

Touch and play—'spiritual attacks' in ayahuasca ceremonies

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Abstract

This article describes a case of a 'spiritual attack' in the context of Amazonian ayahuasca ceremonies. These attacks are often assumed to be imaginary, and there is relatively little information available about them. Specifically, there appears to be no documentation about possible mechanisms of action for these attacks. Subjectively, they typically appear as context-dependent visions or somatic sensations that represent disease-inducing or lethal interventions from an external hostile party.

Such 'spiritual attacks' could tentatively be conceptualized as subjective mental representations of fundamental disagreements between two parties. 'Defenses' against these attacks might then consist of methods for maintaining stability and resolving the associated negative affects. This discussion could facilitate an improved understanding of this rarely documented, difficult-to-conceptualize phenomenon.

Keywords: psychedelic therapy, psychedelics, ayahuasca, complex trauma, sorcery, shamanism, ethics, competition

Introduction

'It seems understandable that the concepts of objectivity and subjectivity would become somewhat diffuse under such conditions.'

Ayahuasca is a psychoactive water extract of two Amazonian plants: *Psychotria viridis* containing N,N-dimethyltryptamine (DMT), and *Banisteriopsis caapi* containing β -carbolines (Durante et al., 2021). It also contains numerous other active chemicals and is administered as a liquid. Some Amazonian indigenous tribes have developed advanced therapeutic practices using plant extracts, with ayahuasca being the most well known and the most extensively studied (Buller et al., 2021; Frecska et al., 2016; Gonzalez et al., 2021; Hartogssohn, 2021; Jiménez-Garrido et al., 2020; Kaasik et al., 2020; Labate and Cavnar, 2014; Mudge, 2016; Oikarinen, 2020; Ona et al., 2021; O'Shaughnessy and Berlowitz, 2021; Palhano-Fontes et al., 2018; Roseman and Karkabi, 2021; Ruffell et al., 2021; dos Santos et al., 2017). The pharmacopoeias of the tribes include over a hundred commonly used plants; recently, one Brazilian tribe documented their knowledge in a book (Muru and Quinet, 2019). In the Western scientific context, ayahuasca is currently being studied as a promising method for healing various psychiatric conditions, including substance abuse, anxiety, and treatment-resistant depression (Hamill et al., 2019; dos Santos et al., 2016).

Ayahuasca group ceremony facilitators are often called *curanderos*, *pajés*, or *shamans*, depending on the context and their country of origin. In many traditions, the education required for leading group sessions takes several years and is typically harsh, more closely resembling special forces military training than a conventional medical education. The goal of the process, according to Pérez-Gil, is to obtain knowledge and power (Pérez-Gil, 2001). Knowledge without power is considered useless, as is power without knowledge (skill). Power in this context may be best understood as mental and physical strength, stability, and resilience. It may also be conceptualized as *evidence-based self-confidence*. This power is what enables the person to heal others.

Stability is needed for the facilitator to function as a fixed point or anchor to what is conventionally understood as 'reality', in order to provide a feeling of safety for the ceremony participants. The facilitators are thus *holding space* for the participants. Also, as psychedelics sensitize to suggestions, projected personal power is what gives these suggestions the necessary intensity and believability in order for them to become permanent features of the recipient's personality, or in order for them to empower the recipient to pass a challenging moment during a psychedelic experience, for example, the reliving of a previously overwhelming traumatic experience. These suggestions are typically provided in the form of music or chanting (through the tone of the voice or specific resonance of musical instruments).

The knowledge component of the education includes the memorization of songs, prayers, and plant or therapeutic-related information. Typically, due to the extended period of time (years) needed to learn each technique or skill, each student initially learns only a subset of the techniques. In many instances, acquisition of the power component includes transformation of body tissues through undernutrition, inducing a constant state of hunger, by limiting the foods that the prospect is allowed to ingest to a few selected ones (sour/fermented drinks only, no foods with a sweet taste, extremely limited selection of foods in general, and no salt, meat, or water) (Pérez-Gil, 2001). In addition,

the diet is performed in social isolation, i.e., by residing on one's own in the rainforest, with occasional contact with the diet's supervisor but with a prohibition to look the supervisor in the eyes. It also requires sexual abstinence, including from masturbation and even sexual thoughts. The education includes several shorter diets of one or more months, and a final diet with a duration of one year. In addition to other outcomes, the isolation in nature also sensitizes the person to the natural environment to an unusual extent. Failure to follow these rules results in the prospect failing the education. Failure to endure the final diet is said to be lethal.

There is currently no information on what kind of changes the diet causes exactly but according to Pérez-Gil, in one Brazilian tradition the aim is said to be to induce 'bitterness' into the body (Pérez-Gil, 2001). This is done by the daily ingestion of a specific medicinal plant selected for the diet, as well as the daily ingestion of ayahuasca and tobacco, which are considered bitter (tasting) plants. In general, only bitter herbs are considered medicinal. Thus, the diet aims to assimilate the properties of these bitter plants into the body as permanently as possible. These biochemical changes likely involve semi-permanent changes to brain biochemistry. The persistence of effects is most likely dependent on adhering to the same dietary and sexual restrictions, at least to some extent. Consumption of foods with a sweet taste, for example, is said to cancel some of the effects. These effects may be mediated by, for example, the intestinal microbiome. In general, the mindset of the tradition is to change the body, and even in psychiatric disorders, the mind is considered of secondary importance.

Essential information about the properties of the ingested plants is thus acquired through an embodied method. The effects produced by medicinal plant extracts are learned by feeling their effects in one's own body. The diet typically forces the prospect to face unresolved emotional and somatic issues, a process that may be unbearably painful and exhausting, often approaching a near-death experience.

Another important mechanism of action of ayahuasca is anti-inflammatory. Flanagan and Nichols have noted that psychedelics regulate inflammatory pathways via novel mechanisms, producing potent anti-inflammatory effects (Flanagan and Nichols, 2018). One possible function of the diet may be to suppress all inflammatory processes. Some effects might be related to dopamine deprivation.

The embodied method appears to sensitize and familiarize the person with the plants' somatic and mental effects, resulting in a kind of embodied, intuitive understanding of the effects and applicability of the therapeutic in question. This practice is unfamiliar to Western medicine. The learned skills seem to appear as intuitive, automatized, immediate pattern matching between one's own embodied experiences and observations of others' somatic and mental states. As a result, the trained person can typically estimate, without conscious effort, the appropriate therapeutic substances and their proper dosing for each person in each situation.

The indigenous traditions emphasize the importance of music in guiding participants' experiences. The music is produced by the ceremony facilitators singing (de Mori, 2009). This is considered essential, as the healing effect is thought to reside in specific affects, tones, or vibrations that must be matched with the participants' needs and changed dynamically in response to changes in group dynamics, in a similar way how a DJ matches the music in a club to the participants' ages, tastes, expectations, and moods. The skill of matching is acquired as part of the extensive training process. The facilitators continuously observe the group as a whole and on an individual basis, adjusting the environment as needed.

The maintenance of a proper, efficacious, and safety ensuring group dynamic is thus predominantly the result of singing (Beyer, 2009). The observed musical skills of some of the facilitators may often appear exquisite, with a prowess to project mental images that are suited to the recipients' current emotional needs. For example, in order to overcome difficult emotions, the guide may project images of mental strength, which the recipients then identify with. As many of the states experienced in ayahuasca sessions are regressive in nature, the role of a facilitator may resemble that of a mother or a father singing to a child, with similar intentions (e.g., calming, uplifting, or energizing).

Traditionally, in addition to healing diseases, ayahuasca was also utilized as a facilitator of warfare between tribes or individuals. Mentions of such practices, typically called sorcery or *brujería*, are sparse and vague. These mentions most often describe the use of *invisible darts* to attack shamanic practitioners of enemy tribes, as well as ways to suck these darts out of the bodies of the targets of such sorcery (Beyer, 2009).

The article by Pérez-Gil describing traditional shamanic practices of a Brazilian tribe up to the 1900s mentions that the main objective of a subset of their shamanic techniques was aggression (Pérez-Gil, 2001). It is unknown whether these techniques are still known, studied, or utilized, or what their exact nature was at the time they were better known (in the 1800s, before slavery-like conditions and cultural oppression were enforced by rubber barons and Catholic missionaries).

Such attacks, as well as defenses against them, typically happen under the influence of ayahuasca, during ceremonies. This represents a conceptual challenge, as it is difficult or impossible to determine whether the subjective experience of an attack is purely hallucinatory, one's own projection of a known or subconscious disagreement between the attacker and the target, or something else. The attacks might be visual or somatic, such as seeing a dart or feeling a wound on one's body. Subjectively, such attacks may seem very real, and from the point of view of a Western mindset, a 'rational' understanding of what happened is typically difficult to achieve. For indigenous people, however, such

concepts appear unproblematic. For them, these phenomena seem to be somewhat common and real, and they rarely seem to analyze or question the concept. Conversely, from the point of view of, say, psychiatry, the phenomenon might be viewed as psychotic. Therefore, as stated in the above quote, objectivity and subjectivity may appear diffuse in this context.

An example of a 'spiritual attack'

The concept is illustrated by a case example. The case involved several ayahuasca ceremony facilitators and two sets of ceremonies, with 2.5 years between the 'spiritual attack' and its resolution. Facilitator F1 was an elder with extensive training. F2 was a close relative of F1, also with substantial training, including a one-year diet. F3, another trained facilitator, had a similar level of experience as F2. F4, a non-indigenous facilitator with training in progress, was present in the first ceremony. F2 and F3 were present in both ceremonies. In addition to these, a few additional facilitators with varying degrees of training were present in either the first or second sets of ceremonies, but not both sets. Approximately four 'helpers' taking care of practical issues and emotional support also participated in the ceremonies. The number of other attendees varied between 25 and 30. Less than five of these attendees participated in both sets of ceremonies. Participant P1, who subjectively experienced an attack in the first set of ceremonies, was also present in the second set of ceremonies.

Before the ceremony, in the first set of ceremonies in which the alleged attack happened, P1 had felt a tension between P1 and F1. P1 felt that F1 had been annoyed at P1 for at least a year because P1 had behaved in a disoriented manner, which F1 considered immature and disrespectful. On the day before the ceremony, P1 had asked F1 about a specific technique. F1 considered that the use of this technique was not recommendable for P1, likely indirectly suggesting that its use would be contraindicated or even 'forbidden' for P1. F1 appeared to consider both the question and the intent unacceptable, and responded in a somewhat annoyed manner. P1 remained oppositional to this guidance, silently persisting in the intent of utilizing the technique.

In the ceremony, P1 experienced what unconditional love would feel like. P1 assumed this was the product of F2 trying to help P1 to overcome pre-specified issues, as agreed. Later, the experience changed into generalized anxiety and a lack of trust towards everyone else except F4, with whom P1 had previously had a closer relationship. P1 experienced the situation in general and F1 in particular as threatening, and also lost trust in F2 and F3. The lack of trust emerged gradually without P1 consciously noticing it until it was fully gone. P1 also lost trust in F2, even though F2 had specifically invited P1 to the ceremony, in order to help P1 overcome the pre-specified issues.

In previous ceremonies, P1 had often felt the presence of various types of 'healing machines' that seemed to induce physical changes in P1's body, either by healing specific parts of P1's body, such as the lymphatic system, or by releasing muscle tension. In the ongoing ceremony, a 'scanning device', a drone-like flying entity, approached P1, seemingly scanning for somatic issues but eventually not performing any operations. P1 interpreted this as a lack of somatic issues in need of healing.

After a while, however, a similar device approached P1, this time with a different and wholly unexpected, seemingly hostile intent. P1 was taken by surprise. The hostile device suddenly tried to attack P1, and while P1 was able to barely deflect the attack, P1 became 'scared to death', assuming a lethal intent. P1 tried a couple of methods for making the attacker disappear, but to no avail. P1 opened the eyes and while the 'attack drone' disappeared, the emotional state of severe shock remained.

Until this point, P1 had felt little effect from ayahuasca. In order to alleviate the shock, P1 tried to join the other participants in dancing in a circle in the center of the space. Due to gender segregation, P1 was not allowed to join between participants whom P1 would have trusted and did not want to join between the other participants. Subsequently, P1 escaped from indoors to outdoors to a fireplace, trying to locate a specific helper whom P1 assumed could help. P1 could not locate that helper.

P1 stayed at the outdoor fireplace for a while, staring at it, and felt a calming effect of ayahuasca emerging. P1 eventually calmed down enough to return indoors, but remained shaky. P1's mind could not figure out how to resolve the alarming emotional and somatic state. P1 resorted to leaning against a wall. Instinctively, P1's hips began to move in specific patterns, which appeared to lessen the anxiety. P1 realized that while the mind did not know what to do, the body had an instinctive way to resolve the shock, and P1 let the body proceed with the movements.

Untypically for P1, a severe, repeated purging of the contents of the stomach soon emerged. These contents appeared to P1 as something very dangerous and harmful. Eventually, as the purges stopped, P1 transported the purge further away to the forest, assuming the almost-black, untypical-looking contents of the bucket to be so lethal that they would eventually kill the tree under which P1 discharged the bucket.

Eventually, P1 was sure that nothing about the attack remained in the body, and felt relieved. However, P1 felt that it had been an extremely close call, and if the drone had touched P1 at all, P1 assumed that some lethal disease would have emerged in the near future.

Intuitively, P1 assumed that the attack had been initiated by F1, and that F2 had not been able to interfere due to being a younger relative of F1. P1 considered that there was only one person present, F1, who had both the skill and the motivation (annoyance towards P1) to pursue such an act. However, P1 was unsure whether the attack had been conscious or unconscious. P1 decided to give F1 the benefit of the doubt and refrained from protesting against F1 explicitly. P1 was also unsure about the attack's exact intention: whether it was meant to be lethal or merely educational. Maybe F1 had assumed that P1 would be able to defend against it, in which case the attack would have been intended as a necessary education or a demonstration of the possibilities, in which case P1 should have been thankful instead of irritated.

P1 also contemplated whether P1 had ever attacked someone in a similar manner, having been raised in the opposite way, that is, to refrain from defending oneself against attacks. From this perspective, the attack could have been designed to teach P1 both the importance of defense and some methods of self-defense.

After the ceremony, there was a 'sharing circle' in which each participant and facilitator was given a turn to speak, with others not allowed to interfere or comment. P1 mentioned both the experience of unconditional love and the attack, saying it had been unclear whether it had been intentional. P1 also mentioned that previously, P1 had not had the capability to recognize attacks or defend against them, but after this experience, P1 had assumedly gained this capacity. After the ceremony, F1 appeared happy and unconcerned, while F2 appeared somewhat annoyed.

In the subsequent months and years, still remembering the shock, P1 considered the attack somewhat unethical. In P1's view, it appeared disproportionate to the annoyance P1 had caused. P1 also considered it unnecessary, as P1's intentions with regard to using the technique had, according to P1, been ethical and constructive. P1 did not see why F1 would need to stop P1 from using it, much less kill P1. P1 assumed that F1 had clearly perceived P1's distrust towards F1.

The main reason for the attack, in P1's view, was that P1 could see F1's weak points related to F1's traumatic past, and this was the main objection of F1 towards P1. F1 simply did not want P1 to see F1's weaknesses. From this perspective, a lethal intent was understandable.

Regardless, P1 remained uncertain whether the attack had been some kind of a test, and if so, whether P1 had passed it; whether it had been only a random incident; or whether it had been a part of some process unknown to P1. Once, P1 attempted to contact F1 and F2 in order to inquire about the occurrence, but neither responded. P1 also attempted to contact another knowledgeable facilitator, who also failed to respond.

Once, F1 mentioned that ayahuasca had two sides: good and evil. P1 disagreed, however. Also, another facilitator in a different context had mentioned that ayahuasca in itself was neutral, and the two sides only resided in people utilizing ayahuasca. Regardless, the event reminded P1 of ayahuasca not being a plaything but a vessel of life and death: death or healing, love and war, life and death, not far from each other, both products of the same force or energy, the 'Creator', i.e., God or nature.

Despite having survived, P1 was aware of the possibility of severe harm. On one side, survival appeared as a source of pride, a proof of power. P1 had known how to resolve the attack and its consequences. Nothing was left in P1 from the attack: P1 was pure. The attack no longer mattered. P1 assumed it had not been intentional but an artifact of weakness, of loss of control, due to remnants of the past, i.e., the residual emotional traumatization of F1. Therefore, P1 forgave F1. Due to P1's personal history, P1 was also somewhat used to being a target of various kinds of near-lethal attacks. Regardless, the lack of understanding of the mechanism of the attacks constantly bothered P1, who could not let the subject go. For P1, it represented the ultimate conceptual challenge.

Vague inquiries about such attacks to people who might have had some knowledge of the subject were dismissed, with people seemingly fearful of 'getting involved with dark energies'. P1 remained unsure whether the attack had been 'real' or a projection of P1's own mind, that is, a projection of assumed negative intent, nothing to do with the actual actions of F1. P1 also wondered whether it even mattered whether it was real or not: maybe the sole intent had been to teach P1 something. P1 considered the issue extremely interesting, though. It was about the nature of reality: how to determine what was real. There appeared to be no fixed points of reference, no guidelines that applied, and no-one to ask.

Two and a half years later, P1 attended the second set of ceremonies, consisting of four ceremonies. F1 was not present in these, but F2 and F3 were. In addition, an indigenous facilitator F5 and a non-indigenous facilitator F6 were attending. Just before, P1 had eventually decided that the attack had been a projection, and the assumed lethality might have been due to some kind of self-suggestion mechanism.

In the first and second ceremony of the second set, P1 processed a severe unrelated interpersonal/intercultural ethical conflict that had emerged in the meantime during the 2.5 years. In the third ceremony, however, the issue of the attack surfaced. P1 relived the shock of the attack, including some of the physical sensations associated with it, as well as a sense of deep unfairness, a deeply insulting quality of being lethally attacked for no good reason. P1 considered that although P1 had many times been targeted by extreme anger, even violence, perpetrated by various severely traumatized people, these people could be considered *non compos mentis* while F1, due to extensive training, should have known better and refrained from such acts.

For a long time, P1 felt extensive anger towards F1, considering F1's actions unethical and unforgivable, deeply disapproving of them. Concurrently, F2, F3, and F5 stopped singing, and the performance was taken over by the non-indigenous facilitator F6, who was unrelated to the others. To P1, it appeared that the others had a too close personal connection to the issue, and the energy of everyone involved was being consumed by a joint, shared processing of the attack: its unfairness, its unavoidability (due to F1's traumatic past), and thoughts of how to resolve the consequences.

In a lengthy speech at the end of the ceremony, F2 described that the ceremony had been 'one of the most powerful and challenging they had ever facilitated' because 'spiritual attacks' sometimes happen in ceremonies and they could be very severe. F2 appeared to consider such attacks a real and common feature of ceremonies. F2 noted that the attack 'had been expected and coming for a long time'. The facilitators had intuitively expected it to emerge in this particular ceremony, and had partially prepared for it.

F2 described having felt a block in the throat that had prevented singing. For nearly half an hour, F2 had been forced to delegate singing to F6. F2 described having become very sad about this because singing to people was one of the most important things in F2's life. F2 described in length the life history of F1 which was one of extreme early trauma. P1 interpreted this as a kind of apology by F2 for F1's previous attack against P1. At the end of the ceremony, all four facilitators appeared either shaky, exhausted, somewhat angry, or confused. P1, on the other hand, considered the attack resolved, fully in the past, and all remaining issues as a private matter to be resolved between F2 and F1.

The fourth ceremony appeared uneventful. The facilitators appeared somewhat exhausted from the previous ceremony and concerned themselves with the issues of other participants. P1 independently processed the lack of physical energy. At the end of the ceremony, however, a melody written by F1, arranged and performed by one of the participants in the ceremony, triggered a deep sadness in P1, who, on an emotional and bodily level, experienced some of the emotional shocks experienced by F1 decades ago. Although P1 had already known most of the events that had happened to F1, the embodied experience deepened P1's understanding, causing P1 to retreat into solitude for a moment, feeling as if P1 had, in that instant, also been a target of the same type of violence that F1 had been targeted with, only to a minuscule degree in comparison, yet leaving P1 shaky for an hour. This experience allowed for increased empathy towards F1.

The next day, another participant commented on F2's speech, having understood that F2 had said that F2 had been attacked in this very ceremony and that the inability to sing had been due to an attack. This confused P1, who began to doubt whether P1's understanding of the meaning of the ceremony, i.e., predominantly a healing and an apology for the previous attack on P1, had been incorrect. P1 began to wonder whether P1's deep disapproval of F1 had been represented to F2 as an attack from P1. Eventually, P1 decided it was probably the case, which meant that F2 had likely perceived P1's disapproval and anger as an attack.

Having adopted the idea of interpreting all interpersonal conflicts in general as 'attacks', P1 considered that the unrelated conflict that had emerged during the 2.5 years and that P1 had processed in the first two ceremonies of the second set could be conceptualized as a diffuse, 'slow attack'. In this case, the aggressor was the whole collective history of a specific nation.

Before experiencing that 'slow attack', P1 was assumed to have gained the capacity to recognize and defend against attacks. P1 realized that the skill had been limited to recognizing and defending against clear, sudden attacks. The slow attack had been of a different kind, like a gradually thickening fog that eventually obscured vision. P1 considered that this slow, diffuse, extremely powerful attack, detected too late, had actually succeeded in wounding P1.

It remained unclear to P1 how to interpret F2's words. P1 asked F2 for a clarification of F2's understanding of what had happened in the ceremony, but F2 did not respond. Eventually, F6 answered P1, saying that the facilitators had discussed the ceremony afterwards. They had come to the conclusion that F2's difficulties were not due to an attack on F2 but simply due to 'dense energies'. In F6's view, attacks represented 'profound distortions of relationships between facilitators' in cases where their deep wounds were involved, and the motivation for such attacks were conflicts of power. The drone could have been an archetypal representation of an aggressor's disapproval of P1. According to F6, one could not understand intellectually an experience that belonged to a different realm of understanding, and truth could only be found in 'what the heart has examined itself in the silence of knowing', and the correct way forward was to 'stay still and observe'.

Discussion

The extreme sensitization caused by long-term plant diets is said to enable the facilitators to be able to feel the emotional states of the participants in their own bodies at will. Also, in the hypersensitized state, the emotional state of one person often 'spreads' to another, especially if the recipient is unaware of such a phenomenon happening, or is unable to overpower the energy of the source. Therefore, it appears natural that the disapproval and anger felt by P1 could have been strongly felt by F2, who could subsequently have felt strong compassion towards both F1 and P1, therefore becoming severely conflicted, as well as feeling indirect guilt due to the previous actions of F1.

Beyer has noted that 'the difference between being a healer and a sorcerer lies in the exercise of self-control' (Maher, 2009). According to him, an apprentice receives magical objects from their teacher. Some of these objects are said to be autonomous pathogenic entities, 'sometimes with their own needs and desires, including a desire to kill'. The healer is able to control these objects 'only by discipline and self-denial'. In his book, Beyer notes that momentary lapses of concentration combined with negative affect may lead to unintentional acts of aggression (Beyer, 2009).

The concept of an attack could also be used as a more general alternative explanatory framework. For example, let us consider a person who is in an abusive relationship and suffers from violent actions of a partner who has, say, a 'personality disorder'. An alternative interpretation of the situation might be that the person is being targeted by an attack by not only the partner but also the ancestors of the partner, i.e., the whole family history of the partner. As another example, a person facing structural violence in a society could be considered to be suffering from an attack by the whole traumatic history of that society. Ancestor-related themes are also typically present in family constellations therapy which partially originates from South African tribal conflict resolution practices (Cohen, 2006).

Fotiou, an anthropologist who had worked in Peru noted that 'sorcery has been particularly challenging for me to understand; indeed, no amount of graduate seminars could have prepared me for my experiences with the topic' (Fotiou, 2010). She said that Amazonian ayahuasca users tend to interpret any negative experiences during ceremonies as attacks, while more individualistic Westerners tend to interpret these experiences as part of their own psychic processes. Yet, she noted, Western shamanic apprentices often appeared to integrate the concepts of sorcery and shamanic warfare into their worldview. Fotiou added that while stories of sorcery were initially easy to dismiss as fabrications, when she became directly involved in sorcery cases, they were impossible to ignore. According to her, sorcery emerged from inequality, reflecting competition for power and resources.

Fotiou described a personal negative experience in a ceremony, consisting of 'gory scenes, accompanied by a feeling of malevolence that I was sure was not my own . . . visions of bloody limbs around me appeared as I experienced an unexplained anger toward the shaman'. Fotiou had ignored the event because she had not considered that someone else could influence her experiences in a ceremony. Later, another shaman explained 'shamanic warfare' which Fotiou interpreted as 'good old-fashioned competitiveness'. Another shaman also claimed that the first shaman had placed a harmful object in Fotiou's body. The description of this object matched what the first shaman had previously asked Fotiou to imagine putting in her body.

Ensuring the 'realness' of one's direct experience is directly related to the concept of psychosis. A significant experience, such as an attack perceived as lethal, may be destabilizing, and require significant mental or physical energy to handle. The uncertainty of the realness of such an event adds an additional layer of complexity. The attack was perhaps experienced as 'embodied' in the sense that its consequences to the person's physiology were real, but the person could not be sure whether the event was 'real' in the cognitive sense. In other words, such an attack could traumatize (induce PTSD) in the target, but one could not know whether it 'really happened'.

In the event that these attacks were considered imaginary, it could be concluded that, likely due to the experience-amplifying effect of psychedelics, a person could self-traumatize oneself solely by imagining negative events. However, these 'imagined' events would most likely be based on the individual's life history, such as past interpersonal conflicts.

Fotiou discussed 'the key to all this to be power', i.e., energy, commenting that shamanism is especially concerned with the manipulation of energy and power (here, it might be appropriate to clarify these two concepts by defining energy as the ability to cause change, and power as the rate at which energy is transmitted).

Rodd investigated sorcery accusations among the Piaroa people of southern Venezuela (Rodd, 2006). He described the resolution of a sorcery case as a process of navigating a negative affect arising from social conflict. The reason for the negative affect or difficulties in life was typically unclear, and the role of a 'shaman' was to pursue a discovery in order to clarify which parties were involved in it and what the conflict was about exactly. The role of plant medicine in inducing heightened perception and empathy was central to the first stage of the discovery process based on observation of the social setting (Rodd, 2008). The second part consisted of inducing psychedelic visions based on the previously acquired information. These visions could be interpreted as summaries of the previously collected data. This summary and any conclusions drawn from it were communicated back to the targets of the sorcery and used to alter the emotional/interpersonal dynamics of that social setting. According to Rodd, Piaroa shamanism is 'a practice for understanding energy flows among systems; the self, human communities, the ecosystem, and the cosmos' (Rodd, 2006).

As an example, Rodd described a case in which a family was suffering from unclear misfortunes, stagnation of emotional development, and infertility. After a lengthy observation of the family and discussions with its members, during which the shaman utilized a hypersensitive state induced by plant medicines, the shaman concluded that the issue was related to a man who had previously asked to marry one of the daughters of the family. As the daughter had refused the man, he was then assumed to have performed retributive actions towards the family, causing the misfortunes. The shaman subsequently cleared each member of the family from the consequences of the attack, convincing them that the issue had been resolved. In its essence, this practice resembled systemic family therapy, social work, or the clarification and enforcement of personal and family boundaries. In the psychoanalytic framework, the process could be seen as making subconscious family processes conscious in order to transform them.

Both in the present case and in Rodd's example, the perspective on the issue was one-sided: that of the assumed targets. The perspectives and opinions of the assumed attackers were absent. This lack of information is the main source of uncertainty in the social construction of 'reality', i.e., what happened, in these two examples. In this sense, the present case illustrates the consensus nature of the 'truth'. In the presence of excessive uncertainty, if knowledge of the point of view of the other party could be obtained, the final decision of what happened would likely be based on a consensus of the points of view of the two parties. Depending on the amount of detail agreed upon, the parties could construct a shared view of what had occurred, that is, a shared 'history' of events. This could also be seen as 'convergence of evidence', with the evidence being a collection of subjective interpretations.

Because the objects for proposed correspondence relations would exist solely as intra-psyche mental representations of individuals and pointers to them could not be shared (although there are anecdotal examples of shared visions during ayahuasca ceremonies), correspondence-based naive epistemological theories appear unsuitable for addressing these kinds of issues. In general, almost by definition, psychedelic visions appear to be outside the scope of conventional theories of truth, on which, in any case, no consensus exists.

Rodd presented an epistemological model utilized by the Piara to translate knowledge derived from the integrative mode of consciousness (more commonly referred to as altered states of consciousness), induced primarily through the consumption of plant hallucinogens, to practical effect during waking life (Rodd, 2003). Psychedelics were said to facilitate entry into 'a realm of potentially infinite understanding of past, current, and future ecological, social, and individual situations'. The level of access depended on acquired skill, i.e., on specific 'technologies of consciousness'. Apparently, the model consisted of a collection of archetypal patterns, which the shaman matched to the psychedelic visions related to the current subject of analysis. These patterns indicated suitable courses of action, i.e., how the current situation could be transformed into a more desirable one. The patterns were stored in the collective memory of the society as songs. As the phenomena described by these patterns were considered 'non-linear, non-discursive, and non-linguistic', the contents of the patterns were difficult to verbalize. Subsequently, the epistemological model was also non-linguistic and embodied, requiring the inclusion of a model of the autonomous nervous system. The use of psychedelic plant medicines was seen as a pre-requirement for proper processing of this information (proper thinking). However, one was supposed to visit the world of visions only shortly; otherwise, one was to risk 'losing their mind'. One needed to maintain 'a proper balance between seeing and doing'.

With regard to the mention of ayahuasca possessing 'two sides', Greene stated that 'the power source is raw, socially unformed, and thus ambivalent. Its moral and political (that is, social) direction is determined by the moral and political action of the social (shaman) or antisocial (sorcerer) agent' (Fotiou, 2010; Greene, 1998). What is this power (i.e., energy), then? In general, it would simply appear to be *agency*. This agency implies the capability to make an impact on one's environment, as well as resilience. It also implies self-confidence and assertiveness, which in turn translate to interpersonal influence. In the Western context, wealth and the capability to generate it may serve the same purpose. Perhaps ironically, by causing inequality and envy, agency also contains the seed for its own demise. That is because agency causes opposition, one form of which is sorcery.

In the end, it appears that the described kind of 'sorcery' is qualitatively no different from, say, pharmaceutical companies fighting for profits using abusive practices (Kontoghiorghes, 2021). In its essence, it is simply the unethical enforcement of agency (agency being the capacity to exert energy) in some cultural context. The involvement of psychedelics, as well as general difficulties understanding the very different cosmology of the Amazonian indigenous cultures, obscure its phenotype in Amazonian culture. In a legal context, for example, the sorcery-like nature of a business operation could be obfuscated by utilizing complicated legalese and off-shore company structures to make it incomprehensible for laypeople, as well as making the operation and its consequences difficult to prevent or undo. Regardless, sorcery appears as unethical competitive behavior, fundamentally no different from similar phenomena in non-psychedelic and non-indigenous contexts.

Wilber has proposed three broad stages of mental development: the pre-personal (children, psychotic people), personal (the 'everyday' developmental stage, or the level of the 'ego'), and transpersonal (the stage related to psychedelic experiences, transcending the ego, or 'oneness') (Kaspro and Scotton, 1999). While business competition takes place on the 'personal,' 'ego-driven,' and primarily reductionistic level, ayahuasca sorcery takes place on the transpersonal level. Whatever the exact differences between the emerging mental phenomena on these two levels are, the concept of energy and the principles governing its acquisition and use presumably remain the same.

Conclusions

In the absence of better hypotheses, consistent with Rodd's theory of sorcery as navigation of a negative affect, 'spiritual attacks' could be conceptualized as representations of deep disagreements between two parties. Under the influence of hallucinatory substances, these disagreements may be perceived as 'attacks', with context-dependent subjective representations of the negative affect (e.g., featuring 'darts', 'drones', or any other weapons). Such attacks may be conscious or unconscious in their nature.

If these attacks are assumed to be intentional, such attack sorcery could be conceptualized as unethical enforcement of personal agency in a specific cultural context. In contrast, sorcery with a healing intent, or healing sorcery, could

be compared to psychotherapy, family therapy, or social work. In this use case, use of the term 'sorcery' would indicate the unexplainable nature of the act (for the target), i.e., the lack of knowledge of the mechanism of action.

'Defenses' against attack sorcery may consist of conscious or unconscious techniques that aim at preserving the emotional and somatic stability of the target. In the case of an attacker and target participating in the same ceremony, an attack may be induced by singing or by the attacker being in a specific emotional state. The subjectively perceived lethality remains an open question but may be related to mechanisms of self-suggestion.

Even for extensively trained ceremony facilitators, determining whether a stressful event was a 'spiritual attack' eventually came down to interpersonal agreement or interpretation. Thus, the conceptual frameworks used in such ceremony contexts appeared open-ended and adaptable, and truth was necessarily subjective.

Authors' contributions: The author was responsible for all aspects of the manuscript.

Funding: This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Availability of data and materials: Due to the protection of anonymity, the materials are not available.

Competing interests: The author declares that he has no competing interests.

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