

Ayahuasca: Current Interest in an Ancient Ritual 3 4

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Abstract The amazonic brew *ayahuasca*, with strong psychoactive properties, 6
and which has been used probably for millennia by Amazon tribes as their main 7
“medicine,” is currently being used by some groups in cities in Latin America 8
and abroad by people seeking curative effects or transcendent and meaningful 9
experiences. At the same time, research on its effects in treating depression and in 10
neuroimaging is being carried out. 11

The brew is made of a blend of at least two different plants cooked together that 12
potentiate each other: the stem of a vine, called *ayahuasca* proper (*Banisteropsis caapi*), 13
and the leaves of a bush, *chacruna* (*Psychotria viridis*). 14

In this chapter, the ritual is described and the pharmacodynamics of the brew are 15
discussed, as well as some of its effects in the brain and in the subjective experience 16
of the self. Two vignettes of patients in analytical psychotherapy are presented to 17
illustrate its effects. Reflections on the risks and benefits of its use are then shared. 18

Keywords Ayahuasca • Consciousness • Depression • Ethnopsychiatry • Psychotropic 19

Introduction 20

Brazil, Bolivia, Colombia, Ecuador, the Guyanas, Peru, and Venezuela share the 21
Amazon rainforest. Hundreds of different tribes inhabit this huge area. At least 70 22
of those indigenous groups, primarily in the Upper Amazon and Orinoco basins, 23

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24 have used for millennia the blend known as *ayahuasca* for divination, healing, and
25 other cosmogonic and shamanic purposes [1]. In its original milieu, the ritual,
26 which has as its main vehicle the *ayahuasca*, with strong psychotropic activity in
27 virtue of its serotonergic properties, allows the participants to contact the “other”
28 reality, or the “real aspect of the world,” where the spirits of plants, animals, and
29 dead people exist. It is also considered as a preparation for life after death [2]. The
30 shaman of the tribe usually conducts the rite. The ingestion of *ayahuasca* produces
31 intense visions. At first these are of geometric patterns (which can be seen as part
32 of the Amazon people’s crafts, in clothes, paintings, and pottery), and then the
33 visions become gradually more complex, with emotional, cognitive, and somatic
34 components, as we will see later.

35 The *ayahuasca* brew is a blend of two different plants cooked together. *Ayahuasca*
36 proper (*Banisteropsis caapi*) is a vine native to the Amazon – currently it grows in
37 different parts of the world – that contains beta-carbolines such as harmine, harmaline,
38 and tetrahydroharmine, all of which are potent monoamine oxidase (MAO) inhibitors.
39 The other plant is the Chacruna (*Psychotria viridis*), a bush that contains the
40 tryptamine alkaloid *N,N*-dimethyltryptamine (DMT). DMT is not orally active itself,
41 because it is inactivated by peripheral MAO of the liver and gut.

42 It is the blend that works: the beta-carbolines present in the *ayahuasca* vine
43 inhibit the MAO and allows the DMT to enter the internal milieu. The question of
44 how the indigenous people found the right combination remains unanswered, and
45 this is definitely a result of many years of investigation and combinations. Sometimes
46 the brew may include other plants, as tobacco, Toé (*Brugmansia suaveolens*), or
47 coca leaves.

48 In the last decades, this ceremony has come out from the rainforest and has
49 made its appearance in the main cities of many countries not only of South
50 America but abroad. Conducted also by a leader – a shaman, *Maestro*, or
51 *Curandero* – the aim is to have an inner experience with intense visions,
52 somatic and emotional effects, and occasional key insights. During the ritual, in
53 both Amazon and urban settings, the participants drink the brew from a cup
54 (50–100 ml) and sit in silence waiting for the effects of the substance to occur.
55 In an urban setting, the conductor has previously evaluated the participants, by
56 overt questions or subtle observation, to determine the amount of brew each one
57 will have, if any. This evaluation is important to reduce the risks of a bad expe-
58 rience for the participant for reasons of psychic frailties or other health condi-
59 tions. In not rare occasions the shaman decides not to give the brew to a
60 participant.

61 This ritual would be of little importance to our field, or perhaps be taken as a
62 folkloric and curious issue, if it were not that some of our patients in psychotherapy
63 have participated in one or more of these *ayahuasca* sessions and have talked about
64 their experiences in their psychoanalysis and psychotherapies.

65 For historical and affective reasons, I would like to mention Carlos Alberto
66 Seguin, who in the decade of 1960 was among the first psychiatrists to study the
67 brew in Peru. These studies vary from a phenomenological approach to ethnographic
68 psychiatry.

At the same time, neuropsychiatric research studies have been made on the effect of ayahuasca in refractory depression [3] and on its effects in visualization, memory, and consciousness [4].

I would like to suggest that the ayahuasca experience, because of its peculiarities, has a unique value for research in both neural and mental fields. Let me share with you a glimpse of what possibilities are open to research and theorization.

Description of an Ayahuasca Ceremony

The ceremony usually takes place at night. The participants and the shaman sit in a circle. The shaman gives a small amount of the brew to each person and then asks all to sit in silence. Shortly, about half an hour later, the visions begin. At first, they are colorful geometric patterns, and then gradually become more complex. Songs sung by the shaman during the session ~~are supposed to conduct~~ the participants to different visions, to changes in mood and in the level and quality of consciousness. The participants describe themselves as entering another state of mind, with keen awareness of the body, thoughts, and inner images. Very elaborate images may also appear.¹

During the 4 or 5 h that the experience lasts, old memories may appear, many of them painful and formerly repressed, as well as images of plants, animals, landscapes, and buildings. A numinous feeling or sometimes a feeling of awe may occur. Issues regarding the meaning and direction we give to our lives are not rare.

The shaman closes the ceremony with a brief rite as the participants gradually come back to a “normal” state. The following day there is a feeling of renovation. Insights may still be very clear.

It is interesting to consider that in Brazil there are two organized religions that have the ayahuasca as the core of their inner experience and their beliefs. Medical members of one of these groups, the União do Vegetal (www.udv.org.br; the other one is the “Igreja de Santo Daime”), have participated in research and publication of their data [5]. Also in Brazil, in the University of Ribeirão Preto, research has been conducted on animals as well as in treating refractory depression in humans in a strict medical setting [3]. Brazilian researchers have also published studies on the nature of the visual imagery so vividly enhanced in the participants, using functional magnetic resonance imaging (fMRI) [4].

From the psychodynamic perspective, what our patients bring to their sessions is very impressive and requires an open attitude on our part as therapists to avoid considering the experience as mainly an acting-out or a risk-seeking attitude.

¹There are many artists that have depicted their visual experiences, with more or less skill. Among the most interesting of them is Pablo Amaringo (1943, Peru), founder of the Art school Usko-Ayar, in Pucallpa.

104 Let me share with you two experiences of patients who brought their ayahuasca
105 experience to their psychotherapeutic sessions.

106 In the first vignette, a woman in her sixties comes to analytical therapy because
107 she still feels somatic and psychic pains after a car accident suffered years ago. In
108 that accident, her teenaged nephew was killed and she was seriously injured.
109 When she came to analytical therapy, 2 years after the accident, she was somewhat
110 recovered, but still felt deep sadness, guilt, and constant pain in her head, side, and
111 legs. One of the issues that appeared during our work was the sadomasochistic
112 bond with her very old but still lucid mother, who lived nearby. It was in the sec-
113 ond year of therapy when she decided to participate in an ayahuasca session. Even
114 though some symptoms had become lighter (less guilt and a better disposition
115 toward life), the pain in her body remained, and the relationship with her mother
116 and daughters was still complicated. She talked for some sessions about her inter-
117 est in drinking the brew and finally decided to participate in one group session
118 with a shaman.

119 This is a summary of her experience:

120 After an hour or so after she drank the brew, the visions started and she entered into a calm
121 mood and heightened sense of awareness. After a while she found herself directing her
122 attention to her body and started exploring every part of it inch by inch. She felt she could
123 distinguish the different kinds of pain and, at the same time, the distinct emotions “tied” to
124 each part. She cried very deeply. After a while a sort of oneiric vision appeared: she saw
125 herself sitting in a chair in a dark room, with her mother behind her, and her grandmother
126 further behind. She could almost guess (or see?) the mother’s grandmother further back. In
127 front of her, her daughters were sitting. All these women formed a silent and quiet row. In
128 the same way that my patient had been able to observe every detail of her sore body, now
129 she could see the expressions and emotions of the women of her family. She noticed there
130 was a common pain that passed through all of them, a pain related to a way of being a
131 woman that had been transmitted through generations. Suddenly she had an insight: she
132 recognized the same style of hardening the hearts and controlling the emotions shared by
133 all the women in her family. They had lived doomed, so to say, to live that way.

134 What happened after her ayahuasca ceremony was a surprise for us. In a very natural way,
135 the next time she approached her mother, some days after the ceremony, her attitude was
136 quite different. When they met, she listened to the querulous old woman with her “heart
137 opened,” and then she hugged her with a tenderness she could not remember feeling or
138 having with her. This was the beginning of a new relationship, more kind and affectionate,
139 that lasted until her mother passed away. The relationship with her daughters also gained
140 new life and dimensions, as my patient felt free to express more openly her emotions and
141 to tolerate, and appreciate, the daughters’ own characteristics and decisions.

142 ~~There are plenty of questions brought about by this subjective experience, and in~~
143 ~~spite of the lack of consistent research on this issue, subjects related to the insights~~
144 ~~some forms of visualization can produce or to the changes in the interpersonal~~
145 ~~relationships appear, to mention only two.~~

146 There are also other kinds of insights produced by the experience, as the
147 following vignette can show:

148 A man in his late thirties comes for reanalysis. Some years before he had started
149 participating in ayahuasca sessions in Lima and later went to the Amazon. He had his first
150 ayahuasca experience moved by curiosity. He thought he would “enjoy” a psychedelic trip

but found something else. Some of the visions he had were in a way similar to the one already described. These visions consisted in seeing himself in relationship with people he loved, and he felt he could understand the feelings of each one of them. He also saw himself as a baby and mourned deeply – he felt it was the first time – for the loss of his grandfather, which had occurred when he was 3 years old. He was also able to remember his childhood and adolescent dreams, what he wanted for his life, and could see where he was now professionally and personally. From this perspective he felt he could see what decisions and changes he had to make and take in his present life to redirect it in consistency with his desires, which also became clearer to his eyes. These could be considered important biographical visions and insights.

But during the sessions he also had another kind of experience: he sensed very strongly and deeply something he had known intuitively and by his studies and work: being an ecology activist, he was convinced that the only path to a better life in society passes through the development of a new way of relating to nature and to others. During the most intense part of the experience, between the second and third hour, the patient had a sense of awe of being alive. He felt he could perceive emotionally, not only understand rationally, the interconnectedness of all things. He could feel that the air he inhaled had been just exhaled by the surrounding trees, and that the moon in the sky and his retina receiving that light were intimately connected. And that he shared an intimate “brotherhood” with all forms of existence. He came out from the experience with a sense of profound gratitude.

These insights can be considered not as biographical but having to do with consciousness and awareness. This is a subject to be treated elsewhere. What I can say here is that I have listened to his associations with an open attitude and that an important part of our work has consisted in helping the patient to find and value his own style of searching, thinking, and expressing himself.

There are also risks that have to be taken into consideration. The experience can trigger psychotic symptoms in some participants or enhance narcissistic pathological traits in others. These possibilities are minimized if the shaman who will conduct the session has the experience and skill to detect these structural frailties.

Conclusions 180

It is thus possible to consider the ayahuasca experience as especially valuable for neuropsychiatric research as well as psychoanalytical investigation. Published papers, as well as conferences on this subject, have become frequent in the past decade. Traditional knowledge can lead us, as mental health professionals, to new insights and ways of understanding health and suffering.

We can also state that the study of the *ayahuasca* experience provides areas of reflection and research:

- a. Depression and other mood disorders 188
- b. Visual imagery (and its relationship with dream images) 189
- c. Memory (flashbacks, posttraumatic stress disorders, repression) 190
- d. Consciousness and awareness (meaning of life, ecologically and altruistically driven motivations and acts, etc.) 191

193 **References**

[AU2]

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