned from Peru (Hern, 1965):

“...During this half-hour, [I saw] grey, half-lighted faces suspended in the air, very distinct in the features. This did not startle me, but it helped me wake up. As I lay looking at the ceiling of my mosquito net, I began to see many, many pairs of eyes floating in the darkness. This was a little eerie, but I turned back, trying to go to sleep, wondering if I was really going to have to get up and vomit. After a few unsuccessful minutes of this, I sat up in bed, looking blankly at the end of the mosquito net. Then I saw it coming at me...a horde of figures, dancing, moving, gesticulating, dark figures with a red glow behind them advancing toward me. My face, particularly my lips, began to numb, then my arms and hands and fingers. The numb areas started to tingle, and soon felt strangely dissociated from me and what I was experiencing.

I began to see full faces and figures, menacing, frighteningly real, coming to my left. From in front, out of the swirling vortex of grey figures, a green, scintillating shield laced with intricate thin lines of black began to emerge and dance before me. I felt a thrill of ecstasy, of wonder...full of a sort of electricity, a mystic feeling of revelation. The shield came closer, moving and vibrating, and the intricate pattern became visible over its entire surface. The center of the shield faded to a white glow, from which emerged a slate-grey mask-like face, flat, surrealistic, with lines across the forehead and the cheeks in parallel steps, with unseeing eyes and a thin mouth. The whole scene was full of the richest and truest colors I have ever seen. I felt somewhat frightened, and needed to say something to someone to reassure myself of my contact with the reality outside my vision, even though I could hear the bats flying about the room, hitting boxes, their wings beating the air. I spoke to Frank and tried to wake him, still staring at the apparition before me.

As I spoke, I heard my voice call out with a strange tone, the ethereal tone of a trance, a séance, for even though I felt and knew the voice was mine, it was almost apart from me, disconnected, disembodied, as were my hands and arms. As it happened I understood why Benito and Palestino took on unnatural, falsetto voices during the curing session. I sat transfixed, ecstatic, consumed by the vision before me, and it was in my voice. The figures, the brilliance and beauty of the patterns commanded my whole consciousness, and I felt such a strength of concentration as I had never experienced before, and an overwhelming vividness of the sensation. It was as though nothing stood between the figures and the core of my being, that I was looking at death itself, afraid but with an intense feeling of strength and awed by the truth, the almost supernatural nature, of the experience. One of the thoughts that immediately came to me, that seemed vividly true, was that the Shipibo design patterns, with the strongly geometrical, angular sense and the three-dimensional effect achieved by alternating heavy and light lines, the patterns one saw everywhere on the faces, the pottery, the woven cloth and carved wood paddles, came from this vision. There was just no question about it...”

“Frank, I’m having the vision. I’m having the vision.” He woke up, and then he laughed. “You’re out of your mind,” he said. “No, I’m having the vision. This shit works.” He laughed some more. My voice was very high, a falsetto that I could not control. It sounded like Benito’s voice when he sang.

“...At this point I began to feel somewhat overwhelmed by the effects, both physically and emotionally. I got out of bed and found significant effect on my coordination as I attempted to put on my pants and sandals. I went outside and vomited noisily behind the house while Frank laughed derisively from his cot. I could hear the neighbors waking up. It was 4:00 in the morning. They had been eagerly asking each morning following a sojourn to Benito’s if I had had a vision. I was sure they had heard our conversation and knew what I had just experienced. I went back in the house, shaken by the experience, but also full of a feeling of exultation and strength. I felt as though a door had been opened to me...”

When I got back into the house, I sat in the hammock and looked at the kerosene flame for a long time. I felt that I had seen into the Shipibo culture in a way that I would not if I had not taken the *oni*. It was obvious to me at that instant that the designs the Shipibo painted on everything, including their faces, came from this vision.

The next morning, when we finally got up, I decided to go find some eggs to buy for our breakfast. Everyone I spoke to knew that I had had the vision. It was community knowledge. “Now you are Shipibo,” said a neighbor.

“...The next day, many people in the village came to me and asked me if I had taken oni, had had a vision, what I had seen, etc. They seemed to be quite excited and elated that I had experienced the full effects of the drug. This reinforced my notion that understanding the mythology and sense of the curing session, and therefore some very fundamental aspects of the Shipibo culture, would be very difficult without taking the drug and experiencing its effects. A few Shipibo had had the experience, but not many, and I became interested in what the meaning of taking the drug was for the Shipibo. Whether it was part of some kind of initiation rite or took on a religious significance was not clear but suggested from some of the remarks that were made...”

That evening, there was a wake in the evening for a woman who had died the year before of cervical cancer. It was the anniversary of her death and the end of mourning. There was no *jonibwensuate*. I did not go to Benito's house.

The next evening, I told Frank that I was going to Benito's house and do a job on myself with *oni*: I wanted to find out just how this works when one has a serious dose.

“...So on the evening of August 4, I went again to Benito's at about the same time. The oni: that was used this evening was the remainder of the batch that had been prepared on Sunday...”

When I arrived at Benito's house, he had been joined by Palestino, his son, who was already an accomplished *muraia*: but who lived in another village up the river. Palestino greeted me in a cordial way. “I understand you had a vision the other night,” he said. “Yes, it was *my interesante*,” I said. “What did you see?” he asked. “*Dibujos* (patterns),” I replied. “*Ah, si. Esto es puro medicina. Estos que ponemos en nuestras ollas, ropas, armas, caras, y todas cosas*,” he said. “*Se protege contra el Yushin*,” he said. He confirmed my conjecture. I had seen women put these patterns on their newborn babies with a carved wooden roller dipped in *huito*, a black vegetable dye. The patterns were on a *macana* (tapered club) that is used in adultery battles and in war. And the patterns were on all the Shipibo pottery I had seen. Shipibo hand-spun, hand-woven, and hand-painted cloths with these patterns are collected by many museums. I also told Palestino about the face that I had seen. “*Ah, si. Yushin huemena. Jascarabi*.” *The face of the Yushin. That's it.*

This time, I was well prepared with a long-sleeved shirt, a stocking cap, my army poncho, and my pipe. I drank the *oni*: and waited, watching Palestino and Benito perform their healing ceremonies.

“...I drank about a teacup full at the outset. Within one hour after settling back to wait, I began to see myself falling down a long, sectioned chute with patterns on the sides. One very striking pattern appeared for several minutes - a very fine diamond-checkered red and blue sheet sweeping up before me, out into the distance, and back again to make a spiral. A flash of bas-relief patterns appeared which were so like the sort of designs one sees on the Aztec calendar and other Central American pre-Columbian art, I was startled. I did not recognize anything in particular, but was reminded by it. It was very clear.

One new and very distinctive thing happened. I was lying with my head propped against the canoe, the towel wrapped around my head to protect against the cold, the mosquitoes, and to make a pillow. I began to have the feeling of intense weight on the top of my head. In fact, I put my hand over my head to make sure nothing else was on it. The pressure bore down and down, then suddenly I felt a very sharp, heavy, short blow on my head accompanied by a loud sound that can only be compared to a cymbal or a big gong, but was no exact replica. The sound was quite clearly an internal event, but it was nonetheless very real.

After a while, I sat up, chatted with Benito and Palestino for a moment, commenting that this batch of oni: was much more powerful than it had been two nights previously, and they agreed, stating that this was always the case. But to make sure I would have the full-blown effects once again, I drank perhaps a half-cup more.

Within one-half hour to an hour, I began to feel more of the blows on the head with sound effects, plus more of the intensely vivid visual patterns. I felt myself slipping into a more introverted state, aware of the fact that I was now lying in a huddle by Benito on the mat, but still entranced in my vision.

I began to see the figures again...this time large, towering figures coming toward me. I opened my eyes slightly and saw that they were not unlike the figures of the trees before Benito's house. I closed my eyes again and continued. The figures took on a more realistic aspect...their faces became sharp, clear, horrible, ugly, menacing, like the faces of ghouls, with flesh rotting away to show teeth and naked cheekbones. I was fully aware, however, that a patient sat before Benito now, probably Maria again, but I couldn't tell and didn't care enough to look. I felt myself begin to shiver and to moan the way one does when he is very ill with severe chills and malaise. The shivering was spasmodic at first, then it swept through my whole body uncontrollably. At this point the vision was at its most brilliant clarity and was quite terrifying; the nausea was intense as was the desire to get up and vomit and stop the effects. Even so, I was strongly conscious of how I must appear to the others, lying there on the mat, shivering and moaning, apparently quite senseless from the effects of the drug. At the same time, I was glad that they could see me under the full effects, so that they would know that I was truly sharing the experiences with them. And I smiled at the thought. I heard Benito and Maria talking and chuckling quietly and knew that they were talking about me. I didn't care. And it was reassuring to be next to someone. The vision, the full physical and psychological effects, were so vivid..."

In spite of the terror, I felt safe.

After a while, the vision passed. I felt weak but happy. I felt sick. I got up to go vomit at the edge of the clearing, and I was very unsteady. I sat down again to wait until I felt better before walking home. It was about 1 AM. Frank was due to leave the village on a float plane the next morning. I would stay for a few days and catch a canoe going up river.



Figure 5. Florencia Urquia, master artist, painting Shipibo designs on a cloth



Figure 6. Jacoba Urquia, Florencia's sister and another master artist, painting designs on one of her ceramic masterpieces, a *jonichomo*, with a piece of her hair.



Figure 7. Jacoba Urquia with her daughter, Valentina, putting the finishing touches on her *jonichomo* with some resin



Figure 8. A *jonichomo*: waiting for sale at the *Maroti šobo* (“selling house” or trade cooperative) in Yarinacocha

Use of *oni*: for Healing and Artistic Inspiration

Over the next 50 years since my experience with Palestino and Benito, I have continued my research among the Shipibo and have attended many healing sessions. I have not taken *oni*: again, partly because I had no desire to do so, and partly because I learned from Colombian pharmacological studies that I read after returning to medical school in 1964 that the active ingredients can be dangerously toxic and potentially fatal (Nuñez-Olarte and Constain-Mosquera, 1962). But I have seen many *muraiabo*: in the original community and other Shipibo communities. The singing that accompanies the *jonibwensuate*: is compelling, haunting, and unforgettable. In my home village of Paococha, one family that moved there in 1969 and was present at the time of my research visit that year has a family tradition of medicine. All the men are *muraiabo*:, and some of the women take *oni*: to help them have visions and form a basis for their artistic work. I have never attended a healing session conducted by a woman. I am told this happens in certain villages, but the main (although very uncommon) use of *oni*: by women is as an aid to painting patterns. I did speak to a woman in the village one evening who told me had been taking *oni*: in order to see the patterns she would create. I knew who she was but did not know her well.

Various western anthropologists have speculated on the connection between *ayahuasca* usage by male Shipibo healers and women artisans (Gebhart-Sayers, 1985; Odland and Feldman, 2010) without documenting a clear connection.

In one village, a man trained as a *sanitario* (medical corpsman) gave *oni*: to his child to cure intestinal parasites, and the child died. It was not clear whether the child died from the parasites, an overdose of *oni*:, or the violent intestinal purgative effect of the *oni*: with uncontrollable bleeding resulting from sloughing of a heavy *ancylostoma* (hookworm) infection or intestinal obstruction from a necrotic *ascaris* (roundworm) infection.

Pharmacology of *Oni*:

The Shipibo report to me that they have several hallucinogenic drugs that are used in healing ceremonies, and combinations are more potent than the individual drugs. A combination of two drugs is sometimes used.

Some of the effects of the principal alkaloids of *oni*, harmine, harmaline, and tetrahydroharmine, are known to be those of monoamine oxidase inhibitors in the same class of psychoactive drugs as LSD. Harmine reportedly causes serious fluctuations in blood pressure, pulse, or other cardiovascular effects. This alone could be fatal for an older man with coronary heart disease or partial carotid artery obstruction. The “normal” dose sufficient to give the vision produces obvious toxic physiologic effects: impaired or altered consciousness, shivering, dizziness, violent intestinal spasm, and intense auditory and visual hallucinations. These are signs and symptoms of toxicity. The margin between a toxic result that is more or less controlled and incorporated into a common cultural practice and a toxic result that is fatal depends on both dosage and the physiologic condition of the intoxicant. These parameters are basically true for all toxic substances. A review of the extensive pharmacological and experimental literature published in recent years illustrates a wide range of neurotoxic and cytotoxic effects of the alkaloids present in *Banisteriopsis caapi* and *Psychotria viridans*, the two most common combinations in Amazonian tribal use of these vegetal compounds (Aarons, et al, 1977; Frison, et al, 2008; Fuentes and Longo, 1971; Karch, 2009; Riba, et al, 2001; Riba, 2003; Riba, et al, 2003; Riba, et al, 2006; Schultes and Hofmann, 1980, 1992; Schultes, et al, 1998; Rättsch, 1998; Yritia, et al, 2002). *Psychotria viridans* contains N,N-dimethyltryptamine (DMT), a hallucinogenic substance which is active and potent only in the presence of monoamine oxidase (MAO) inhibitors. The principal β -carboline alkaloid components of *Banisteriopsis caapi*, harmine, harmaline, and tetrahydroharmine block the metabolic breakdown of DMT by the monoamine oxidase present in the body. The physiologic effect of this combination of drugs includes extrapyramidal signs and symptoms such as tremors, vocal cord spasms resulting in unnatural vocalizations, auditory, somatic, and visual hallucinations, dizziness, nausea, vomiting, and diarrhea. I experienced all these signs and symptoms when I was most affected by *oni*, and these effects explain some of the experiences and hazards of being a Shipibo shaman. These toxic effects following *ayahuasca* ingestion are also described by anthropologist Wade Davis (1998).

The biochemistry and pharmacology of the principal ingredients of *ayahuasca* are exceedingly complex and have a potential fatal toxicity (Sklerov, et al, 2005). Both the psychodelic and neurotoxic effects of these drugs have been incorporated into a system of healing and understanding within the Shipibo as well as other Amazonian cultures (Schultes and Hofmann, 1992; Dobkin de Rios, 1972, 1984); Harner, 1968, 1972, 1973, 1980; Illius, 1992; Langdon and Baer, 1992; Plotkin, 1993; Waisbard, 1959). Although psychotropic drugs are consumed in some cultures by individuals for their own personal spiritual or emotional experiences, and have been considered for their psychotherapeutic value in others (Crocket, et al, 1963), use among the Shipibo is confined almost exclusively to shamans acting as intermediaries for a person suffering from a real or perceived illness.

Conclusion

This account is an anecdote about an unanticipated personal experience rather than an informed, prepared and formal field investigation, and I made these observations in 1964. The experience was vivid. I remember every minute of it. It was an adventure. But it was not a meaningless adventure. The mere fact of my participation in their culture to the level I did helped me form an enduring bond with the Shipibo I met and knew in 1964. Most of them are no longer alive now in 2016. Some of them have died recently, but some are alive, and I feel kinship with them. It is mutual. The kinship is less based on my experience with *oni*: than more than 50 years of contact and work with the Shipibo as a physician and scientist, an improved knowledge of the language, and many shared experiences of all kinds. I have been in the field with the Shipibo for months at a time on numerous occasions. During my Ph.D. dissertation research in epidemiology, I was with them continuously for over a year (Hern, 1994). I have returned many times since then and traveled far into the forest of the

montaña with them to places even they did not know, survived hazards and hardships with them, shared their laughter and jokes (often at my expense), healed their sick and injured, helped deliver babies, vaccinated whole villages against disease, comforted my friends who lost loved ones, and helped them in other ways. I have been adopted by several families, and I am considered as a family member by many Shipibo on the Ucayali and Pisqui rivers. *Eariqui shipibaõn panobaque*: (I am an adopted son of the Shipibo). The event of experiencing the full physiologic and psychotropic effects of *oni*: in an authentic cultural setting during one of their most important ceremonies is an important but not isolated part of my relationship with them. I feel very privileged to have had that experience at that time.

The observation and conclusion that Shipibo artistic patterns are based on the visions offered by *oni*: and its congeners may be impossible to prove, but there is considerable ethnographic evidence of this, and others have made this observation or speculation in other Amazon cultures. There are geometric patterns found on indigenous art from many sources, including the Amazon. Imitation of striking patterns does not require a direct experience with *oni*: or similar substances, but somebody, sometime, somewhere, saw these visions and tried to portray them. Of that I am certain. I think this continues, although to a much lesser degree than it did 50 years ago.

Some questions are intriguing: How did the Shipibo or any other Amazonian tribe discover the intense effects of *Banisteriopsis caapi*, when did they discover it, how many people died taking it before the shamans worked out the “dose,” how did they learn to combine preparations in the right amounts from different plants to obtain the effects, and what exactly does this psychotropic experience mean in this culture? The same questions can be asked for all tribes that use hallucinogenic drugs.

Notes

A version of this paper was presented at the Invited Session: Consciousness, Agency and Authenticity in Shamanic Identity and Ritual in South America: Expanding The Range of The Sound Of Rushing Water (Part I: Papers in Honor of Michael J Harner 108th Annual Meeting of the American Anthropological Association. December 2-6, 2009 Philadelphia, PA

1. There is a glottal stop following the final vowel in Shipibo words. I have used a (colon:) to indicate this for the purposes of this paper.
2. There are extensive references to psychoactive substances in the ethnographic literature of the Amazon and of the Shipibo. Only a few are given here. Also, only a few key citations are given for the many studies of the biochemistry, pharmacology, toxicology and botany of these psychoactive drugs.
3. All photographs in this presentation are by the author (© Warren Martin Hern 2016; all rights reserved).

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