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Moving beyond a figurative psychedelic literacy: Metaphors of psychiatric symptoms in ayahuasca narratives

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ABSTRACT

Metaphors, analogies, and similes commonly appear in narratives of drinking the potent psychedelic "ayahuasca", presenting an intriguing transcultural pattern. Based upon survey and field research at an ayahuasca healing center in Pucallpa, Peru, the article investigates conceptual metaphors in narratives of ayahuasca experiences made by the visiting international guests. Bodily metaphors and visionary analogies frequently appear in narrative plots where they can express the reappraisal, overcoming, and sometimes emboldening of symptoms diagnosed by psychiatry. Moving beyond the literal-figurative divide, the article explores the intrinsic "metaphoricity" of psychedelic experiences and advocates for a literacy of conceptual metaphors regarding both clinical and non-clinical psychedelic narratives. Developing this literacy can broaden approaches in psychedelic psychiatry that analyze and treat syndromes and disorders, while also being applicable to social science and humanities research that examine psychoactive drug use beyond medical frameworks.

1. Introduction

The recent resurgence of the medicinal use of psychedelic substances-whether in clinical settings or wellness retreats-represents a controversial intervention in psychiatric reasoning and treatment (Anderson, 2012; Johnson, 2018). Alterations in consciousness induced by psychedelic substances were historically termed pathological by mainstream psychiatry (Dyck, 2008:32; Hartogsohn, 2020), a view that is increasingly changing in recent years with a surge of clinical studies showing promise in combining the substances with existing mental health treatments for a range of psychiatric disorders (Luoma et al., 2020; Nichols, 2016) and brain studies suggesting therapeutic mechanisms at the neuropharmacological level (Carhart-Harris, 2018; Johnson et al., 2019). The adjunctive approach involves combining a careful and supportive use of psychedelics with aftercare services that emphasize narrative making, such as psychotherapy. In parallel, yet beyond allopathic clinics, a burgeoning psychedelic wellness milieu has emerged offering commercial healing services. Both university clinics and private wellness retreats often place a special emphasis on the need for people to create narratives about their own psychedelic experiences. Patient narrative making has emerged as a core practice of many psychedelic therapies.

The narratives people construct about the effects of psychedelic

compounds can possibly help to drive the effects in different directions. Psychedelic experiences are highly modulated by context (Carhart-Harris and Nutt, 2017; Hartogsohn, 2017; Perkins et al., 2021) and cultural and social background (Wallace, 1959; Gearin and Calavia Saez, 2021; Hartogsohn, 2020; Dupuis, 2020). Ingestion of the substances may occasion mystical absorption and ego dissolution (Griffiths et al., 2008; Nour et al., 2016; Richards, 2016) altered bodily perception, visions, and synesthesia (Gearin and Calavia Saez, 2021; Hintzen and Passie, 2010) imagery of faces, entities, and worlds which are often ascribed spiritual and metaphysical identities, whether symbolic depths, godly realms, or other dimensions (Shanon, 2002; Luna and Amaringo, 1999; Letheby, 2021) catharsis, high-anxiety, and psychological relief (Riba et al., 2006; Belser et al., 2017; Gearin and Labate, 2018) heightened perceptions of meaningfulness (Shanon, 2002; Hartogsohn, 2018) social and ecological connectedness (Roseman et al., 2021; Roseman and Karkabi, 2021) and different political and moral perspectives (Taussig, 1987; Langlitz et al., 2021; Pace and Devenot, 2021; Earp, 2018). The high dose experiences are described as awe-inspiring and ineffable in their enigmatic transcendence of language (Shanon, 2002; Richards, 2016; Harris, 2019). The problems which the experiences pose to language have not diminished the major role of narrative making in the global resurgence in psychedelic medicine. The need to make sense of experiences that resist ordinary discourse and language brings a special

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flexibility to strategies of narrating psychedelic experiences.

Narrating psychedelic experiences is central to the therapeutic process and goal of "integration" (Bathje et al., 2022; Earleywine et al., 2022). However, the term "integration" lacks a clear definition in the context of psychedelic therapies and research. It refers to a range of different ideas and techniques, including the consolidation of insights, perceptions, attitudes, and moods from psychedelic experiences into daily life. Patients and enthusiasts aim to positively inspire different kinds of changes in light of their psychedelic experiences, including therapeutic, social, artistic, and vocational changes. Such quests may involve behavioral, existential, and ontological shifts. An exploratory, internet survey study of psychedelic experience narratives suggested the substances could help "catalyse adaptive shifts in developmental trajectories by tapping into fundamental components of narrative selfhood" (Amada et al., 2020). Whether at university-based psychedelic clinics or at the hundreds of Indigenous Amazonian wellness retreats serving global markets, participant narrative making has taken a major position. It represents perhaps the most common "integration" modality of psychedelic medicine use. In addition to the task of categorizing and defining what psychedelic integration seemingly is (Gearin and Labate, 2018:191; Earleywine et al., 2022; Bathje et al., 2022) there is a need to better understand the narrative and literary strategies that patients and others employ to make sense of their psychedelic experiences.

This study seeks to explore the role of metaphor and analogy in narratives of ayahuasca experiences made by international visitors at a Shipibo wellness retreat in the Peruvian Amazon. Ayahuasca is a psychoactive brew which originated from Indigenous Amazonia and is typically made from boiling the tryptamine-rich shrub Psychotria viridis with the liana Banisteriopsis caapi (Bouso et al., 2021). It can inspire a wide range of temporary and dramatic changes to experience and brain function, resembling the effects of classic psychedelics (De Araujo et al., 2012; Nichols, 2016. The brew contains active levels of N,N-Dimethyltryptamine - a potent psychedelic molecule endogenous to the human body (Smythies et al., 1979) – plus β -carbolines and other constituents which may contribute to its purgative and vomiting action. Such bodily and healing processes are related to different dietary practices and behavioral taboos which accompany ayahuasca drinking in Indigenous and non-Indigenous contexts (Fotiou and Gearin, 2019; Gonzalez et al., 2021; O'Shaughnessy and Berlowitz, 2021; Gearin and Labate, 2018). Ayahuasca has a long history of autochthonous use across Northwest Amazonia for healing and social welfare (Dobkin de Rios, 1972; Harris, 2019) identity and group cohesiveness (Gow, 1996; Calavia Sáez, 2011) and conviviality and seasonal festivities (Spruce and Wallace, 1908; Brabec de Mori, 2012). Ayahuasca has expanded globally during the second half of the 20th century among syncretic Brazilian churches (Labate and MacRae, 2010) and a burgeoning wellness and spirituality industry, particularly across South America, Europe, North America, and Australia, but also Asia and Africa (Tupper, 2009; Labate et al., 2017; Luna and White, 2016; Talin and Sanabria, 2017; Gearin, 2023a). Remote cities in rainforest areas in Peru represent something of a tourist mecca for patients and global enthusiasts seeking curing from Indigenous ayahuasca specialists (Brabec de Mori, 2014; Fotiou and Gearin, 2019; Gearin, 2022; Peluso and Alexiades, 2006; Shepard, 2014).

The phenomenological effects of ayahuasca provide a rich terrain for metaphorical thinking. Like other psychedelics, ayahuasca drinking can inspire wondrous kinds of synesthesia. Amazonian shamans, well aware of the synesthetic effects of ayahuasca, have intentionally modulated the patient's vision through song (Shepard, 2014). Psychologist Benny Shanon suggested synesthesia is actually the sensory counterpart to metaphor (Shanon, 2002:337); (see also Fortier, 2017). Metaphor and music may assist in immersing people into visionary psychedelic worlds and also in describing the indescribable attributes of such worlds. Considering the ineffable heights of mystical or unitive experiences induced by psychedelics or other means, Roland Fischer suggested without elaboration that "the only way to communicate its intensity is the metaphor" (1971:902). Lawrence Fischman (2019) briefly suggested

psychedelic ego dissolution experiences are rich in symbolic and metaphorical meaning useful to psychoanalysis. Advocating combining psychedelic use with third-wave cognitive behavioral therapies, David Yaden and colleagues (2022:13)suggested "the use of metaphor and experiential exercises is a way of helping [patients] to integrate an experience that is beyond words using therapeutic approaches that are also meant to go beyond words". Rosalind Watts and Jason Luoma (2020:98) describe employing techniques of metaphor in guided meditation activities for patients prior to a psychedelic therapy session.

The pioneering psychedelic psychiatrist, Stanislav Grof, conducted approximately 4500 LSD therapy sessions between 1956 and 1967 (Grof, 1980). Grof suggested that psychedelic experiences were symbolic representations of the birthing process, and he used the metaphor of sequential "perinatal matrices" to map the affective and sensory experiences of LSD consumption. Through this process, Grof's patients learned to describe, paint, and embody their psychedelic experiences. Such experiences included elaborate multisensory encounters with the constriction of a cosmic womb and eventual birth into a new or renewed self. Serving as psychedelic "midwives", Grofian trained therapists sought to heal patients through helping them to encounter painful memories of birth trauma in combination with fetal and neonatal experiences of bliss and oceanic connectedness. Grofian therapists sometimes allocated metaphorical status, at other times, literal status to the rebirthing experiences (Kline, 2020:81). This historical example shows how metaphors can shape psychedelic experiences through providing elaborate frameworks for patient experiences and narratives.

Conceptual metaphor has been used in psychedelic research to help generate and communicate therapeutic frameworks and theories. In the 1950s and 60s, psychedelic experiences were examined as an expanded Mind at Large (Huxley, 2009) and catalysts of ego death and rebirth (Leary et al., 1964), to name a few. In recent scholarship, experiences of taking psychedelics have been termed with metaphors of plant teachers (Tupper, 2014) oyster fishing (Watts and Luoma, 2020) containment (Noorani, 2021) and microclimates (Hartogsohn, 2022) by researchers aiming to elucidate different aspects. This scholarly use of metaphor reflects William James's wide approach when he claimed "all knowledge, including science, is ultimately based on finding an appropriate enlightening comparison or metaphor" (cited in Leary, 1992; see also Tambiah, 1985:60). Considering this wider view, there is a need to extend the analysis of metaphor to descriptions that patients and others employ when seeking to make meaning about their psychedelic experiences.

Despite an inherent "metaphoricity" of psychedelic experiences (Shanon, 2002:335) the role of metaphor has been largely overlooked in research on psychedelic therapies, which is somewhat puzzling. This lack of research may be partially explained by the common association between metaphor and fancifulness. Referring to someone's psychedelic experience as figurative or "just metaphors" could devalue it and even offend the person, especially if they interpret the contents of the experience literally. A participant in psychiatrist Rick Strassman's clinical trial in the United States, who received a moderate dose of the ayahuasca-based molecule DMT, described an experience of visions and "alien worlds" which he argued were:

not at all a metaphor. It's an independent, constant reality ... It's not like some kind of drug. It's more like an experience of a new technology than a drug ... It's not a hallucination, but an observation. When I'm there, I'm not intoxicated. I'm lucid and sober. (Strassman, 2001:195)

Resistance towards ascribing metaphorical status to psychedelic experiences appears to be shared by many ayahuasca drinkers in the United States, Europe, Australia, and elsewhere. It is arguably part of wider social issues and debates on the validity, legitimacy, and value of psychedelic experiences in societies. For some, marking a psychedelic vision a metaphor is an ontological offense akin to treating a sober memory like it was a fairy tale or fiction.

Yet, metaphor can also do important therapeutic work. Ascribing metaphorical status to a psychedelic vision of a "false memory" could help to redirect or contextualize the patient's interpretation away from harmful psychological and relational views. In such cases, the difference between the literal and the figurative imparts a way to promote or diminish the meaning of different aspects of the psychedelic experiences. It introduces a malleability in therapeutic discourse and phenomenological experience. But deciding what is figurative and what is literal is a complex affair with relevance to patient ethics and the ontological responsibility of the carer.

Cultivating a literacy of conceptual metaphor can improve the narrative competencies of psychedelic therapists. Taking a broader view of metaphor than everyday uses of the term, conceptual metaphor theory recognises structural relationships between language and *thought* itself (Lakoff and Johnson, 1980). As such, metaphor can be defined as "a pervasive mode of understanding by which we project patterns from one domain of experience in order to structure another domain of a different kind" (Lakoff and Johnson, 1980). Metaphorical thinking is not just an ornament use of language, but rather is foundational to thinking processes in scientific practice, political rhetoric, and everyday life. As Lakoff and Johnson emphasize, "Metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (1980:3).

The human body is the most common source domain for metaphorical thinking across societies and cultural worlds (Kimmel, 2014:280-81; Lakoff and Johnson, 1980). Bodily parts and liquids, along with biological organs and systems, have provided an enduring basis for similes, metaphors, and analogies that embody cultural values, social hierarchies, and moral relations (Classen, 1997; Howes, 1991; Jackson, 2006). Laurence Kirmayer (2008) illustrated how the sensations of bodily pain are elaborated with diverse metaphors and sensorimotor models across varied cultural traditions. The metaphor of balance among Anlo-Ewe-speaking people in south-eastern Ghana was used to describe a bodily technique and central value of what it means to be human, moral, healthy, and dignified (Geurts, 2002). In Euro-American contexts, the movement, posture, and orientation of bodies are prominent in metaphors of mental and physical health (Lakoff and Johnson, 1980:15). Examples include falling ill, feeling down, or under the weather for sickness, and back on your feet, things are looking up, or bounced back for healing.

Psychiatric disorders often involve bodily symptoms that vary across social and cultural worlds, making it challenging to find a common language to describe them. Metaphorical thinking has been critiqued in psychiatry, as it can reduce the reality of bodily experience to the detachment of figurative language. When clinicians label the bodily expression of depression in China as metaphors and idioms, it can cast these experiences as less genuine. In such an approach, a literal psychiatric meaning may erase important aspects of lived experience. Pointing to the wide evidence for bodily symptoms of depression across humanity-such as a heavy, sunken, or sad heart- Lee, Kleinman, and Kleinman argued (Lee et al., 2007:5) that "clinicians should view these expressions as windows that cast light on the deep sensibilities, personal and cultural, of being depressed" and not as metaphors or idioms of a definition of depression that reflects Western patient descriptions. The use of metaphor as cultural translation can lead to orientalist and primitivist fantasies, as seen in the past pathologizing of shamanism as a metaphor for schizophrenia (Noll, 1983) or a savior of modern urban problems (Cesarino in Labate, 2013:7). But the notion of conceptual metaphor and its transcendent analytical position beyond the literal/figurative divide can provide an epistemological bridge across cultural contexts and domains. Analyzing the interplay between psychedelic use, narrative making, and conceptual metaphor can help take Indigenous and non-clinical healing practices seriously, providing a more objective understanding of psychedelic medicine practices.

The study aims to disclose important processes of narrative and

meaning making in psychedelic therapies. I set out to investigate the significance and diversity of conceptual metaphors in narratives of ayahuasca drinking at a Shipibo retreat center in Peru. Through a mixed-methods approach, I examined an internet survey completed by international guests of the retreat center in combination with ethnographic and semi-structured interview data. As detailed below, many participants in the research described seeking ayahuasca to help overcome specific psychiatric disorders. Conceptual metaphors in ayahuasca narratives illustrate how aspects of the ayahuasca experiences resembled, reappraised, and sometimes emboldened symptoms of psychiatric diagnoses.

2. Materials and methods

2.1. Research population and ayahuasca retreats

The data used in this article was collected in 2019 through an online survey and semi-structured interviews with international participants at a popular ayahuasca healing center near Pucallpa, Peru. I term the center with the pseudonym "The Temple". Forty-three previous participants of The Temple consented to completing a qualitative online survey sent from The Temple email address. Eleven guests were interviewed at the center itself. Presented in order of most common, the surveyed and interviewed participants registered their country of origin as: The Netherlands, France, United Kingdom, Germany, Poland, United States, Canada, Australia, South Africa, India, Mexico, Singapore, Japan, and Iran. The mean age was 39 (ranged between 22 and 63). For gender, 28 participants identified as male, 24 as female, and 2 chose not to say. The mean annual income of the survey participants was \$38,000 USD. Occupations varied with a trend towards healthcare, mental health services, and alternative therapies, but also included marketing, banking, hospitality, academia, and the arts. Most of the participants were new to drinking ayahuasca and had consumed the brew less than ten times. The main reported "intention" for attending the retreats was to achieve healing and psychospiritual growth. 41 of 43 survey participants answered "yes" to the question: "Has ayahuasca healed or has ayahuasca been healing anything in your life?". The most common description of healing benefits included obtaining an increased selfconfidence; less anxiety and a greater ability to deal with stress; processing trauma and troubling past experiences; relief from depression; overcoming alcohol dependence and other addictions; overcoming trauma; improving interpersonal relationships; and gaining purpose and stronger life goals. Even though 41 of 43 survey respondents indicated gaining healing benefits, some of them expressed uncertainty towards these benefits, which included the view that the retreat initiated a longer process of healing that was ongoing. The study population reflects a larger international milieu of ayahuasca drinkers in urban centers in Europe, North America, Australia, and South America (Labate et al., 2017; Labate and Cavnar, 2014). Yet, the survey respondents overwhelmingly indicated a preference to drink ayahuasca in ceremonies with Indigenous specialists rather than non-Indigenous specialists. Indigenous settings were perceived as more authentic given common views about a wide and long historical use of the brew in the Peruvian Amazon.

Although the conceptual metaphors of the Shipibo healers at The Temple are not addressed in this article, it is important to briefly introduce the context. The ayahuasca drinking ceremonies at the retreats represent a new style of Shipibo healing directed at the global neoshamanic, New Age, and wellness markets (Brabec de Mori, 2014; Fotiou, 2020; Gearin, 2022) and which contrast to shamanistic kinds of Shipibo practice directed at local populations (Brabec de Mori, 2012; Illius, 1992). Four of the healers at The Temple had previously worked for low wages in farming before joining the ayahuasca tourism economy. Two were Spanish and Shipibo language teachers. Some of the healers also provided regular curative services to local Shipibo populations. The healers each drink ayahuasca approximately 130 nights per year to

perform curative services for mainly the international clients, which involve larger group ceremonies compared to a more "consultation" approach for locals.

This study complied with the principles of "informed consent" and was conducted with voluntary participants who gave written consent and knew that they could leave the investigation at any time if they so desired. All participants' names in the article have been anonymised to ensure privacy. The data collection for this article was supported by the Xiamen University, Fundamental Research Fund (20720181008).

2.2. Online survey, in-depth interviews, and participant observation

The analysis presented here is based on data acquired from three kinds of methods. An online survey was completed by 43 previous participants of The Temple. It consisted of 42 questions (see Appendix 1). Survey respondents received an email from the Temple email address inviting them to complete the survey. The survey and interview questions covered a range of themes, including participant: 1) background 2) reason and intentions to drink ayahuasca 3) experience preparing to drinking ayahuasca 4) experiential aspects of drinking ayahuasca 5) specific bodily and sensory experiences drinking ayahuasca 6) perceived benefits and risks of avahuasca 7) challenges and successes "integrating" back into daily life after the retreat. The semi-structured interviews were conducted with 11 participants who attended ayahuasca drinking ceremonies at the Temple retreat. They were undertaken privately and individually at the Temple during the winter of 2019, sometimes in the ceremonial maloca, other times in the garden area of the retreat space. The interviews were semi-structured and conducted in English, an approach which allowed for dialogue and the interviewer to express his thoughts and views too.

The author undertook participant observation methods at The Temple and the wider Pucallpa area for 4 months during the winter of 2019. This included participating in 4 retreat packages involving 26 ayahuasca ceremonies in total at The Temple. The retreat packages included other group activities, including flower baths, sharing circles, meditation, yoga, art workshops, nature walks and boat rides, rapé ceremonies, and Shipibo history and culture talks. Fieldnotes were taken and coded. Retreat packages included 7-day and 12-day options and cost \$1050 and \$1750 USD respectively.

2.3. Data analysis

Telling stories about personal psychedelic experiences and healing trajectories is ritualized into psychedelic wellness retreat programs, including at The Temple. Therefore, the invitation to narrate such personal stories in a research survey taps into organic cultural practices. The data which proved particularly useful to analyzing analogical and conceptual metaphor structures in the guests' narratives about ayahuasca healing included their descriptions about: 1) their background and intention to drinking ayahuasca 2) their personal experiences of visions and purging during the ayahuasca drinking ceremonies, and 3) their challenges and successes in "integrating" the lessons of the ceremony experiences in their daily lives after the retreats. The most qualitatively dense and longest responses were to questions which asked the participants to describe aspects of their personal ayahuasca experiences.

Thematic analysis of the data was undertaken. Expressions were analyzed and coded into the main types and themes of conceptual metaphors employed in the ayahuasca narratives. A focus was placed upon bodily and sensory experience, because this was a frequent shared source domain whereas the respective target domains of the metaphors varied considerably. This analysis produced a distinction between two kinds of conceptual metaphor that I term "metaphor-type" and "metaphor proper" expressions. Metaphor-type refers to how a metaphor-like patterning of meaning across disparate domains occurs where the person narrating does not imply a materialist "literal" over a spiritual

"figurative" (see also Gearin, 2023b). As noted above, plenty of literal meanings are patterned by metaphor-like semiotic structures. When spiritual conceptions of ayahuasca visions are described literally but still share a semiotic "twist" or structure of metaphor, I employ the notion of metaphor-type. See Table 1 for an overview of the common types of conceptual metaphors I identified in the ayahuasca narratives, accompanied by examples of metaphor-type (literal) and metaphor proper (figurative) expressions.

3. Results

The combined data on participant motivations and intentions to drink ayahuasca gathered in the online survey and semi-structured interviews presented several themes. Many participants described drinking ayahuasca to try to heal or overcome a psychiatric disorder. Importantly, 65% (or 28) of the survey respondents mentioned at least one psychiatric disorder they hoped to cure at the ayahuasca center. Before guests arrive at an international ayahuasca healing retreat whether in Europe, China, or Amazonia—they have already been asked by the organizers to develop a concise "intention" for why they are visiting the healing center. The most common psychiatric disorders which participants acknowledged in their "intentions" and wanted to cure were depressive disorders, post-traumatic stress disorder (PTSD) and trauma related disorders, and addiction and alcohol-related disorders. Participant intention discourse was not always medicalized. It also included themes of work-related issues, existential questions about purpose and the meaning of life, and desires for spiritual growth, equanimity, and love, to name a few. At The Temple, before the first ayahuasca drinking ceremony, the guests articulate these personal intentions to each other in dedicated group meetings or "circles". The attendee's personal intention discourse impacts their later narrative efforts and may reappear throughout the retreat, sometimes in revised form, as the person attempts to verbally make sense of their ayahuasca experiences with others listening and sharing.

Conceptual metaphors in ayahuasca healing narratives may reflect and help give tangible expression to experiences of psychiatric disorders among such populations. As illustrated below, this can be observed in some of the conceptual metaphors communicated about ayahuasca experiences. The strategies may also provide narratives with an essential coherence in long descriptions of ayahuasca experiences that include idiosyncrasies of the person and their life trajectories. They may bring coherence to narrative plots of the self which move from disorder, suffering, and affliction to healing, peace, motivation, pro-sociality and other positive attributes. They are also present in narratives when healing was not achieved or even, in some cases, when the person seemingly becomes worse after drinking ayahuasca. Following global patterns of ayahuasca use (Bouso et al., 2022) some of the survey participants described heightened distress in the weeks following an ayahuasca retreat and perceived it as a positive process of healing and psychological development.

The results below indicate how conceptual metaphors in narratives of ayahuasca experiences can reflect symptoms of psychiatric diagnoses in some general senses. Plus, case studies of individual persons are included to highlight how the participant's life contexts can relate to the conceptual metaphors they employ about their ayahuasca drinking. Some of the survey and interview responses have been slightly edited for expression without adding, reducing, or transforming their meaning, but simply to improve readability.

3.1. Trauma

A desire to heal post-traumatic stress disorder (PTSD), "personal traumas", or "childhood trauma" was a major theme in the "intentions" discourse that 33% (or 14) of the participants at The Temple described in the survey responses. Some did not describe in clear terms the specific traumatic incidents related to the stress they hoped to cure, while others

Conceptual metaphor themes and examples in narratives of ayahuasca drinking.			Key	Themes of the	Metaphor-type	Metaphor-proper	
Key conceptual metaphor	Themes of the conceptual metaphor	Metaphor-type examples (ie. literal	Metaphor-proper examples (ie. figurative	conceptual metaphor categories	conceptual metaphor categories	examples (ie. literal descriptions)	examples (ie. figurative descriptions)
categories	categories	descriptions)	descriptions)			mean, I instantly	shaman put it back
Cleansing	Purification and release of physical fluids, psychological issues, and traumatic components of the mind-body.	"I have purged many times. It starts low in my stomach and slowly creeps up until I vomit the red and black energy I no longer need." "I felt incredible pain during a ceremony. It was like having surgery in my ovaries without any painkiller. Then I purged and she [ayahuasca] healed a huge trauma of abortion I'm grateful and I learned so much through the pain." "I let the medicine	"It felt like leaving things behind, feelings and emotions I have been carrying my whole life." "The icaros [songs] had a very powerful effect on me. It was as if the icaros would penetrate deep inside me and clean me deeply, not only my body but also my emotional and astral bodies." "They say that purging is a way of cleaning. That you get rid of things that no longer serve you. If that's so, then I have lost			got relief or reward visually and confirmation by another voice than my own inner voice. It's pretty hard to explain really." "I saw how my depression looks and had to face the ugly site of it. I got stuck in a timeless situation with dark colors, only fear, a nazi-like horror. I don't know the lesson of this yet." "She [ayahuasca] taught me that I already have everything I need to create the life I desire."	together to harmonize me" "Upon returning home, I was grateful for the experience and the lessons I received, but also somewhat confused and slightly disappointed."
		sit inside of me, let the maestros do their work on me and I purged when they wanted me to because they control it anyway."	quite some stuff."	Connecting	Unity with interpersonal relations, nature and nonhumans, and the universe and cosmos.	"I was just one with all people. My girlfriend and I were actually just one." "I saw myself as a unique being connected to	"It felt at times like [the healers] were maternal and paternal Fig. I called one of the maestros 'papa' at one point because he reminded me of
Exploring	Journeys of the mind and spirit, including through landscapes, worlds, and vistas.	"I was shown a rocky landscape with a volcano. I realized I took things too seriously." "I met them [two spirits] when I entered a different space and they were talking to me about how beautiful it is there and how troubled the people from earth are when they come to this space." "Ayahuasca has helped with the grieving process, with clarifying issues and supporting me to embark on further exploration of different areas of life and different areas of stuckness."	"Shamans are the anchors and safety for my voyage. It's like being accompanied by a local when visiting a new town. They know their way around." "During the fifth ceremony, I had extreme diarrhea. I spent most of the ceremony in the bathroom. I was traveling in space while peeing out of my asshole." "I had the sense that the ordinary world is the domain of effect, and with ayahuasca I shifted over to, or nearer to, the domain of cause. How one negotiates this causal domain and its inhabitants can have real world	Awakening	Increasing awareness,	everything on earth and beyond, with the ability to spread love to all and do good. I saw myself in a blue heaven and I learned what my mission in life is." "Connection to everything and everyone. Feeling unconditional love."	my deceased father." "When I decide to participate in an ayahuasca retreat, it was like I already felt the ayahuasca spirit, it was like the spirits were helping me to follow the instructions." "Why is it so impossible for me to focus on the beautiful things in life and love myself? Instead, I feel pain and all the injustice in this world, and I feel so disconnected from everyone. I am struggling and at this point I am not sure if I should be grateful for what ayahuasca showed me." "I saw myself very happy like I was
Learning	Wisdom, insight, understanding, and ethical guidance.	"I got lessons that came visually or physically to me and once I figured out for myself what the hell this all is supposed to	consequences." "I don't really know if ayahuasca is a healer, but I consider it more like a teacher" "I felt my body was a puzzle and the		perception, and insight.	with myself and more confident with my thoughts. I can cut through the bullshit of everyday Western life more." "It was awesome.	waking up from a dream." " Altered state of consciousness, which are like waking up from a sedative half-comatose existence." ontinued on next page)

Table 1 (continued)

Table 1 (continued)

Key conceptual metaphor categories	Themes of the conceptual metaphor categories	Metaphor-type examples (ie. literal descriptions)	Metaphor-proper examples (ie. figurative descriptions)
	*		U
		open person than I was before, so I can say it brought more benefits than difficulties."	felt lighter, happier, and rejuvenated."

did explicitly describe the incidents. These included traumatic stress from childhood and adulthood sexual abuse, domestic violence, military service, and abortion or the termination of pregnancy. Although the kinds of ayahuasca experiences that this category of participants described varied considerably, there are trends which reflect a major psychiatric symptom of PTSD. Some of these participants described experiencing bodily kinds of flashbacks or repetitive and distressing images of traumatic experiences. Many described how they initially encountered such imagery and memories with resistance, avoidance, fear, or anger, but then progressively moved towards attitudes of acceptance and equanimity throughout the retreat. Some acted out aggressive, violent, and afflictive scenarios in their visionary experiences. This included narratives wherein persons and situations from the participant's past were dynamically projected onto the Shipibo healers or into the ceremonial environment. Some participants described social encounters with deceased family members in their visions, including feeling forgiveness or being forgiven, and renewing or developing new attitudes towards family members, living and dead. Others encountered, battled, befriended, or became intimate with nature spirits and other more-than-human entities.

Participants who described an intention to cure personal trauma at the ayahuasca center described the traumatic experiences as initially repressed, hidden, or lodged deep in their bodies. They explained how this repressed past was disclosed or evoked during the ayahuasca ceremonies, sometimes through somatic experiences of purging, vomiting, crying, sweating, shivering, and excessive yawning, at other times through vivid imagery, memories, and otherworldly perceptions. Purging was usually described as a curative act of cleansing, releasing, and removing trauma from the body. It was typically ascribed a positive value and was usually followed by feelings of relief and peace.

John, a 54 year old retired military veteran from Texas, USA, born to

parents with Mayan, Pipil and Spanish ancestry, decided to drink ayahuasca several years after he was discharged from serving in Iraq and diagnosed with PTSD. "I didn't like how the psychotropic treatment [of psychiatric medicine] was messing up my brain. I didn't feel under control and I felt like a Zombie. So, I decided to research where to go for an ayahuasca treatment", he explained. The Temple retreat appeared to him on an internet search engine. Referring to the eldest healer at the center, he said that "Mama Maria's ancient look made me choose this temple". In the week prior to traveling to Peru for the retreat, he stopped taking "Western medications" at his own volition. He followed the basic diet prescribed by the ayahuasca center. Several months after the retreat, he described its overall impact.

[a]yahuasca has helped me get rid of so much bad child programming. It helped to reset my mind so the horrible things that were repeating over and over are now sitting there in their respective times. My PTSD is under control, no more debilitating depression, or unexplained pains. But the most important thing that ayahuasca helped me with was to free up my feelings. I had become incapable of expressing my feelings. Since I returned from my ayahuasca retreat, I can freely tell my wife that I love her. I can actually hug my daughters and my wife with feelings. I can tell my mother that I love her. Yes, before ayahuasca, I had never told my mother that I love her.

John explained that the benefits he received from attending the center were inseparable to how he navigated the experiential challenges during the ceremonies. In the elaborate description below, memories and images of his traumatic experiences at war, along with images of family members and otherworldly scenes with animal spirits, provide the core elements of a healing narrative. Perhaps somewhat surprisingly, it involves battling the Shipibo healers in spiritual realms followed by a period of critical reflection and forgiveness towards the self.

He described ayahuasca experiences which appeared as visionary "flashbacks" and imagery of past experiences. It appears, based on his response, that these flashbacks were dynamically influencing crossmodal sensory perceptions and hijacking his visual and auditory perception of the immediate environment.

The first night I ingested ayahuasca was December 24 and there were lots of fireworks outside of the temple. Talk about special effects! Those fireworks brought me back to Iraq and a cascade of feelings and memories with it. Fear, anger, uncertainty, more fear, insecurity, and on *and on*. I felt terrified as if I was dying, so I asked the man that was taking care of us to help me. I held on to his arm as if I was falling. I felt so much fear that my heart was going to explode. But at that moment, I began to think about my youngest daughter, then I vomited and began to feel better. I laid down on my mattress and began feeling immense gratitude and love for my wife, my kids, and everyone. Someone came and helped me to sit up and one of the maestros was there waiting for me and began singing *icaros* [songs].[

In the dark, I could see the maestros as snakes slithering around the floor going from one traveler to the other. The first vision I had was of my grandmother that died when I was about 14 years old. She said that she forgives me and that she has always been with me. That made me start crying. I cried and cried like I never had before. I was crying so much that Mama Maria had to come to bring me back from my deep sorrow. It was at this point that she was in front of me and I started feeling afraid of her, because there were a lot of snakes around her, in the air, on the floor. She also looked like a big crocodile or a big snake. And at one point, she reached inside of me (to touch my soul) and I jumped back and began fighting with her. Not a physical fight, but a spiritual fight. At first, I attempted to escape by becoming a falcon. I saw the canopies of the trees. I felt the air on my feathers and could see to the left and right and saw my wings flapping in the wind. Then all the sudden I was back in front of her and

my grandmother told me "protect your soul at all cost". So, I converted myself into a beetle and put my arms in front of me. I protected my essence. She attempted to break my armour with many spells, but she couldn't. I truly felt she could have stolen my essence if I wouldn't put up a fight. Still, I don't feel any ill feelings towards her because I understand that just like a lion goes after a zebra guided by its instinct, Mama Maria was just following her instincts. [...]

Now I know that it was during these battles with Mama Maria that I saw and released much of my ill programming. I then felt energetic, full of hope, full of love, and I could clearly see the mistakes that were dragging me down. I could see very clearly that I needed to forgive myself before I could ask for forgiveness. The trip began to dissipate early in the morning and I was floating on happiness. Everyone could see that my experience had been amazing. [...]

There is more to my ayahuasca experience. What I wrote here is a synopsis.

John's long and intricate narrative of his ayahuasca experiences are replete with multiple metaphors and analogies. During his first ceremony, the fireworks in the surrounding area became analogues of his traumatic experiences at war in Iraq to the extent of evoking vivid memories and feelings. His use of the terms "as if I was falling" and "Mama Maria looked like a crocodile" involve the explicit use of figurative metaphorical language. But his sense of spiritually defending himself from Mama Maria was anything but figurative. "I truly felt she could have stolen my essence", he explained. The motif of battling with the healers reached its conclusion when he "released and saw much" of his "ill programming". The narrative twists and turns in the shamanistic battles with the healers represent a highly embodied metaphor-type experience of his traumatic experiences at war in Iraq. Yet, this time, the experience finished with a critical reflexivity and forgiveness towards the self followed by a greater perception of equanimity and happiness.

3.2. Depression

A desire to cure depression or depressive symptoms was a major theme in the intentions discourse that 39% (17) of participants at The Temple shared in the survey responses. The participants who described intentions to cure a depressive disorder at the ayahuasca retreat used a wide range of conceptual metaphors specific to their depressive experiences. A major theme of this group included descriptions of drinking avahuasca and experiencing social isolation during the ceremonies, such as floating in another dimension, feeling a vast and uncomfortable emptiness, and becoming numb and detached from the ceremony. They described how ayahuasca spirits and the Shipibo healers positively helped them "feel the love of the universe", "reconnect me", "awaken every cell in my body like a child", or "then my mother and brother joined me and I cried for hours remembering how much they love me". Another theme, which relates across many of those just mentioned, included descriptions of a lack of vitality, often defined by "traumatic blocks" in the body which may augment visionary patterns and which are treated by song and cosmic light penetrating the senses. Experiences of purging, vomiting, sweating, crying, and shaking "release" the "blocks" in the body. The process enables a vital energy they hope will enliven them against their symptoms of depression.

Mark, 48 years old at the time of the survey, is a Canadian man born to South Asian immigrant parents. He lived in Korea working as a professor of English for two decades. He had initially moved to Korea to participate in the "Korean wave" film industry in the early 2000s. After assisting to make several films, he resigned to teaching English at a Korean university. He visited The Temple to drink ayahuasca in an attempt to heal depression. He was also curious about shamanistic traditions, the ecology of the Amazon, and the wider cultural environment of the Shipibo healers. Several months after attending the retreat, he

described, using a range of metaphors, his overall experience of drinking ayahuasca. He explained that the ceremonies enabled him to "witness and be part of the healing [...] I observed how my knots unraveled and root problems resolved [...] It taught me about myself, how to correct certain distortions. It taught me how to throw a spear mentally and reach my target". The seven day retreat included four ayahuasca drinking ceremonies. He introduced four metaphors to categorize each of the ceremonies. He explained how "the 4 ceremonies were definitely structured", adding:

To outline them briefly in order: 1. Burial. 2. Birth. 3. Self-analysis. 4. Pregnancy. The first was a visual experience, dim but strangely cosy, of being in the tomb watching Easter egg patterns on the ceiling. The second was a hatching experience which I acted out rather than saw [...] The third was insight into my chief fault, given to me in a riddle I had to solve. The fourth was a strong musical sensation of wanting to give birth to an *icaro* [song] as I felt it emerging inside me.

Mark specifically elaborated upon the second ceremony in which he was "hatching". During the ayahuasca ceremony, he saw the retreat center as a giant body. The large maloca hut, where the ceremonies take place, "was a great womb, the kitchen fire-pit the stomach, and the walkway to the toilet-shower area was the birth canal". Feeling an urge to visit the toilet, he physically walked there, slowly to avoid dizziness, along the 50 m "birth canal" walkway. Once returning to the maloca, he again felt the need to urinate, but ignored it thinking it must be a false signal. The feeling persisted, so he decided to stand up and go again. This time, walking the "birth canal", he felt stronger, clearer, and more balanced. He arrived at the toilet and then unexpectedly purged, vomiting intensely into the basin. "That felt really great, a massive relief and clearing" he explained, adding that the purging was a way of "accomplishing my birth process". This, he remarked, made him ready for the following ceremony, which was a deep and critical self-analysis focused on the causes of his depression. "I was already something of an alien and anomaly among humans. Ayahuasca has helped me accept that", he shared.

During his final ceremony, which he termed "pregnancy", the feeling of a powerful energy, a ball of light, developed in his torso. This, he explained, inspired him to want to create, sing, and express himself more. The spirit of ayahuasca, which he described as a female "jungle cat" and also "an electric green dragon", placed a cosmic seed inside him to return him to his early-career passion for filmmaking. Reflecting upon integrating back into ordinary life in Korea after the retreat, he stated "The first month was great as I had new energy and direction. By the second month old habits and routines were encroaching and I've been up and down since".

Mark's descriptions of his ayahuasca experience and attempts at healing depression are replete with multiple conceptual metaphors and analogies. An overarching concept involved an experience of death and rebirth, including bodily processes of gestation and birthing. These conceptual metaphors were experienced in an embodied and perceptual sense and represent conditions by which Mark perceives himself to have reduced his depressive symptoms for approximately one month.

4. Discussion

It is crucial to clarify what these results do not necessarily imply. Demonstrating that symptoms of psychiatric diagnoses may manifest in ayahuasca experiences with increased intensity, enhancement, or alteration does not suggest that these experiences are pathological. This notion, previously termed psychomimetic or "mimicking psychotic conditions", was largely abandoned by psychedelic psychiatrists in the 1950s and 60s (Dyck, 2008; Hartogsohn, 2020). For patients, mental disorders can be oddly totalising and infiltrate many aspects of life, including ayahuasca experiences. However, the presence of psychiatric symptoms in psychedelic experiences occur among a larger frame that can underpin their therapeutic potential. Psychiatric symptoms enter a

different state of experience that can include tender moments of equanimity and clarity, healthy relational insights, and beautiful multisensory vistas. Conversely, it may also include unfathomable fears, grotesque sensory worlds, and other sources of distress. The unique ayahuasca journey each individual undertook offered a source domain for conceptual metaphors that facilitated the re-narrativization of the self and, at times, its world or broader contexts.

The sensory and bodily ayahuasca experiences of Mark and Paul ultimately defined different kinds of narratives with various therapeutic implications. Nevertheless, they all demonstrate how the attempt to heal with ayahuasca involved directing critical attention to a conceptual register that bridges the inherent metaphoricity of psychedelic experiences and the challenges and conditions of everyday life contexts.

A crucial technique for practicing integration has involved the development of new metaphors and narratives of the self that can effectively incorporate the alternate bodily and visionary experiences of ayahuasca in everyday life. Given the often ineffable nature of these experiences, crafting new narratives of the self can be challenging. Visions and purging demand decoding and unpacking to become consolidated, with narratives and metaphors opening new and old vistas and possibilities. Recognising the power of metaphor, Laurence Kirmayer explained, "Healing may occur not because a conflict is accurately represented, or even symbolically resolved, but because the metaphorization of distress gives the person room to maneuver, imaginative possibilities, behavioral options, and rhetorical supplies" (1993:195). The ayahuasca experience, particularly the bodily purging and multisensory experiences, inspire conceptual metaphors targeting aspects of everyday life that could benefit from a healthy reappraisal.

In conclusion, there is a strong rationale for fostering a literacy of conceptual metaphor in the interpretation of psychedelic healing narratives. Learning to speak and interpret the "twisted language" of ayahuasca visions has been beneficial for Amazonian ayahuasca healers (Townsley, 1993) and it can support psychedelic therapists elsewhere. Similar to how narrative medicine techniques involve clinicians developing literary competencies "to absorb, interpret, and respond to stories" shared by patients (Charon, 2001), a literacy of conceptual metaphor can enhance narrative skills for healthcare providers in psychedelic therapy. The ability to competently understand stories of suffering, illness, and disease has become an essential skill in the cultivation of empathetic and effective physicians and psychiatrists. Narrative medicine offers a framework for clinicians and patients to collaboratively "read" patient experiences like a plot, accounting for ambiguity, complexity, and mood, and ultimately helping to adjust and improve illness narratives and responses to life situations. The pervasiveness of narrative making in psychedelic therapies, combined with the inherent metaphoricity of psychedelic experiences, suggests a literacy of conceptual metaphor may not only support patients, but also enrich the lives of healthy enthusiasts who consume psychedelics.

Data availability

The data that has been used is confidential.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.socscimed.2023.116171.

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