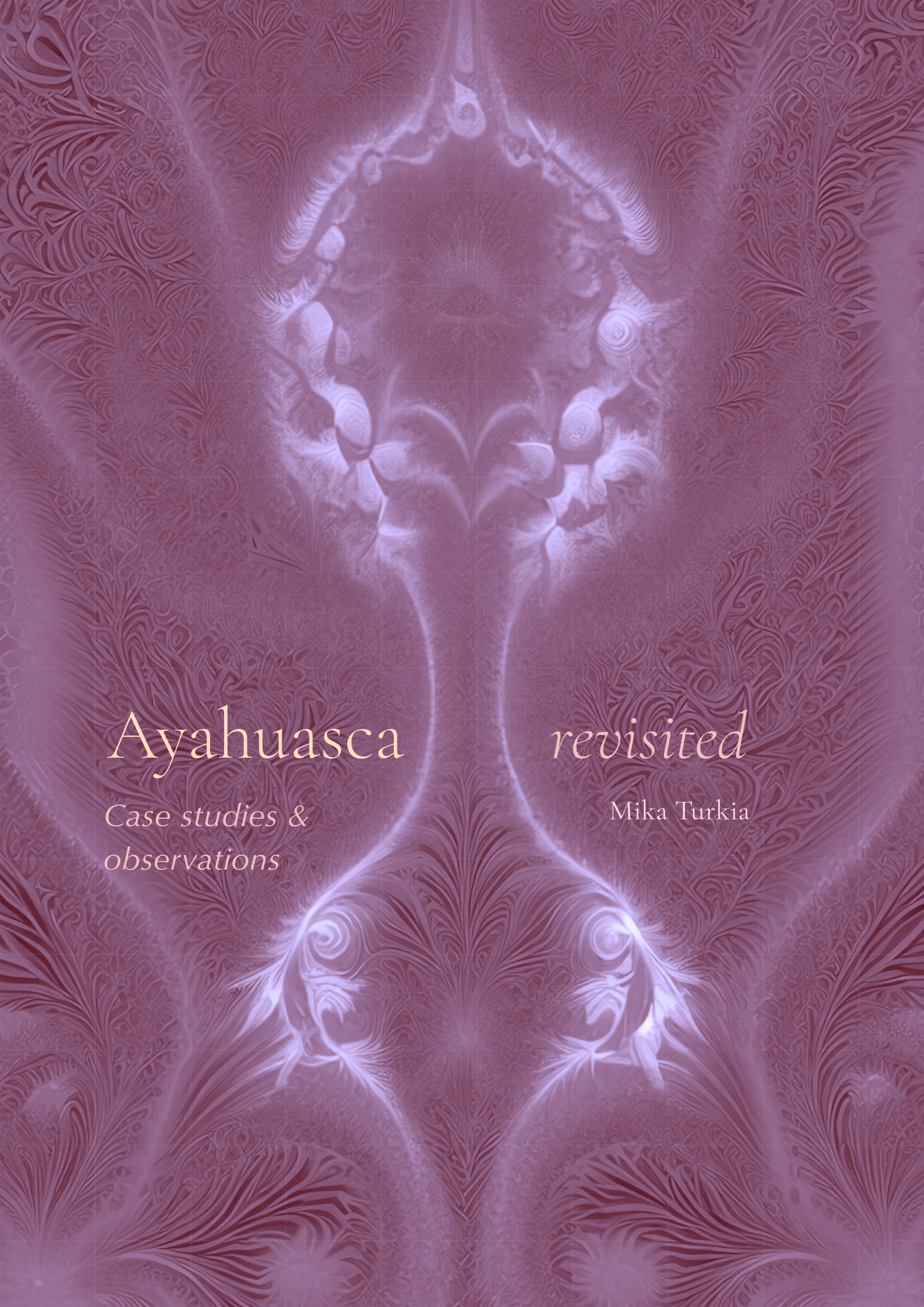

Ayahuasca *revisited*

Case studies & observations

Mika Turkia

Ayahuasca revisited

Case studies & observations

Abbreviations

The following abbreviations are used in this book:

2C-B	4-bromo-2,5-dimethoxyphenethylamine
2C-x	psychedelic phenethylamines (e.g., 2C-B)
2C-T-x	psychedelic phenethylamines (e.g., 2C-T-7)
5-HT_{1A} receptor	a subtype of serotonin (5-HT) receptors
5-HT_{2A} receptor	a subtype of serotonin (5-HT) receptors
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine
5-MeO-xxT	psychedelic tryptamines (e.g., 5-MeO-DMT)
ACE	adverse childhood experience
C-PTSD	complex post-traumatic stress disorder
COEX	systems of condensed experience; a set of similar experiences clustered on the first one
DMT	N,N-dimethyltryptamine
DOx	substituted amphetamines (e.g., 2,5-Dimethoxy-4-methylamphetamine; DOM)
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
DXM	dextromethorphan
ICD-10	International Classification of Diseases, 10th Revision
ICD-11	International Classification of Diseases, 11th Revision
IFS	Internal Family Systems therapy
LSD	lysergic acid diethylamide
MAOI	monoamine oxidase inhibitor
MAPS	Multidisciplinary Association for Psychedelic Studies
MDMA	3,4-methylenedioxymethamphetamine
MXE	methoxetamine
PTSD	post-traumatic stress disorder
SSRI	selective serotonin reuptake inhibitor
THC	tetrahydrocannabinol
UdV	União do Vegetal

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Chapters 2 and 3: Due to the protection of anonymity, the materials are not available. Chapter 4: Data collection was predominantly memory-based. Where materials existed, due to protection of anonymity, they have been destroyed. Chapter 5: The materials have been destroyed.

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Chapters 2 and 3: Consents to participate were obtained. Ethics pre-approval does not apply to retrospective ethnographic studies. Verbal consents for publication were obtained. Due to the sensitive nature of the subject the interviewees requested a waiver of documentation of informed consent (45 CFR § 46.117(c)(1)(i)). Chapter 4: The research was done out of an institutional context and involved hundreds of people, most of them unidentified and uncontactable. From a legal viewpoint, this research may be considered criminological observation, and as such aligns with the guidelines of the British Society Of Criminology Statement of Ethics for Researchers on topics of exceptional importance [1].

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Colophon
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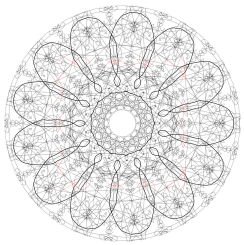
[1] British Society Of Criminology. *Statement of ethics for researchers*. 2015. URL: https://web.archive.org/web/20220901061945/https://www.britsoccrim.org/documents/BSCEthics2015.pdf (cited on page iii).



'If there is no love, there is no therapy. The healing force is love.
Without love, nothing interesting happens. We have to find out what love is.
So now we are seeing that listening is love.
It is a very simple exercise, but it contains all the essential teachings.'

'It is like time has stopped,
with just this one, crystal-clear, crisp voice
with such a steadiness and resonance
flowing through you.'

'From your heart, for all of us.'

Contents

1 Introduction

This compilation expands upon the author's previous collection of retrospective ethnographic case studies on psychedelic therapies [1].

[1]: Turkia 2025 URL

The present work focuses on ayahuasca. Chapters 2 and 3 examine long-term childhood sexual abuse and its consequences, including psychosis and bipolar disorder. Chapters 4 and 5 explore various aspects of ayahuasca ceremonies. The chapters were originally published as preprints on ResearchGate, PhilPapers, or PsyArXiv.

A central theme uniting all chapters is transgenerational collective trauma (see, e.g., [2, 3]). When such trauma remains unconscious, it often leads to destructive consequences, including violence, abuse, and war. While unconscious trauma may occasionally heal by chance under the right circumstances, as its prevalence increases, the likelihood of such circumstances arising diminishes. Therefore, healing requires deliberate intervention. Entheogens—i.e., psychedelics or psychosomadelics [4]—offer an effective and accessible means of uncovering unresolved issues.

[2]: Klaavu 2023
[3]: Hübl et al. 2023

[4]: Scholkmann et al. 2024 DOI

If these issues are not identified and addressed in time, they tend to escalate in scope and severity. There may be a tipping point beyond which the chaotic consequences of unresolved collective trauma exceed the available resources for resolution. The behavior of traumatized individuals may become unmanageable, their numbers may grow too large, the rate of traumatization may outpace treatment resources, or the severity of trauma may surpass the efficacy of most entheogens. In other words, there may come a point when entheogens are no longer sufficient to aid society. In the case of ayahuasca, its supply would be insufficient for large-scale societal healing programs, necessitating the use of other substances.

A case in point is the Israel–Palestine conflict. A few years before the most recent escalation, 13 Palestinians and 18 Israelis participated in an ayahuasca ceremony, where they found mutual understanding and harmony [5–8]. Had these ceremonies included 31 leaders instead of 31 ordinary citizens, history might have taken a different course. Unfortunately, without the participation of leadership, meaningful progress remains unlikely. It is regrettable that the necessary courage has not been found among them. As a result, the situation has continued to deteriorate, reaching the point of absurdity [9].

[5]: Busby 2023 URL
[6]: Margolin 2024 URL
[7]: Roseman et al. 2021 DOI
[8]: Roseman et al. 2021 DOI

[9]: Trump 2025 URL

At present, no other practical methods are known for resolving the most severe issues. It is therefore essential to consider immediate, population-wide approaches based on legalization, self-treatment, and community healing.

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[2] Juha Klaavu. *Lapsuuden kehityksellinen trauma. Syy arvottomuuteen, häpeään ja syyllisyyteen*. Helsinki, Finland: Viisas Elämä, 2023 (cited on page 1).

[3] Thomas Hübl and Julie Jordan Avritt. *Healing Collective Trauma: A Process for Integrating Our Intergenerational & Cultural Wounds*. Boulder, Colorado: Sounds True, 2023 (cited on page 1).

[4] Felix Scholkmann and Peter Sjöstedt-Hughes. 'Psychosomadelics: the case for renaming psychedelics'. *PsyArXiv* (2024). DOI: 10.31234/osf.io/3j2kc (cited on page 1).

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[6] Madison Margolin. *Feeling beyond it: ayahuasca, trauma, and healing among Israelis and Palestinians*. 2024. URL: https://web.archive.org/web/20241108142656/https://ayinpress.org/feeling-beyond-it-ayahuasca-trauma-and-healing-among-israelis_and_palestinians/ (cited on page 1).

[7] Leor Roseman and Nadeem Karkabi. 'On revelations and revolutions: drinking ayahuasca among Palestinians under Israeli occupation'. *Frontiers in Psychology* 12 (2021). DOI: 10.3389/fpsyg.2021.718934 (cited on page 1).

[8] Leor Roseman, Yiftach Ron, Antwan Saca, Natalie Ginsberg, Lisa Luan, Nadeem Karkabi, Rick Doblin, and Robin Carhart-Harris. 'Relational Processes in Ayahuasca Groups of Palestinians and Israelis'. *Frontiers in Pharmacology* 12 (2021). DOI: 10.3389/fphar.2021.607529 (cited on page 1).

[9] Donald J. Trump. *@realDonaldTrump: Donald is coming to set you free / Bringing the light for all to see / No more tunnels, no more fear / Trump Gaza is finally here / Trump Gaza shining bright / Golden future, a brand new light / Feast and dance, the deal is done / Trump Gaza number one / Trump Gaza shining bright / Golden future, a brand new light / Feast and dance, the deal is done / Trump Gaza, number one*. 2025. URL: https://web.archive.org/web/20250226095827/https://1a-1791.com/video/fwe1/e9/s8/2/e/J/P/k/eJPky.gaa.mp4 (cited on page 1).

Ayahuasca in the treatment of bipolar disorder with psychotic features caused by long-term early childhood sexual abuse

2

Ayahuasca is a plant-based brew of indigenous Amazonian origin. It has psychedelic, anti-inflammatory, neuroprotective, cytotoxic, and anti-parasitic effects, which are primarily due to monoamine oxidase inhibitors (MAOIs) and N,N-dimethyltryptamine (DMT). This retrospective case study describes the case of a woman in her late thirties with complex trauma due to severe, years-long sexual abuse in early childhood, resulting in a decades-long chronic condition involving suicidality. She was diagnosed with bipolar disorder and borderline personality disorder, but refused to accept either of them. She presented with delusional parasitosis and deep dissociation. Despite being severely psychotic in private, she appeared high-functioning in public, hiding most of her symptoms.

In her mid-thirties, she participated in an ayahuasca ceremony in a legal setting. It resolved her suicidality, eliminated her social isolation, and reduced her shame related to her early trauma. Nine more ceremonies alleviated her distress further. Her abuser also participated in an ayahuasca ceremony and confirmed her memories of childhood abuse.

The first interview was conducted 1.5 years after her first ceremony, and a follow-up interview 2.5 years later. She had experienced sixteen additional ceremonies, recognized the validity of her bipolar disorder diagnosis, and believed her early trauma to be its sole cause. Her core trauma remained partially unresolved, but her dissociative symptoms continued to decrease. She had observed several other instances of psychosis and bipolar disorder in which ayahuasca had resulted in positive effects. This case study contributes to a better understanding of the use of ayahuasca in bipolar disorder and severe traumatization. It also reviews the current state-of-the-art in the treatment of bipolar disorder using low-dose ayahuasca, and a case in which bipolar disorder was resolved with LSD.

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10.13140/RG.2.2.21294.18243
10.31234/osf.io/65se9
Shortdoi: mmf2

Keywords: childhood sexual abuse, C-PTSD, bipolar disorder, psychosis, delusional parasitosis, ayahuasca, LSD

2.1 Introduction

'I want people who have been in similar situations to hear my story. I was looking for people who would say, 'I had this too!' But I didn't have anyone to talk to. I felt lonely and conflicted. It would matter a lot to me if people began to share these stories.'

Documented examples of the treatment of psychoses and bipolar disorder with psychedelics are currently rare. A recent study by the author featured a teenager with complex post-traumatic stress disorder (C-PTSD), genetic predisposition to schizophrenia, psychosis triggered by cannabis use, and acute suicidality [1]. He successfully resolved acute suicidality with a single unsupervised session with 100–200 µg of LSD carried out alone at home. Subsequently, he resolved his C-PTSD with five more similar LSD sessions, and a few months of almost daily low-dose (psycholytic) N,N-dimethyltryptamine (DMT) sessions. While some residual auditory

[1]: Turkia 2022 DOI

hallucinations remained, the teenager interpreted them as representations of unprocessed adverse childhood experiences (ACEs), and considered the information contained in these representations helpful in recognizing the remaining unprocessed material. After one year of such unsupervised self-treatment, he had acquired the capability to study and work.

The article also featured a general discussion about the role of self-treatment and harm reduction policies, the safety of LSD, a proposed mechanism of action of psychedelics in healing C-PTSD, comparisons of various models of psychedelic therapy, and examples of successful treatment of severely psychotic children with LSD and psilocybin in the 1960s and 1970s [1].

[1]: Turkia 2022 DOI

According to the article, the primary 'mechanism of action' of psychedelic therapy was to revive or bring back to life repressed or dissociated traumatic events. These events were not only 'remembered' as cognitive memories but relived as embodied experiences, with their original, associated physical feelings (another interpretation could be that psychedelics acted as 'anti-dissociatives'). When these unresolved traumas originated at a very young age, they could present themselves as psychotic symptoms. A psychotic state could be understood as a partial regression into the conceptual framework of the age of the original trauma. The conceptual framework of that age could consist of undeveloped and vague concepts, including vague concepts of time and causality, unsuitable for navigating the adult world.

It was also proposed that distorted, psychotic ideas could simply result from learning the features of one's childhood environment, which was too different from the other environments in which one later tried to apply these learned models. These 'biased' models could not produce reliable predictions, i.e., could not enable correct reasoning about the behaviors of other people and the features of one's current living environment. If the magnitude of these prediction errors was high, the condition of a person could have been deemed psychotic, whereas errors of lesser magnitude could have been labeled personality disorders or, say, 'being a difficult person'.

The current case bears similarities to the above case featuring the teenager, but the outcome was achieved with ayahuasca, an Amazonian psychedelic plant-based brew, administered in a group setting [2–7]. The effects of ayahuasca are considered to be mostly due to monoamine oxidase inhibitors (MAOIs) harmine (originally known as 'telepathine'), harmaline, tetrahydroharmine, and other harmala alkaloids, as well as DMT [8, 9]. The effects of ayahuasca are not limited to psychedelic effects but include, for example, anti-inflammatory, neuroprotective, cytotoxic, and anti-parasitic effects [10–14]. In people with dissociative disorders, it appears to exert an 'anti-dissociative' effect.

[2]: Frecska et al. 2016 DOI
[3]: Santos et al. 2016 DOI
[4]: Santos et al. 2017 DOI
[5]: Palhano-Fontes et al. 2018 DOI
[6]: Hamill et al. 2019 DOI
[7]: Wolff 2020 DOI
[8]: Kaasik et al. 2020 DOI
[9]: Durante et al. 2021 DOI
[10]: Santos et al. 2022 DOI
[11]: Flanagan et al. 2018 DOI
[12]: Katchborian-Neto et al. 2020 DOI
[13]: Simão et al. 2020 DOI
[14]: Katchborian-Neto et al. 2022 DOI

Concerning the physiological safety of ayahuasca, coadministration with SSRIs, some psychedelic tryptamines (5-MeO-xxT, such as 5-MeO-DMT [15]), amphetamines, MDMA [16], cocaine [17], tramadol, and dextromethorphan (DXM) is considered dangerous [18]. Coadministration with alcohol and methoxetamine (MXE) is considered unsafe [18]. Caution is advised in combination with cannabis, mescaline, substituted amphetamines (DOx), substituted phenethylamines (NBOM), psychedelic phenethylamines (2C-x, 2C-T-x), ketamine, and opioids [18].

[15]: Reckweg et al. 2022 DOI
[16]: Sottile et al. 2022 DOI
[17]: Simon et al. 2016 DOI
[18]: Tripsit.me 2022 URL
[18]: Tripsit.me 2022 URL
[18]: Tripsit.me 2022 URL

Coadministration of DMT with lithium may cause seizures [19].

[19]: Nayak et al. 2021 DOI

In practice, people using SSRIs have attended ayahuasca ceremonies without adverse consequences. Ruffell noted that there wasn't a single known case of serotonin toxicity recorded in the literature [20]. Recently, Malcolm and Thomas have reviewed the serotonin toxicity of serotonergic psychedelics in detail [21]. They noted that little information is available on the circumstances of severe toxicities, but ayahuasca by itself is unlikely to pose a high risk of serotonin toxicity, and its propensity to induce vomiting may also limit the ability to consume large quantities. Also, psilocybin and LSD appear to be relatively safe in combination with ayahuasca. Henríquez-Hernández et al. recently discussed general aspects of toxicology of psychedelics [22].

[20]: Ruffell 2022 URL

[21]: Malcolm et al. 2021 DOI

[22]: Henriquez-Hernández et al. 2023 DOI

A systematic review by dos Santos et al. found three case series concerning members of the Brazilian syncretic ayahuasca church União do Vegetal (UdV) and two case reports describing psychotic episodes associated with ayahuasca intake [4]. The overall incidence of psychotic episodes in the UdV context was estimated to be less than 0.1% (0.052–0.096%), and cannabis use could not be excluded as a contributing factor. They noted that the incidence of psychotic episodes appeared rare in both ritual and recreational/uncontrolled settings. An European case series of presentations to emergency departments dealing with acute recreational drug and novel psychoactive substance toxicity (n=5529) did not mention ayahuasca [23].

[4]: Santos et al. 2017 DOI

[23]: Vallersnes et al. 2016 DOI

The use of ayahuasca has spread internationally in the 2000s [24, 25]. It is typically used in ritualized group settings, i.e., 'ceremonies', in which trained psychedelic guides direct participants' experiences by singing [1, 26, 27]. In Western societies, ceremonies typically happen overnight during weekends, beginning on Friday evening and ending on Sunday morning. Participants usually present with treatment-resistant psychiatric conditions such as treatment-resistant depression, post-traumatic stress disorder (PTSD), and complex post-traumatic stress disorder (C-PTSD), and they have exhausted other, official options for treatment. Usually, people with psychotic and bipolar conditions are excluded, primarily due to a lack of sufficient resources for follow-up, and increased legal risks for the organizers. In the present case, however, the psychotic patient attended tens of ceremonies without complications.

[24]: Labate et al. 2011 URL
[25]: Labate et al. 2014 DOI

[1]: Turkia 2022 DOI
[26]: Beyer 2009 URL
[27]: Mori 2009 URL

In many cases, ayahuasca ceremonies organized elsewhere still follow various Amazonian indigenous traditions, most of which remain either sparsely documented or undocumented in the scientific literature. One documented example of such a tradition is the Shipibo tradition [28], although in Europe, ceremonies adhering to this tradition have appeared relatively rare.

[28]: Gonzalez et al. 2021 DOI

O'Shaughnessy and Berlowitz studied 'plant diet' practices of Peruvian Amazonian medicine [29]. Graham et al. investigated the phenomenology of listening to 'icaros', or medicine songs, during an ayahuasca ceremony [30]. Callon et al. discussed ayahuasca ceremony leaders' perspectives on preparation and integration practices for participants [31]. Sapoznikow et al. noted that cross-cultural ceremonial use may have advantages relative to psychonautic (individual) use [32]. Kaasik described ayahuasca ceremony culture in Estonia [33], and analyzed the chemical composition of traditional and analog ayahuasca [8]. Byrska et al. noted that the

[29]: O'Shaughnessy et al. 2021 DOI

[30]: Graham et al. 2022 DOI
[31]: Callon et al. 2021 DOI

[32]: Sapoznikow et al. 2019 DOI
[33]: Kaasik et al. 2020 DOI
[8]: Kaasik et al. 2020 DOI

chemical composition of ayahuasca seized in Poland varied [34]. Pontual et al. studied the importance of non-pharmacological factors such as the setting to induce or promote mystical experiences or challenging experiences among ayahuasca users in neoshamanic and syncretic church contexts in the Netherlands and Brazil [35].

Dobkin de Rios et al. described how the União do Vegetal (UdV), a Brazilian syncretic church, was granted a permission for the ritual and religious use of ayahuasca in the US Supreme Court [36]. Their book also discusses the Santo Daime church of Brazil, the traditional use of ayahuasca by indigenous peoples, 'neoshamanism', and the globalization of ayahuasca. Groisman et al. described the corresponding legal process concerning the Santo Daime church in the US Supreme Court [37]. Groisman et al. analyzed the healing, neurophenomenological, and therapeutic aspects of the ritual and religious use of ayahuasca in the Santo Daime church [38].

A book edited by Roberts discussed ceremonial use of psychedelics more generally [39]. Alcantarilla et al. presented a case of psychosis following the use of ayahuasca [40]; Neyra-Ontaneda presented another case [41]. Williams et al. discussed indigenous ontologies [42]. Devenot et al. discussed an open source alternative to psychedelic capitalism [43]. Fotiou warned against idealizing South American indigenous tribes [44]. Somé discussed the treatment of first psychosis in an indigenous African context, emphasizing the importance of rituals [45].

James et al. provided a narrative review about the current status of medical ayahuasca research [46]. A recent handbook of medical hallucinogens edited by Grob et al. covered a wide range of aspects related to psychedelic therapy [47]. Devenot et al. examined how therapeutic frameworks interact with the psychedelic substance in ways that can rapidly reshape participants' identity and sense of self [48]. Friesen discussed historical entanglements and contemporary contrasts between psychosis research and psychedelic therapy research [49]. Nemu discussed biases and prejudices in the academic study of ayahuasca [50]. Maia et al. recently reviewed ayahuasca's therapeutic potential [51]. Perkins et al. presented the results of a naturalistic longitudinal study concerning changes in mental health, wellbeing, and personality following ayahuasca consumption, concluding that ayahuasca consumption in naïve participants may precipitate wide-ranging improvements in mental health, relationships, personality structure, and alcohol use [52]. Perkins et al. also discussed psychotherapeutic and neurobiological processes associated with ayahuasca [53]. Bouso et al. reported survey results on adverse effects [54]. Mastinu et al. reviewed the ethnobotanical uses of the best-known psychedelic plants and the pharmacological mechanisms of the main active ingredients they contained [55]. The pharmacopoeia of the Huni Kuin tribe of Brazil featured over a hundred plant medicines [56].

Ona et al. described the essential features and benefits of traditional practices and the importance of incorporating them into a 'Global Mental Health' movement [57]. Group therapy and communal aspects were discussed by Hartogsohn [58, 59], Gonzalez et al. [28], and Meckel Fischer [60, 61]. Oehen and Gasser described the treatment of patients with C-PTSD in Switzerland since 2014 [62]. General aspects of the

[34]: Byrska et al. 2022 DOI
[35]: Deus Pontual et al. 2022 DOI
[36]: Dobkin de Rios et al. 2008
[37]: Groisman et al. 2007 URL
[38]: Groisman et al. 1996 URL
[39]: Roberts 2020
[40]: Alcantarilla et al. 2022 DOI
[41]: Neyra-Ontaneda 2017 DOI
[42]: Williams et al. 2022 DOI
[43]: Devenot et al. 2022 DOI
[44]: Fotiou 2016 DOI
[45]: Somé 1997
[46]: James et al. 2022 DOI
[47]: Grob et al. 2021
[48]: Devenot et al. 2022 DOI
[49]: Friesen 2022 DOI
[50]: Nemu 2019 URL
[51]: Maia et al. 2023 DOI
[52]: Perkins et al. 2022 DOI
[53]: Perkins et al. 2023 DOI
[54]: Bouso et al. 2022 DOI
[55]: Mastinu et al. 2023 DOI
[56]: Muru et al. 2019 URL
[57]: Ona et al. 2021 DOI
[58]: Hartogsohn 2021 DOI
[59]: Hartogsohn 2022 DOI
[28]: Gonzalez et al. 2021 DOI
[60]: Meckel Fischer 2015
[61]: Sessa et al. 2015 DOI
[62]: Oehen et al. 2022 DOI

use of psychedelics in psychotherapy have been discussed in a recent book edited by Read et al. [63]. Danforth discussed focusing-oriented psychotherapy as a supplement to preparation for psychedelic therapy [64]. Dolezal et al. suggested that shame-sensitive practice is essential for the trauma-informed approach [65, 66].

Bosch et al. reviewed psychedelics in the treatment of bipolar depression, commenting that the integration of these promising and fascinating substances into contemporary biomedicine seems feasible and even desirable [67]. Szmulewicz et al. reported a case of mania after ayahuasca consumption in a man with bipolar disorder [68]; Oliveira et al. reported a similar case [69]. Wrobel et al. surveyed childhood trauma and depressive symptoms in bipolar disorder, noting that feelings of worthlessness emerged as a key symptom among participants with—but not without—a history of childhood trauma [70]. Janikian investigated the potential and risks of psychedelics in bipolar disorder [71]. Blackwell presented 'bipolar breathwork' method: an adaptation of holotropic breathwork developed for bipolar patients [72–74]. Young et al. discussed the neurobiology of bipolar disorder [75]. Healy reviewed the history of bipolar disorder [76]. A preprint by McCutcheon et al. presented a new, receptor affinity-based classification system for antipsychotic medication [77].

An article by Fusar-Poli et al., co-written by experts by experience and academics, reviewed the lived experience of psychosis using a bottom-up method (deriving a theory from ethnographic material) rather than a top-down method (trying to overlay a theory onto data) [78]. Utilizing the same method, Estradé et al. reviewed the lived experiences of family members and carers of people with psychosis [79]. Sips also discussed the phenomenology and the lived experience of psychosis [80]. A book edited by Moskowitz et al. discussed the relationship between psychosis, trauma, and dissociation [81]. A book edited by Dorahy et al. brought together current thinking and conceptualizations on dissociation and the dissociative disorders [82]. A book edited by Vermetten et al. discussed the neurobiology and treatment of traumatic dissociation [83]; Vermetten et al. also studied MDMA-assisted psychotherapy for PTSD [84]. Beutler et al. reviewed the knowledge on the relationship between trauma-related dissociation and the autonomic nervous system [85]. Trauma and dissociation have also been discussed by van der Hart [86]. Ratcliffe discussed hallucinations, trauma, and trust [87]. A book edited by Woods et al. discussed voices in psychosis from an interdisciplinary perspective [88]. A book by Lanius et al. discussed the impact of early life trauma on health and disease, considering it to be a 'hidden epidemic' [89]. Ritunnano et al. noted that delusions have and give meaning [90].

Bourgeois et al. noted that sexually abused youth were ten times more at risk of receiving a diagnosis of psychotic disorder than youth from the general population [91]. Rhodes et al. discussed the relationship between psychosis and trauma, including the relationship between psychosis and child sexual abuse [92, 93]; however, the cases appeared to differ significantly from the present case. McLaren described methods for (self-)treatment of the consequences of childhood sexual abuse using the 'spiritual' terminology [94]. Maté discussed 'spiritual' roots of trauma, considering that the cause of any mental disorder was (transgenerational) trauma [95, 96]. Youngman et al. discussed modeling complex adaptive systems in the humanities [97]; in this context, Turkia previously

[63]: Read et al. 2021

[64]: Danforth 2009 URL
[65]: Dolezal et al. 2022 DOI
[66]: Dolezal 2022 DOI

[67]: Bosch et al. 2022 DOI
[68]: Szmulewicz et al. 2015 DOI
[69]: Oliveira et al. 2018 DOI

[70]: Wrobel et al. 2023 DOI
[71]: Janikian 2020 URL

[72]: Blackwell 2011 URL
[73]: Bray 2018 DOI
[74]: Grof 2010
[75]: Young et al. 2020 DOI
[76]: Healy 2008
[77]: McCutcheon et al. 2023 DOI

[78]: Fusar-Poli et al. 2022 DOI

[79]: Estradé et al. 2023 DOI
[80]: Sips 2022 URL

[81]: Moskowitz et al. 2019

[82]: Dorahy et al. 2023
[83]: Vermetten et al. 2007
[84]: Vermetten et al. 2019 DOI

[85]: Beutler et al. 2022 DOI
[86]: Hart 2021 DOI
[87]: Ratcliffe 2017

[88]: Woods et al. 2022
[89]: Lanius et al. 2010
[90]: Ritunnano et al. 2021 DOI

[91]: Bourgeois et al. 2018 DOI

[92]: Rhodes et al. 2018 DOI
[93]: Rhodes 2022 DOI

[94]: McLaren 1997

[95]: Maté 2019
[96]: Maté 2018
[97]: Youngman et al. 2014

presented a computational model of emotions [98]. Dourron et al. presented a novel theory, the self-entropic broadening theory, examining how psychedelics could be therapeutic while mimicking symptoms of psychosis [99].

Kettner et al. noted that intersubjective experience during psychedelic group sessions predicted enduring changes in psychological wellbeing and social connectedness [100]. Brennan et al. presented a qualitative exploration of relational ethical challenges and practices in psychedelic healing [101]. Aixalà wrote about post-session psychedelic integration in detail [102]. Hendricks proposed awe as a putative mechanism of action [103]. Scull noted that 'the limitations of the psychiatric enterprise to date rest in part on the depths of our ignorance about the etiology of mental disturbances' [104]; the present case study also aims at enlightening etiological aspects.

Schwartz described the Internal Family Systems (IFS) therapy approach [105, 106]. Yugler discussed psychedelics in the context of IFS [107], noting that 'parts' (subpersonalities, alters) corresponded to 'entities', 'beings', or 'spirits' in the psychedelic context. Hallucinatory voices originated from the parts/entities. In addition to parts, there was also an unchanging, boundless source of energy called 'the Self' whose energy was characterized by compassion, curiosity, calm, clarity, courage, connectedness, confidence, and creativity (8 C's). In the end, any therapeutic outcome was due to the energy of the Self, not to a therapist or substance. Everyone, regardless of the severity of their past trauma, had the ability to heal. Yugler also described the concepts of 'unburdening', 'polarization', and 'blending'. IFS was a method or 'toolkit' for 'navigating' any experiences, including psychedelic ones.

Wolynn reviewed current research into the epigenetic inheritance of trauma, i.e., the evidence on the genetic transgenerational inheritance of trauma [108]. Research on mice indicated that trauma triggers could be epigenetically inherited by the offspring [109, 110]. Levine, the inventor of the somatic experiencing method [111, 112], provided an introductory overview of the role of memory in trauma, including the long history of the role of the phylogenetically more ancient structures of the brain in trauma [113].

2.1.1 The low-dose maintenance treatment method of Mudge

Mudge has developed a method for the treatment of bipolar disorder with ayahuasca, and has utilized it himself for his own bipolar disorder for years [71, 114–116]. Since his teenage years, describing himself as a 'compliant patient in the mainstream psychiatry', he unsuccessfully tried seventeen different pharmaceutical medications. He said that their adverse effects were downplayed or ignored. In his youth, SSRIs had triggered mania which was ignored by his psychiatrist who doubled of the dose. This led to full-blown manic episode with psychotic features. He was hospitalized and injected with antipsychotics. In the following years, he was administered seventeen different medications without results. Eventually, after experiencing 'massive' adverse effects, he quit.

After finding ayahuasca around 2006, he had not used pharmaceutical drugs [117]. Initially, he used it with psychedelic doses in ceremonies a

[98]: Turkia 2009 URL DOI
[99]: Dourron et al. 2022 DOI
[100]: Kettner et al. 2021 DOI
[101]: Brennan et al. 2021 DOI
[102]: Aixalà 2022
[103]: Hendricks 2018 DOI
[104]: Scull 2022
[105]: Schwartz et al. 2020
[106]: Schwartz 2021
[107]: Yugler 2021 URL
[108]: Wolynn 2016
[109]: Dias et al. 2013 DOI
[110]: Morin et al. 2021 DOI
[111]: Kuhfuß et al. 2021 DOI
[112]: Winblad et al. 2018 DOI
[113]: Levine 2015
[71]: Janikian 2020 URL
[114]: Mudge 2016 URL
[115]: Saiardi et al. 2018 DOI
[116]: Mudge 2022 URL
[117]: Buller et al. 2021 URL

few months apart. However, the effect did not last for months; therefore, he invented a more regular low-dose self-treatment practice. He initiated a research program, and as a part of his PhD studies, he tested various ayahuasca preparations on himself.

All in all, Mudge has 15 years of experience on the use of ayahuasca and on brewing it himself in various formulations, using different varieties of the ayahuasca vine, resulting in different ratios of the MAOIs harmine, harmaline, and tetrahydroharmine. Different ratios produced different effects: stimulating, sedative, or balancing. He was currently analyzing 50 different varieties in a laboratory. Mudge had also received ceremony facilitator training in the contexts of Santo Daime, and various indigenous traditions including Huni Kuin [56], Shipibo [28], and Yawanawá [118, 119]. He was planning on creating a manual for guiding ceremonies for bipolar people.

[56]: Muru et al. 2019 URL
[28]: Gonzalez et al. 2021 DOI
[118]: Pérez-Gil 2001 DOI
[119]: Oikarinen 2020 URL

The main risk was that in bipolar people, psychedelics could induce mania, even psychotic mania. However, a few cases did not imply that all bipolar people should be excluded from the use of psychedelics (an overgeneralization). Also, adverse effects had often been exaggerated; some were due to taking ayahuasca four nights in a row and not sleeping, for example [117]. Mugde stated that the exclusion of bipolar people was not only illogical but also dangerous because bipolar people were highly suicidal. The 'do no harm' principle was applied illogically. By treating bipolar disorder as a contraindication, patients were given a message: 'We're just going to ignore you', depriving them of hope.

[117]: Buller et al. 2021 URL

Another consequence was that bipolar people were 'doing it anyway, in a messy way', for example, by lying in the screening for ceremonies and ending up in a wrong kind of ceremony for them, with a variety of ayahuasca which was not designed to have a balancing effect but, say, stimulating. Therefore, bipolar people should be included but their special needs taken into account. In addition to bipolar people, the exclusion issue also applied to schizophrenics. Mudge stated that 'doing nothing did not equal to doing no harm'; in effect, it implied avoidance of responsibility.

The fact that ethics committee had prevented Mudge from offering his medication to suicidal people in need, had led him to 'question the whole concept of ethics as defined by an institutional committee of experts, as opposed to peer ethics based on compassion'. Mudge did not see any logical, ethical reason for bipolar people not being allowed to help each other out. Also, who had the right to decide what risks they could take? Avoiding suicidality was more important than preventing mania. According to Mudge, no-one had the right to say they they could not try a possibly life-saving medicine. He added that 'psychedelics experts had taken on this patronizing attitude from psychiatrists'. Due to mainstreaming of psychedelics, there was no longer need to be overly cautious about appearances; instead, it was time to be more brave.

Mudge had been deeply involved with the Brazilian syncretic church Santo Daime [58], as well as with several indigenous tribes of the Amazonian area. He described himself as 'post-bipolar', mentioning that developing his method was complicated and challenging, but it had been 'incredibly beneficial' for him [120]. He concluded that due to its short binding time to 5-HT$_{2A}$ receptor, DMT did not induce mania in people

[58]: Hartogsohn 2021 DOI

[120]: Janikian et al. 2021 URL

with bipolar disorder, but instead acted as a mood enhancer/stabilizer. Tetrahydroharmine, in turn, provided a SSRI-like effect.

Mudge commented that he went 'seriously manic' on LSD or mescaline, and 'borderline manic in a funny way' on psilocybin [117]. With MDMA, he 'felt terrible afterwards'; ketamine appeared slightly better. With ayahuasca, it appeared that the balancing effect was due to the MAOIs; subsequently, he could 'get the psychedelic benefits in a balanced context'. Through ayahuasca, he had learned to recognize when he was about to escalate into mania, and could then stop the process in time. In other words, he had less 'self-denial'. He had also become more compassionate or aware of the adverse social consequences of manic episodes, i.e. harm to others close him; this motivated him to stop things that escalated mania. The increasing self-compassion, it had also reduced self-destructive behaviors and suicidality.

[117]: Buller et al. 2021 URL

In summary, self-awareness was the key. The irony was that it was the opposite of numbing oneself with pharmaceutical drugs. Numbing prevented access to trauma: 'the reason why bipolar people got depressed in the first place'. Interestingly, he commented that there was 'an epidemic of sexual trauma', particularly affecting women, and there was a large statistical correlation between sexual trauma and bipolar disorder. Mudge had a friend who had previously been given 65 different pharmaceutical drugs and 50 applications of electroconvulsive therapy without result. In the process, her sexual trauma had never been addressed. The trauma was eventually treated by a Shipibo woman in an ayahuasca ceremony. Currently, she was 'getting great results with ayahuasca'. Thus, psychosocial healing could happen with psychedelics that basically eliminated the underlying triggers. Diet and lifestyle (sleep habit) changes had also been resulted from the use of ayahuasca.

Based on qualitative interview data about 75 bipolar people who had consumed ayahuasca, Mudge acknowledged numerous cases of bipolar people becoming manic, but his detailed analysis indicated that many of these were false negative results, and that the majority of bipolar people had therapeutically positive experiences with ayahuasca [116]. Adverse events were due to either unsuitable mindsets and/or environments, or pharmaceutical differences resulting from differences in preparation methods.

[116]: Mudge 2022 URL

Mudge concluded that the crucial determining factor for people with bipolar disorder was the cooking technique, because cooking variations affected the ratios of the four major psychoactive ingredients. Also, it was essential that ayahuasca did not ferment, in order to avoid alcohol forming in it [120]. Alcohol triggered depressive episodes [117]. With these enhancements, adverse effects could be minimized or avoided.

[120]: Janikian et al. 2021 URL
[117]: Buller et al. 2021 URL

It was also critical to avoid using any other psychoactive agents at the same time, particularly cannabis/tetrahydrocannabinol (THC), tobacco (rapé) [121, 122], and even caffeine, chocolate, sports supplements, and incense. THC could overstimulate the dopaminergic system and induce paranoia and psychoses. The concurrent use of MAOIs amplified this effect of THC. This combination had been linked to four incidents of violence or homicide. Regardless, although a large part of the population attending ceremonies consume cannabis regularly, and many tribes and

[121]: Mori 2020 DOI
[122]: Narby et al. 2021

syncretic churches consume cannabis in ceremonies, such incidents are very rare and may only concern people with bipolar disorder.

Mudge's mother was a professor of neurobiology who specialized in bipolar disorder after her son was diagnosed with it. She found that mood swings corresponded to modulations in the frequency of the phosphoinositide turnover cycle in cortical neurons; as the cyclic process speeded up and slowed down, mood swung up and down [115]. Lithium and fluoxetine regulated the rate of phosphoinositide synthesis in neurons. 5-HT_{2A} receptor appeared to stimulate phosphoinositide hydrolysis [123, 124]. Ayahuasca likely also contained a counteracting component and thus modulated phosphoinositide synthesis in the same way that the combination of lithium and fluoxetine did, thus resulting in the previously mentioned mood-enhancing and stabilizing effect.

[115]: Saiardi et al. 2018 DOI

[123]: Rabin et al. 2002 DOI
[124]: Brito-da-Costa et al. 2020 DOI

Mudge mentioned that there was currently an unfounded 'community belief' functioning as a 'cultural taboo' that psychedelics and bipolar people were contraindicated. Mudge mentioned that due to bureaucracy and 'ethics approval' related obstacles, conducting clinical trials had proved impossible for him, and he had only been able to produce pre-clinical studies. In the meantime, five of his 75 interviewees had committed suicide. Mudge was 'not willing to wait fifteen years' before people could be treated. In terms of academia/community, Mudge felt having 'struggled against taboos, getting mixed responses'. Some conferences had appeared supportive, others 'just hadn't wanted to know': the subject was 'too controversial'. Mudge described that earlier, a professor of psychiatry, after reading his abstract, had commented: 'So, a bipolar person thinks that he's worked out a treatment for bipolar disorder by himself, and he thinks it's ayahuasca. Well, that sounds like a grandiose delusion, doesn't it?' Two years later, after hearing Mudge's presentation, the professor acknowledged Mudge's work as 'very progressive'.

Young, a leading bipolar disorder expert in the UK [75], had recently become involved with ayahuasca research [125, 126]. There was also a project by Standish aimed at getting a standardized ayahuasca product approved by the FDA, produced from ayahuasca wine grown in Hawaii [127]; however, according to Mudge, their current recipe was likely unsuitable for bipolar disorder. There was also initial interest and 'unofficial encouragement' in the subject but no resources at the Multidisciplinary Association for Psychedelic Studies (MAPS). Yet, no individual or institution, outside the PhD supervisory panel, had yet officially backed Mudge's study. Mudge considered the current mainstream research practices 'playing a reductionist game'.

[75]: Young et al. 2020 DOI
[125]: Ruffell et al. 2020 DOI
[126]: Ruffell et al. 2021 DOI

[127]: Standish 2019 URL

About the idea of using a synthetic product containing only DMT, or DMT and harmine, Mudge commented that a product without harmaline, tetrahydroharmine, and other components would be unlikely to provide the required balancing effect. Also, the ritualistic-ceremonial concept was central to him. However, acquiring a specific ratio of components would be easier. All in all, as a prescription option, even such a 'substandard' mass-producible synthetic product would be a significant improvement over the current situation, i.e., the use of antipsychotics. Also, initially, Mudge himself had only been able to acquire products that he now considered substandard.

The maintenance protocol consisted of 'microceremonies': taking a low dose of ayahuasca before going to sleep, in a self-organized, uninterrupted meditation ritual, held approximately once every one to two weeks, according to the need, i.e., depending on the intensity of depression. After such a ritual, the 'afterglow', or calming and uplifting effect, usually lasted for a week or two. With regard to dosing, the dose required for a balancing effect was significantly lower than that required for psychedelic effects. Mudge recommended taking 1/8 of the 'standard' dose (approximately a spoonful). According to Mudge, this maintenance treatment would likely need to be ongoing.

With regard to the indigenous roots of ayahuasca, Mudge pointed to the extreme poverty of the tribes, the lack of even clean drinking water, their cynicism about biopiracy by commercial companies (as happened with psilocybin in Mexico), and 'active government policies of genocide against indigenous populations' in some countries. On the other hand, bipolar people were also 'desperate and life-threatened', but Mudge 'did not see why there couldn't be a win-win situation if it was just done right, with ethics'.

There were a lot of controversial issues: a synthetic product would essentially be biopiracy, unless a large part of the profits were given to the indigenous people. There was also a conflict between for-profit companies possibly getting the medicine to market faster and universities possibly providing a non-profit product a decade or so later. An advantage of for-profit companies was that they didn't care about academic reputation or taboos. Over USD 200 billion was spent annually in the US on the treatment of bipolar disorder, the vast majority of which went to pharmaceutical companies and psychiatrists. Mudge commented that there were 'a lot of people profiting from my people's illness'.

Psychedelics startups were slightly separated from traditional pharmaceutical businesses, and, as an example, a hedge fund manager whose wife was bipolar had mentioned that maybe he could 'help out'. Mudge proposed an alternative model to the university-led and business-led models: founding a new church that would take into account the specific needs of bipolar people, which the Santo Daime church had not accommodated. The day before, he had received three calls from three suicidal friends.

2.1.2 Aspects of the present case

The dosing strategy presented by Mudge was non-psychedelic, intended for balancing the mood without accessing traumatic memories, and utilized without support at home in regular, self-organized 'microceremonies', depending on subjectively perceived need. This dosing might be called sub-psycholytic, somewhere between 'microdosing' and 'psycholytic' [128]. The ayahuasca was made according to a special recipe developed for the treatment of bipolar disorder.

[128]: Passie et al. 2022 DOI

In contrast, in the present case, the dosing was psychedelic, intended for accessing the traumatic memories, and utilized in a group ceremony context. The ayahuasca ceremonies were 'neoshamanic', i.e., not strictly adhering to any specific traditional lineage of the Amazonian area. The

patient always attended the same group, organized by the same non-indigenous facilitator. In total, she participated in 26 ceremonies over the course of four years. There was one nine-month break between ceremonies, but on average, she attended a ceremony once every two months. The ayahuasca was always brewed by the same person but it was not specifically prepared for bipolar patients and would likely have been considered substandard by Mudge's standards. There was no maintenance treatment with ayahuasca between the ceremonies. The described ceremonies were arranged *in a legal setting*; further details are omitted for the purposes of anonymization.

Information was acquired from a 20-minute audio recording produced by the interviewee in 2019, and two semi-structured retrospective interviews with a total duration of approximately three hours conducted in 2020. Diagnoses and prescriptions were confirmed from medical record excerpts provided by the patient. In general, with the exception of the last two years, her contact with the psychiatric healthcare system had been sporadic and shallow. Thorough follow-up discussions and a review of all data were conducted in 2023.

The interviewee favored the term 'spiritual'. Pollan proposed 'egoistic' as the antonym of 'spiritual' [129]. In this presentation, the 'spiritual roots' of trauma roughly correspond to 'having to do with the loss of individual agency'. Similarly, the term 'awakening' refers to remembering trauma memories, or their re-emergence from the subconscious. Assumed to re-emerge in their original, age-specific form, such memories might appear incomprehensible.

[129]: Pollan 2018

One intention of this article is the facilitation of a shared conceptual framework, i.e., a preliminary fusion of several paradigms. Concepts were adopted from IFS [105], the object relations paradigm [130, 131], the paradigm of psychosis as a 'spiritual awakening' [72, 132], the Open Dialogue approach [133, 134], and various indigenous ayahuasca traditions.

[105]: Schwartz et al. 2020
[130]: Tähkä 2006 DOI
[131]: Tähkä 1993
[72]: Blackwell 2011 URL
[132]: Grof 1990
[133]: Mosse et al. 2023 DOI
[134]: Bergström et al. 2022 DOI

The present case description is not to be taken as a treatment guideline or a recommendation. Even though the described methods produced a feasible result for this person and in another case briefly reviewed in the discussion section, a degree of unpredictability lies in the nature of psychedelics, and the same approaches might not produce the same results in others with a different background and characteristics. The intention of the present study is to open new perspectives and lines of research on C-PTSD, psychosis, and bipolar disorder. The role of case studies in the context of the current paradigm, evidence-based medicine (EBM), has been discussed in the author's previous article [1].

[1]: Turkia 2022 DOI

2.2 Case description

At the time of the interview, the female interviewee was in her late thirties. Since early childhood, she had been exposed to continuing, severe sexual abuse by an older male sibling from the mother's previous marriage. The boy did not get along with his stepfather (the girl's father). The abuse had been frequent and ongoing for several years. As her life had felt unbearable, she had 'invented a wonderful world' which she 'blended

with this one' in order to be able 'to breathe, to escape an unescapable situation, to gain some control', i.e., agency.

Her parents had been either unaware of or unresponsive to the abuse. She described that she loved her parents and wanted to make them happy by being happy herself. In her words, 'I understood that being happy was the greatest gift you could give to the people you love. So I took it as my duty. But I couldn't be happy if I lived in this world, so I built another one, or chose to see it, and chose to disappear from this world every time the door to that tiny room would close and I knew what was coming next. I chose to love my brother and to forget everything for years. Although I never actually forgot.'

In her memory, the abuse had been ongoing. She could not say exactly when it had began but based on certain events, she timed its beginning at the age of five or six. She described that a child did not have a memory of life being any other way; a part of the child's mind assumed that such a life was normal. Yet there was another part that had the information that such abuse was not ok. These two parts were in conflict. According to her, for these reasons, early trauma was difficult to handle or treat, and resided at the root of all psychiatric diagnoses.

Her relationship to her parents was 'good'. She was always 'a good girl', behaving nicely and not causing problems. She was 'perfect at school and with friends'. Occasionally, however, her behavior rapidly changed, and she became impulsive and physically violent, yet she returned to normalcy just as rapidly. Her parents did not recognize the ongoing abuse. All through her childhood, they dismissed her symptoms as a sign of her having been 'spoiled'. She believed that her parents 'had not wanted to see; if they really would have wanted to see, they would have seen'. She described that as her environment did not 'see her', her mind adopted the same mechanism and applied it to herself. The part that had not been acknowledged, ie. 'seen', was 'split' as a separate part. This process of 'splitting' led to problems.

> *I was abused in one room. When my parents returned home, I had to pretend to be happy and act like a good girl. At school, I appeared to be a perfect student. But at night, my life was completely different from the daytime. This created a huge internal conflict: a split. One cannot process severe trauma as it is happening. The internal split was actually a survival mechanism.*

As a way to maintain a sense of control over her life, she secretly went to the roof of her house every day for years with the intention of jumping off, but she never followed through. Not jumping served as proof of her agency. She had no recollection of experiencing any pain. She had 'just wanted to die for no apparent reason'.

Dissociative symptoms started with intentional and conscious daydreaming as a form of escapism, but eventually transformed into an uncontrollable and unconscious automatic response. The child's visions of imaginary friends and mythical creatures, which were initially created to create a safe and controllable personal world, took on a life of their own and led to severe dissociation and derealization. She felt like she was not in the present, but she didn't know where she was.

She started to 'shift between worlds'. This shifting was accompanied by a physical sensation in her stomach. When she dissociated, she seemed to exist in multiple states of consciousness at the same time, partly in the present moment as if she were having an out-of-body experience, and partly in a dimension without time where she felt like she was simultaneously in the present, past, and future. There was also a dimension without causality, where her perceptions and actions seemed disconnected from each other.

She felt that everything she saw around her was 'created by her and also parts of her'. Boundaries between inner and outer dissolved into 'oneness'. When 'everything coexisted in timelessness', social interaction was difficult. Words could turn into units of time, or into 'souls who found their vibrational matches in their surroundings'. To 'bring herself back', she applied obsessive-compulsive methods: repetitive sounds and rituals, 'to keep her grounded before she got completely lost in the other worlds'.

When her parents finally found out about her habit, they closed all access to the rooftop. Subsequently, she began to feel the pain. She described that 'it broke my heart that I felt I was being taken even this control and freedom. Standing on the edge every day had been my secret. I felt like my choice of not jumping had made me a good girl, and after the lockdown, that choice was no longer mine'. Subsequently, she began sleepwalking, playing with knives and blades, cutting herself, and swallowing pharmaceuticals and detergents. Once she stood on a tramline when a tram was coming, but a neighbor pushed her away from the tracks. She remembered being pushed away, but not how she had ended up standing there.

Her suicidality originated from 'not being seen: likely the most common and influential trauma on the societal scale'. According to her, a lot of people actually did not want to live but remained largely unaware of this tendency. The lack of overt suicidality did not imply the absence of an unconscious wish to die. Such unwillingness was 'the biggest conflict one could have'. In an organism with a fundamental survival instinct, it sent a 'completely wrong signal'. A healthy individual fought to remain alive. An internally conflicted individual might have lost this objective.

In her case, the abuse had been 'more dramatic, and thus had more dramatic effects' but an 'unseen' hypersensitive child could become traumatized in the absence of dramatic events, through neglect alone. The underlying mechanism was the same: not being seen led to not being protected. It was interpreted as not being important enough to be protected, which led to low self-esteem and efforts to compensate by performing at school and work.

> *Every time a child is beaten by his parents, he gets the message that he is not worthy of not being beaten. If he goes the extra length, like many do, he will translate that into: I'm not worthy of being here, not worthy of being loved, not worthy of anything. I suffer, but it remains unseen and therefore unvalidated. The subconscious message is that I deserve that suffering because nobody saved me. The logical conclusion will naturally be that I'm not worthy of being here, and since being here brings only suffering, why should I be here?*

At the age of thirteen, she developed 'a firm irrational belief' that she had terminal cancer. Yearly health checks made her 'hysterical', yet when the results came back completely normal, it only strengthened her belief that her illness had become 'so much worse'. She believed that she knew the exact type and location of the tumor and was trying to prepare her mother for her death, praying that her mother would stop loving her in order to not be hurt by her death. In retrospect, she described that the belief had 'no grounds in reality' and that 'the fact that I was perfectly healthy all those years was in no way connected in my head to the possibility that I didn't have cancer'.

For seven years, she was convinced that she would die in a month at the latest. In her diary, she organized her funeral and wrote letters to her mother, telling how happy she had been during her life, asking her mother not to be sad. Her heart was breaking because of the pain her mother would feel. She cried 'every night without exception from 10 p.m. to 3 or 4 a.m.' She cried 'so hard she couldn't breathe' and begged God to forgive her for dying and causing so much pain for her mother.

Despite these issues, she was 'an A-grade student all the way, winning first place every year at every contest or competition'. She said that 'absolutely no-one knew' about her suicidality. A few times, she attempted suicide because she 'could not stand to look at all the suffering that was waiting in my near future because of this imaginary cancer'.

Around the age of 20, the belief about having cancer was replaced with a different belief: delusional parasitosis. She became convinced that inside her body were unique species of bugs that were multiplying faster and faster because her body was feeding them. She saw bugs all around her body: they were moving under the skin of her arms, on her head, and inside her brain. Describing her question as 'curiosity' unrelated to herself, she asked a medical doctor whether such a phenomenon was possible. The doctor 'explained to me why that couldn't happen, and I understood the explanation perfectly, but it made no difference: I knew the bugs were there. I was seeing and feeling them, and every time I looked in the mirror, I had to throw up due to disgust about the bugs'. She had always hated bugs and still did.

Psychosis could be due to trauma or extreme sensitivity. Her mind was hypersensitive, extremely flexible, and 'allowed to travel to very unusual places'. It 'lacked a kind of identity', i.e., *points of reference*. Hypersensitivity in itself was not a problem, but the inability to ground this hypersensitivity on anything ejected her 'into outer space'. Her mind 'flowed like a wave', yet when it attached to something, it became rigid 'in a nanosecond'. Everyday beliefs and opinions were formed gradually, but in psychosis, an impression instantly transformed into an unchangeable belief. The belief transformed into 'a black hole sucking everything in', and her whole life was subsequently subordinated to that belief.

> *For example, when I saw that bug near me, I immediately stated: 'It's from me'. I don't know why. It just happened. After that, any sensation confirmed that idea. If I felt itchy or saw a leaf moving in the wind, it was because of the bugs. My mind went to great lengths to fabricate stories to sustain the thought. I started creating.*

> *Creating is the essence of psychosis, and its connection to the spiritual realm. We create our reality and manifest externally what is inside us. Psychosis is an extreme example of creating your own reality: you shape everything around you to fit your beliefs. My mind got very imaginative. Every thought, every move, the way clothes fit on me, and how I felt after eating supported that belief. If there was a wrinkle in my pants, it was because there was a bug under the fabric. If I felt better or worse after eating, it was because the bugs liked or disliked that food.*
>
> *In retrospect, it is interesting to look back and see what a very playful mind was capable of inventing. It was like an improvisation exercise: how can I link everything in my world to a single belief? When you already understand that the belief was untrue, it appears funny.*

It appeared that building a better world, or 'choosing to see it', was central to maintaining individual agency. Lysaker et al. noted that recovery from mental illness involved recapturing a sense of agency [135]. Creating also aligned with the concept of psychosis as a survival strategy in severe stress [134, 136], as well as with the concept of psychosis as a massive defense system [137–139].

[135]: Lysaker et al. 2012 DOI

[134]: Bergström et al. 2022 DOI
[136]: Seikkula 2019 DOI
[137]: Fisher 1970 DOI
[138]: Fisher 1997 URL
[139]: Walsh et al. 2005

After contemplating the parasite issue for two weeks, she ingested rat poison, assuming that it would kill the bugs but not her. However, as she began to feel ill, she realized she had poisoned herself and called the ambulance. At the hospital, she described the situation and was referred to a psychiatrist, who mentioned that she might have 'latent schizophrenia', adding that she would need to go through a formal evaluation to establish a formal diagnosis. She refused both the suggestion and the evaluation, commenting that she was 'refusing to have this illness'. The psychiatrist appeared to feel pity for her and commented that it was not her choice: no-one decided whether they had the condition or not. She repeated that she had the choice and that she 'decided to not have it or be that'. Regardless, she accepted the prescribed antipsychotic medication, and promised to start a therapy program but never did. The medications she took occasionally.

According to her, anti-psychotic medications 'did not necessarily make a person worse, although they could', but primarily they just 'completely hid the causes of the disease'. She considered them not medicines but anesthetics, which suppressed symptoms instead of addressing the root causes. The causes of disorders were not 'psychiatric' but 'spiritual', and needed to be handled as such.

In this context, 'psychiatric' referred to the view that psychosis was due to biological predispositions (genetic variance) leading to a 'failure state' that was to be corrected with medication to allow a return to a state of normalcy. 'Spiritual', in turn, referred to a holistic view according to which psychosis was due to the loss of individual agency: the loss of one's 'spirit', as a result of a process sometimes referred to as 'soul loss'. She was not against antipsychotic medication but considered it very important to mix both approaches and 'avoid the extremes'. She proposed a dialog between these approaches in order to improve the treatment of serious conditions.

> *In psychosis, the mind becomes rigid or calcified around an idea, losing all flexibility. It resembles a very tight muscle. A person blinded by such a rigid belief needs help. It is impossible to work with someone who has not slept for four nights. First, she needs to relax. Antipsychotics can function as 'muscle relaxants'. Afterwards, she can be approached by a doctor, a friend, or even herself. In my case, the person approaching was usually myself. Upon noticing that I had lost connection with myself, I temporarily used whatever was necessary to unblind me, after which I did whatever else was necessary. My work was very personal; no one taught me how to do it. It was step-by-step intuition. The essentiality of inspecting one's beliefs is a general rule that applies to everyone: don't hold rigid beliefs or slip into fanaticism. Opinions can and should always be combined.*

She began educating herself on 'what schizophrenia meant and how to make sure she didn't have it'. She described that when the antipsychotics (aripiprazole, 15 mg) worked as intended, she 'recognized the unnaturally rigid and inflexible nature of her beliefs, which were always in complete contradiction with any kind of rational reality'. For this reason, she admitted to herself that her mind was not functioning properly. She described having gone through 'uncountable rituals all day': counting various things or saying specific words in certain fixed sequences. The rationale for this was 'to ascertain that a major disaster, such as a fatal accident to someone I loved, or a fatal earthquake, would not happen during the next half hour'.

She described how, upon reading about schizophrenia, she 'slowly began to understand that this was not normal'. In order to resolve the situation, she initiated 'a program for learning the proper way of thinking, in the same manner as someone would re-learn to walk or speak, or how autistic children learn about feelings'. She learned to discern how 'the type, density, or energy' of her psychotic beliefs, sounds, presences, or voices differed from 'the real, healthy ones'. She became her 'toughest and most unforgiving trainer', constantly checking whether what she saw, heard, felt, and thought was similar to the perceptions, feelings, and thoughts of others. When she observed differences, she either adopted the ways of the others, or buried her idea or habit altogether. Her method proved successful, and after some time she was 'doing it almost automatically, like fixing an engine in motion piece by piece, an engine that was constantly working erroneously'.

In the presence of fear or paranoia, she experienced a partial dissolution of boundaries: an external object was 'from her or in her'. There was no full identification: she was not one with the object. The experience resembled a type of paranoid projection in the presence of partial boundlessness. To overcome such projection, she developed a technique for differentiating paranoid ideas from the non-paranoid ones.

> *I began questioning everything in this way: 'Does this thought or idea originate from fear or love?' The ideas 'I am the bug' and 'I am the universe' originated from love. Such good, functional ideas brought me further. On the other hand, the idea that inside me were bugs that were attacking me originated from fear. It was a sort of metaphor for the underlying trauma: you're a victim with*

> *no control over what happens to you, to your body. Psychosis is always a metaphor.*

The differentiating factors were her emotional state and the degree of identification with the object. In the presence of love, one could fully identify with the world and its parts (perhaps 'surrender' to it): she experienced 'oneness'. In the presence of fear, one experienced the world as consisting of separate, threatening parts, and needed to defend oneself against them.

She felt that she was feeding the attacker simply by being alive. The bug appeared to be a representation or a metaphor of the abuser. Her brain tried to convince her that, in order to stop being attacked, she needed to die. While, from a purely factual perspective, death would have been one solution to the problem, it also conflicted with the two most fundamental intentions or 'drives': survival and reproduction.

> *The brain is extremely smart in this way, actually. The fact that you're alive feeds your attacker. That was the message that my brain was trying to send me: 'You feel attacked, and what do I want you to do: I want you to die. That is your role. How do I get you to die?' So I created this story: 'The fact that I'm alive is keeping the bug alive. So what do I have to do?' You see: it's a kind of a puzzle, a trick of the brain, that will always give you the same answer. That's what the mind does: it loops. You will have to die, and how do I get you to do that? I convince you that you have a disease, I convince you that you are being attacked. In various ways, the mind will try to convince you to do the same thing: to die.*

In her words, her 'life force was feeding the position of being a victim'. On the other hand, 'being a victim was feeding the bug', which could be interpreted as follows: the attacker was receiving energy from the abuse, or in other words, her suffering was promoting the well-being of the attacker. In the ayahuasca context, this phenomenon is typically referred to as 'energy exchange'. Regardless of the metaphoric details, the essence was about her vulnerability, her 'core feeling', originating from personal and transgenerational trauma. She was 'certain that there could exist genetic information telling you that you are vulnerable, which could manifest as metaphors' (see e.g., [108–110]).

[108]: Wolynn 2016
[109]: Dias et al. 2013 DOI
[110]: Morin et al. 2021 DOI

Regardless of her relative success in correcting her biases, she commented that 'I was never a whole: there were just pieces that I had made functional'. Still, her only reason for staying alive was the fear of hurting her mother and her family with her death. Like in her teens, she remained very high-functioning professionally in her twenties, acquiring a PhD and starting a family of her own. Successfully keeping her symptoms a secret, she only presented with 'brief but frequent moments when my friends would see a glitch and a crisis would emerge'. She described that everyone had regarded her as 'very atypical, explosive, and unpredictable, but otherwise fun and a good friend'.

However, after a couple of years, she 'could no longer hold her emotions in check', and was beginning to act 'more and more impulsive, dangerous, and unstable'. She 'bursted in fits of uncontrollable anger, violence, and self-harm'. Frequently, she was 'watching powerlessly how someone else

was in control', someone who was destroying her life, relationships, and family.

Her husband, not knowing that she had seen a psychiatrist before, convinced her to see one. The second psychiatrist performed an EEG, which he said was showing a 'classic bipolar pattern with abnormal activity all around'. He therefore diagnosed her as bipolar, prescribing a mood stabilizer (sodium valproate, 1000 mg) and an anti-epileptic (clonazepam, 0.5 mg). She told her husband about being prescribed some medication but not about the diagnosis.

After having taken the new medications for a short while, she decided that she would not accept the diagnosis of bipolar disorder either. Overcoming bipolar features was more difficult because they were 'more about emotions' which she described as her 'soft spot'. Her thoughts were easier to control than her emotions. At the time of the interview, she said this issue was 'not yet completely healed but much easier than before' and that she could manage it. She linked schizophrenia to cognitive biases and delusions, and bipolar disorder to emotional instability.

Due to medical reasons, she had to terminate a pregnancy. After that, she had another pregnancy with a high risk of death for both herself and the child. Her husband was aware of the risk but not the severity of it until the very end of the pregnancy. Her grief over the loss of the first child, and the fear of losing the second one made her more unstable than before. Her husband again asked her to see another psychiatrist, who added a diagnosis of borderline personality disorder. She remained uncertain whether this diagnosis was intended to replace or complement the diagnosis of bipolar disorder, but 'they seemed quite similar anyway'.

Once again, she began studying her newly acquired diagnosis, working on understanding it and gathering skills to handle it. However, this time she was 'too tired'. She described having been 'completely exhausted and feeling the cosmic pain that my children would eventually lose their mother because not even my children, whom I loved beyond what was possible, were enough for me to actually want to live, or like it here'. Adding to the exhaustion, she had 'another traumatic sexual experience' (undisclosed, but assumedly a rape), which led to yet another suicide attempt involving a car crash.

By then, although she could recognize in herself many of the features associated with the diagnosis of bipolar disorder, she became convinced that she had 'never actually been either schizophrenic or bipolar'. She identified more with the borderline criteria, which she said also explained her history of psychosis. She 'gave up all three diagnoses' and the related prescription medications. Regardless, she was 'not coping well'.

The memory of the diagnoses 'continued to scare' her, keeping her 'maybe even overly aware of any irregular state of mind'. She described that her sense of personal identity or trust in her thoughts or feelings had been 'completely lacking'. After years of 'forming herself based on other people's patterns', she had ended up with 'no idea' of what she liked or who she actually was (an 'adverse effect' of her training method, perhaps). She was also 'terrified of someone seeing through my well-organized composure'. This was not because of the fear of abandonment but mostly because 'I knew that if someone would regard me as crazy, I

would have no tools against seeing myself instantly in the same way and eventually end up being exactly that—if there was anything to save me from being that, I was my secrecy and my decision that I was neither of those diagnoses'.

In this situation, ayahuasca had been her 'last shot'. She said that, although up to that point in her life she had also experienced 'many happy moments' and 'sincerely enjoyed life often', only her first experience with ayahuasca had transcended her life story into 'a story of light'.

> *The first thing I experienced during the ceremony was the emotional storm that I had trained to control for years. Following that, I felt the familiar energy, high density, and the unescapable isolation of psychosis. Only at that time, these feelings were fleeting, and they always ended in an unimaginable ocean of love and support, coming from both inside and outside of me. It was a degree of support I had never felt before, and most importantly, I experienced it in a state in which I had absolutely no way of hiding anything. For me, in that moment, there were no more secrets.*
>
> *I was shocked by two things. First, about the enormity of pain and terror living inside me, which I saw so clearly that I could not believe I had ever managed to survive it. Second, about receiving so much support and trust even though this pain had surfaced and was visible. I realized that I had treated this pain as a disease, as my fault, and as my greatest shame. I could feel nothing but compassion and amazement about how I had managed to live for so long with that, with what I felt were many generations of grief, loneliness, and pure sadness. For the first time, I felt genuinely proud that I was alive.*

Subsequent ayahuasca ceremonies shifted her away from having a self-image of being 'mentally broken'. She gained 'an understanding of the massive split and fragmentation that had been created in me'. Her former challenges had been about unbiasing her thoughts (cognitive or 'schizophrenic' aspects), and bypassing or controlling her emotions (emotional or 'bipolar' aspects). Her new challenge became 'how to hold in so much love, so many supportive presences, and the entire understanding of the dimensions of the soul' (connecting with the Self, perhaps). She described that 'the opening of so many more levels of consciousness finally created a space in which I as a whole made sense'.

> *Once I visited a psychotherapist who asked about my childhood. I said I had a perfect childhood. It was perfect. And in that exact moment when you say it, your inner child, who was hurt and not seen, kind of splits from you. This was exactly what half of my latest ayahuasca journey was about. I saw a girl who told me: 'Every time you repeated this lie, you denied me completely'.*

Ayahuasca ceremony facilitators trained in accordance with traditional indigenous guidelines often mention that in ceremonies, they have the ability to access participants' visions. Interestingly, the interviewee described possessing the same skill: in a ceremony, she saw the vision of another participant; this was confirmed in a discussion afterwards. In a sharing after another ceremony, participants realized that a group of

participants had shared a vision of having been in a burning medieval town, some as attackers, some as victims.

As described, her childhood symptoms had included violent raging, sleepwalking, suicidal behavior and self-harm, and actual suicide attempts. Her mother continued to deny the existence of these events or interpret them as inconsequential or harmless. The interviewee had eventually admitted her parents' wrongdoing: 'Allowing myself to accuse my parents of wrongdoing was a big thing for me. It was essential because the validation of myself as a whole became possible only after I admitted that it was not ok, instead of telling myself all my life that it was ok'.

Before the first interview, she had attended ten ayahuasca ceremonies. For the last ceremony, she had two intentions: first, to see whether unresolved trauma existed (it had appeared as if nothing significant remained); second, to find out whether ayahuasca was safe for psychotic people. To her, this was significant because she 'cared so much and believed with all her heart in this medicine'. She was going to dedicate as much of herself as she could 'to bring it to the people who need it'. She felt that it would break her heart if she felt that ayahuasca would hurt the people she wanted to help.

The result of this inquiry was that ayahuasca 'could not hurt anyone, at least not on its own'. According to her, all ayahuasca did was 'purge'. She described that while ayahuasca often caused vomiting, 'the purge' was to be understood as a metaphor, as a purging of unwanted elements from the body. In a similar way, psychosis or mania was to be conceptualized as 'vomiting of the mind'.

While her first ceremony had been explicitly about her personal early trauma, in the subsequent ones she was forced to adopt the role of a therapist for lost souls or 'spirits' who needed to be seen. This otherworldly social service function paralleled her own trauma of not having been seen. For years, she had learned various ways of conceptualizing psychological phenomena, and could choose a point of view: 'spirits' could be hallucinations, exiled parts she could not integrate, or representations of transgenerational trauma. But was such theorizing helpful, or did it only make her worse? By choosing a point of view, she could choose her reality.

> *In this way, we create our own reality. Rules that are pragmatic for you might not be pragmatic for me. That is why a person should primarily trust their own intuition. When you see spirits coming, you can ask: 'Do they make you feel bad? Are they intrusive?' Such questions actually matter. I found that for me, the spirits are actually vibrational matches. I have always been a very empathic person. I feel the emotions of others around me, as well as my own, very intensely. I often felt clear presences around me. I didn't see them or hear them, only felt their presence. I always had the same relationship with them: I needed to tell them that they were fine.*
>
> *I could call it transgenerational trauma, but I didn't think about it like that. I felt them coming to me all the time, to show me the dead in their families. I didn't see them visually: they only existed in my mind's eye, as if I were imagining them. They could come*

with a dead child in their arms and say: 'Look what happened! No one knew about this.'

It was breaking my heart. I had moments during which I could not go on with my tasks. This was the most difficult thing for me. I don't know whether this specific aspect should be called psychosis. A doctor might say: 'Yes, because it disrupts your actions'. I would go erratic and stop what I was doing. I would feel that I was breaking. I had moments during which I cried as if my entire family would have been dead. Later, I learned to manage it to a degree.

Each time I asked them: 'What do you expect me to do? I feel you, I see you, and I'm really sorry for you. You see that I am breaking, but I don't know what to do with you, yet you keep coming'. Their message was always the same: 'We just want someone to see us'. After fighting with it, I eventually accepted the situation, saying: 'You know what? Maybe I simply am the kind of person who needs to see the dead people or whatever, the suffering that needs to be seen'.

My first ayahuasca ceremony was about my personal trauma and the purging of that. Right after that, spirits started arriving in droves, and my ceremonies transformed into this kind of collective work. I begun to see them visually, in person. They could look like ordinary people or like bodies of light. Each time, it was perfectly clear to me why they came to see me. It was no longer about me. I was only holding space for these spirits.

Initially, it felt like I was dying for real. The cosmic pain was of such intensity that I felt unable to contain it all. I was hopelessly restless. Eventually, I learned that the proper way to hold space was to allow their emotions to pass through me. It was an important lesson in opening myself up. I relaxed. They embodied my body for a few seconds, and then went their ways. Their energy simply needed to flow through me to be released. They were energy stuck in the universe because they had never been seen or validated. The energy just needed to pass through something, like when you are mad and need to go to the garden just to smash something.

When I got the idea and accepted my role, things got easier. Currently, this work happens not only in ceremonies, but all the time. Maybe this doesn't really make my case that I'm no longer psychotic. I mentioned to my friends that now I actually see the spirits visually and communicate with them. They likely thought I was still psychotic. But as long as you're functional, and as long as the process feels fulfilling for you, it is a non-issue.

Eventually, I found out that, in the same way that they need me, I need them. I am not only doing charity work for the spirits. Because they are my vibrational matches, and the fact that I needed my pain to be seen attracts similar vibrations from all the layers of reality around me. It is like coming together. We think that our soul has a human experience in our body, but maybe my soul is comprised of all these external parts and fragments that are coming together.

Ever since I was a child, I had the organic possibility to see such things. It was not because I was taught to see them. I was taught

> *differently. But this was how I felt inside since I was three or four years old. In the ceremonies, others around me shared the same experience, which I had thought was only my psychosis. I used the complete emotional instability and intensity of the psychotic experience as a bridge to connect deeply with those around me, as well as with my soul as a whole in all its past charge. I recognized that because of my unusual traits, I was able to connect to a greater wisdom, to higher self, and to feel unconditional and absolute love. I begun to consider these traits a privilege.*

In guidelines for ayahuasca ceremony participants and psychedelic therapy in general, participants are typically instructed to 'surrender' or 'let go' of resisting their emotions. The described process largely mirrored these instructions. The idea of emotional energy being released through experiencing it was also described in another case study concerning psychedelic therapy [140]. A conventional interpretation might consider her holding space for the spirits as indirect processing of either transgenerational or personal trauma. The increased visibility of the spirits could be interpreted, for example, as a strengthening of connections between exiled parts and the Self.

[140]: Turkia 2022 DOI

It was essential to belong to a group where one felt accepted instead of being 'a freak left alone'. Her previous attempts to belong had been based on conformance, mimicry, and pretending that she was like the others and believed in the same things. This resembled society 'putting beliefs in her head' when these beliefs did not fit her. Subsequently, she believed that there was something wrong with her.

In the ceremonies, she discovered that other participants experienced the same 'dimensions' through ayahuasca. Being able to share her internal experience connected her to others, dissolving her feeling of complete isolation: 'Overcoming this isolation for the first time in my life was the reason for my ayahuasca experiences being such a big relief for me'. Instead of being 'crazy', she was 'awakened'. Despite this, she could only connect with a small group of people who shared her experience, rather than the entire society.

She also realized that she 'needed to choose what is practical'. The idea of her creating everything around her was impractical in everyday life. Among the infinite alternative worlds, the most practical solution was to choose a point of view. Existing in all dimensions made daily life impossible and equaled to psychosis. An inability to choose a point of view appeared to equal to *a lack of identity*.

Psychosis was partly 'a sort of enlightenment': a process of receiving a lot of relevant information. It only became a problem when one did not understand the information, could not process it, or choose a point of view, and subsequently got confused. Other people could provide points of reference, to discern between 'true' and 'false', practical and impractical. Although she considered many common concepts (such as, at the time of the first interview, the idea of external objects not being created by her) arbitrary and fundamentally untrue, she had 'chosen to play by the rules, to play the social game' (e.g., believe that external objects were 'real'). This acceptance had been 'her key to professional success'.

Another essential concept had been 'radical acceptance' originating from Zen Buddhism and dialectical behavior therapy [141]. Her acceptance of the usefulness of radical acceptance was based on its pragmatic value in everyday life. Its essence was that there was no good or bad, and one believed that everything was necessary. By eliminating resistance, fighting, and the associated negative emotions, acceptance set an order to life: one just 'needed to play along'.

[141]: Linehan et al. 2015 DOI

Despite having presented with 'all contraindications' to the use of psychedelics as well as contraindications to attending most ayahuasca retreats, her ceremonies had been unproblematic and productive. In her view, the purpose of contraindications was to protect weekend retreat organizers who could not provide extensive in-ceremony support and/or follow-up after ceremonies. These contraindications were understandable but, in the broader view, counterproductive.

The most difficult patients were 'usually stuck in all kinds of therapies or medications that functioned as anesthetics, only hiding their problems'. In order to optimize the cost-effectiveness of mental health services, these more challenging patients should have been prioritized over the 'easier ones'. The scarce resource of ayahuasca ceremonies should have been used for the ones who had not been helped by other means, as well as for the ones who caused the most harm to themselves, others and society by remaining untreated. Ceremonies should have been augmented with proper aftercare ('psychedelic integration'); what was important was what one did after the ceremony. She planned on providing these services herself in the future.

With regard to 'adverse effects' during the ceremony, she commented that 'if something unwanted happened, it was because one's soul chose that as its method to heal itself'. Adverse events occasionally occurred: a bipolar woman became manic after a ceremony. According to the interviewee, this was because the woman 'lacked any insight into her issues, as well as any skills for handling her particular brain chemistry'. Therefore, she had also been vulnerable to various everyday environmental triggers.

Adverse events functioned as a diagnostic filter. Instead of the patients' issues remaining 'blind spots' and these patients refusing to admit the existence and/or severity of their issues, the so-called 'adverse events' made them attentive to their issues, giving them a chance to learn how to handle them. The purpose of psychedelics was to reveal such unprocessed issues, to 'bring into light what remained unseen'. Allowing that to happen was 'very necessary'. Rather than depriving such patients of treatment, a more comprehensive approach was required.

Attitudes were also essential. An indigenous healer (met outside of the ceremony context) with a 'very gentle way of communicating and zero judgement' seemed to 'read her' non-verbally, making her feel 'very seen and validated'. His approach had been working together in order to teach her something, without putting it into words. The healer had shown her how to navigate the 'dimensions' without psychedelics. Psychiatric personnel, in contrast, verbalized, labeled, and judged, as well as appeared scared and avoidant, treating symptoms as 'monsters'. Being labeled often shocked patients, amplifying their feelings of inadequacy.

Such practices arose from and propagated 'collective trauma'. In her view, societal structures were traumatized. In the absence of experiences with alternative ways of being, collective traumatization appeared normal. Despite such appearances, an individual could feel the abnormality as an internal conflict, i.e., the pain and suffering ingrained in structures. Such causal relationships remained largely unrecognized. Some people could remain open to perceiving this state of affairs. Psychoses could result from collective trauma. Failure to find explanations in individual life histories could lead to patients being handled as mechanistic systems that could be 'adjusted with buttons: anger down, pain down, joy up'. In the extreme case, collective trauma could lead to an unrecognized, subconscious unwillingness to live, resulting in society-scale failure to thrive, or inadequate or delayed responses, 'collective freeze reactions', in the face of threats such as climate change. Societies typically wanted to further repress collective trauma instead of 'sitting with it in order to transcend to higher levels of consciousness'.

On the individual level, chronic stress from collective trauma could manifest either as psychiatric or somatic issues such as immune system disorders or cancer. The exact phenotype was determined by how much of the trauma an individual could accept, i.e. process, and release, or 'pass through'. The remainder of the 'stagnated energy' remained in the body, causing disease.

With regard to her childhood psychosis, she commented that she had 'chosen not to include myself in the world because I was not ready to acknowledge all that darkness, and also because I was basing my so-called modesty on the fact that I was still alive and others were not'. Also, getting confused was due to the simultaneous experiencing of several 'states of consciousness' or 'dimensions', some of which lacked the concepts of time and causality, as well as involuntary switching between such states.

Diagnostic practices she considered inappropriate. Schizophrenia was mentioned once in an emergency room, and never again by any doctor. Bipolar disorder was diagnosed after a short appointment with a psychiatrist, based on an EEG. She considered herself 'a victim of superficial labeling'. While some people could be 'actually bipolar' or 'schizophrenic', she considered herself different due to her high performance in her working life, which would have been impossible if she was actually bipolar or schizophrenic. She 'exhibited some unusual traits' but predominantly identified herself with a borderline condition. Therefore, she did not want to see herself as someone who had been healed from bipolar disorder and/or schizophrenia.

According to her, the root cause of schizophrenia was currently considered to be trauma combined with hiding it. Her psychotherapist friends working with schizophrenic patients considered 'stopping their patients from hiding' their primary method. A person could only heal by feeling safe and stopping hiding. They could first experience it in therapy sessions, and later in real life; in contrast, 'taking sedatives and becoming compliant' did not heal.

The outcomes of first psychoses were determined by how cultures conceptualized psychoses. She learned about the concept of psychoses as 'awakenings' from TED Talk video presentations, which mentioned that

in many indigenous cultures, if a child hallucinated, she was instantly separated from her peers, carefully nurtured, regarded as a carrier of special skills, and later trained as a healer [45, 142]. Individuals with hypersensitivity to interpersonal issues were identified by asking whether they had experienced near-death experiences or psychotic episodes. They were open to receiving an unusually large amount of information in interpersonal situations, but if they lacked the skill to organize and process such information, they would become dysfunctional. They could only become healers, leaders, or prophets by learning to process the information. Indigenous approaches to first psychoses aimed at initially calming these individuals down by explaining that nothing was actually wrong [45]. Subsequently, they were taught the required skills, and later assigned a role in their society as a solver of complex interpersonal/psychiatric, and/or medical issues.

[45]: Somé 1997
[142]: Borges 2021 URL

[45]: Somé 1997

> *This information is mixed up and very irrational. But if you regard it like: 'Oh, how interesting! You're psychotic, maybe you have a gift, maybe you have a special ability, let's see what we can do with that', then you completely shift the perspective, prioritize that person, make him accept himself, maybe even be proud of himself: 'Oh, look: I am special, I have this kind of thing'. That's why they say that the psychotic ones are future shamans.*

Her struggles had largely been the result of being overloaded with information. Conventionally, the source might be considered to be the subconscious or exiled parts. She was 'not yet perfectly healthy, and there was still processing to be done'. The abused girl part remained dissociated: she could not feel anything when talking about it, and talking about it triggered escapist reactions.

> *I still can't connect to it in any way. The previous time, when we talked about the abuse, I could not feel anything. I was completely blank. I could not handle the situation. I felt that if I connected, I would get completely depressed. Afterwards, I chose to numb everything with alcohol and cocaine, and I partied for three nights. Party drugs and alcohol, in contrast to plant medicines, completely isolate you from yourself and the world around you—from everything. They function exactly like psychiatric drugs, which are artificial and toxic. I knew very well what I was doing, and did it on purpose. It was a trauma response to do the exact opposite. This is how people become alcoholics or drug addicts.*
>
> *I still possess these ingrained, dissociative patterns that affect my memory. Even when I don't drink or take drugs, when I go out with friends and drink only tea, the next day I only remember arriving at the bar and being at home in the morning. It is freaky. Usually, there was a trigger: something hurtful that caused me to lose touch with myself. Yet my friends did not notice anything. Later, when I asked, they said that I had acted completely normal. Regardless, none of it was stored in my memory.*
>
> *As another example, people often tell me that I met with them yesterday, and I am like: Oh yes, we met yesterday, of course, I know that. And I do know that, but I only remember one sentence from a one-hour meeting. Such situations are extremely difficult: I have to pretend that I remember everything or else I will appear*

> *insane. Such situations perpetuate a vicious circle: by pretending that I remember, I deny the hurt part that caused me to forget what happened. I fail to validate that part. It creates yet another split. Ideally, I would simply tell them: 'My memory fails because I am very traumatized'. But I cannot say that.*

Some of her close friends, whom she had told about this issue, could 'watch for her', i.e., occasionally notice changes in her behavior, and subsequently assume a protective role by 'not leaving her side from that moment on'.

> *I often see myself from the outside, say, ordering ten tequilas in a bar. I would be completely out of myself, observing the situation and saying: 'I do not want to do this, please stop, you'll get drunk'. I am certain that I don't want to get drunk, but I am looking at this person from above: looking at something that I cannot influence or stop. I need to have friends with me who say: 'Stop it!' Currently, this happens less often than before, maybe once every two or three times I attend social events. I call it 'my feet slipping'.*
>
> *My friend then tells me: 'You're acting irrationally, you're crazy, stop it!' And I do. I am very complacent in such situations, even if I sometimes don't understand what they are saying. I might ask: 'What?' and they would tell me something that completely contradicts my own idea of my behavior. It might resemble descriptions of bipolar disorder. I could buy whatever people want from the bar, for a lot of people, for people I don't know, feeling like I actually know them very well, as if they were all my friends. An actual friend of mine might then interfere, saying: 'You don't know these people!' I would realize that she is right: I don't know them. But in a way, I feel that we are friends. Sometimes I need help with such things.*

She also consulted her friends about work-related projects. External feedback and validation provided her with 'a lot of safety'. Regardless, she was trying to find a balance between external support and trusting herself, 'because you have to trust yourself'.

After her first ayahuasca session, in which she first experienced the possibility of not having to hide, she participated in IFS therapy sessions. The therapist asked her to pay careful attention to dissociative traits. In some sessions, he asked if he could talk to 'the other her', and 'yet another her'. According to the psychiatrist, her parts possessed different voices, moved differently, and related to people differently. She was aware of the issue herself, and mentioned that these traits also originated from her childhood traumas, and that switching between these parts was caused by trauma triggers.

She chose to tell her story 'because it was not only her story'. She felt survivor's guilt about ending up as one of those who did not jump off the roof, although she believed the selection was 'random'. This 'complete randomness' had been the most difficult lesson of her survival. She considered herself lucky because her problems had been severe enough to 'push her into a clear awareness of the underlying causes'. People with less severe issues could remain unable to identify the underlying causes, and remain indefinitely confused and chronically depressed. People who were 'only neglected', regardless 'got the message that they were not

survivable material and didn't matter'. Like a sick puppy ignored by its mother, they gave up trying. In such cases, 'soul retrieval', or a guided reliving of a traumatic event in a safe setting, accompanied by 'rewriting' the trauma memory in such a way that personal agency is reestablished, could be indicated (this mechanism may be considered the core essence shared by all psychotherapies).

> *Eventually, your soul breaks. In such cases, if we get more spiritual, 'soul retrieval' could be helpful. It is a metaphor, a meditation upon your wholeness: going back to the scene of the traumatic event, and taking back something that was left behind, because that is what trauma does: it breaks you and leaves a part of you at the scene.*

A thorough review of the previous discussions in a follow-up interview two and a half years later revealed that, after two years, not all she had said before reflected her current views. The main difference was that she now recognized the validity of her bipolar disorder (officially, bipolar type II disorder, ICD-11 6A61; with rapid cycling, 6A80.5). Based on the case description, it could be said that before her first ayahuasca ceremony, she presented with severe (suicidal) depressive episodes with psychotic symptoms. After the first ceremonies, severe episodes no longer emerged. During the first interview, she might have been slightly manic. She was taking mood stabilizers (lamotrigine, 200 mg/day) but also continuing regular plant medicine work with ayahuasca. According to her, mood stabilizers did not interfere with the plant medicine work. With regard to dissociative symptoms, she mentioned that they had largely been resolved.

She believed that her early trauma was solely responsible for the onset of her bipolar disorder, which was an adaptation to trauma, and the core of her early trauma remained largely unresolved. She needed more C-PTSD-focused therapy and somatic work to overcome the remaining toxic shame and coping mechanisms, which included self-harm. Through constant plant medicine practice paralleled with trauma therapy, she was making slow progress with these issues, however.

She still occasionally struggled with bipolar symptoms, and while plant medicine brought 'immense gifts to her life on a daily basis', the years had brought a clear awareness that it had not cured her bipolar disorder. She was therefore 'more moderate and humble' in how she talked about plant medicines. Plant medicine or psychedelics, in any case, 'opened the door to integrating the fragmented parts from trauma, which automatically helped to resolve the bipolar mechanisms'.

She held that a history of psychotic disorders was not a contraindication to psychedelic therapy. She had been involved with plant medicine and trauma work for the whole time, and observed, in detail and for long periods of time, several people diagnosed with bipolar disorder or psychotic episodes. She was using her expertise to train psychotherapists in plant medicine work.

She considered schizophrenia to be outside the scope of her expertise. She 'did not want to risk anyone' by saying that plant medicine could cure psychosis, schizophrenia, or dissociative identity disorder. Her suffering did not match 'the really deep suffering' of people with schizophrenia. Her own diagnosis of schizophrenia she saw as a mistake: it was 'just a

word someone threw once', not something she had to deal with. Instead, practically all her challenges were due to bipolar disorder. Ayahuasca had helped her a lot with that, as well as with suicidality, and she had observed the same positive effects in others.

2.2.1 The abuser's perspective

In contrast to most cases of early childhood sexual abuse, in the present case, the abuser later admitted the issue, validating the victim's memories. This recognition was a consequence of him attending an ayahuasca ceremony.

> *About my early trauma, I can talk in general terms: it was sexual abuse that went on for some years. Then I forgot about it. Such amnesia is typical. It is called dissociative memory: you kind of forget these things. And because it is a kind of Stockholm syndrome, you begin to repeat the same pattern. You get attracted to the same kind of people, because that is how you understand that you are valued.*
>
> *One day, I remembered the abuse. Regardless, I always doubted whether those memories were real. There was always at least a grain of doubt: What if I am not right? What if I am only imagining it? I doubted my memories because they had been forgotten for so many years. This is very typical for victims, especially for victims of early childhood trauma. When you eventually remember, it is of course shocking, and you feel hurt. At the same time, you also feel that maybe you are crazy, or that you have invented it all. You don't have the luxury of an ordinary person beaten up on the street. He will not question himself or the fact that he was beaten up. Therefore, he will allow himself to grieve and feel angry at his abuser.*
>
> *In contrast, if you have carried a dissociated memory with you for years or decades, and suddenly remember what happened, unless you get a chance to really put the issue on the table, it will always be unclear to you whether the event you remembered really happened in the first place. Many people do not have the chance to speak to the abuser afterwards to say: 'Hey, did this really happen?' Some people do that. They have the courage. I didn't have the courage to open that discussion. But many do. Of course, typically, the abuser will then lie and say that the abuse did not happen. The victim will end up even more confused, no longer knowing what is right or wrong. I think that in time, such a response can actually cause schizophrenia. It is a split: a part of you is hurt and knows it, while another part of you is accusing the hurt part of being wrong.*
>
> *I, too, carried this conflict until recently. Then I found out that all of it was actually true, although a part of me already knew that it was true. Nonetheless, receiving confirmation was a relief. But I didn't have the courage to open this discussion. The other person did.*

Interestingly, the abuser eventually took up the issue as a result of also attending an ayahuasca retreat, although not immediately after it. She assumed that the ceremony had 'opened up something in him'.

In addition, during the preceding years, the abuser had pursued 'self-development', realizing that he was also traumatized. According to her, they were both victims. His trauma was also an early childhood issue: the divorce of his parents. After the divorce, his parents did not get along. Because the abuser did not get along with his stepfather, i.e., the girl's father, the situation may have included an element of vengeance: abusing the girl to exact revenge on the stepfather.

> *People think psychosis only means having visual or auditory delusions, but it is not only that. It can also be a belief that you have. In my case, my therapist always said that if you don't talk to your abuser, if you don't tell him that you know what happened, you'll never be fully healed. You need to hear how the abuser reacts, in order to bridge your reality and the abuser's reality. Despite everything, I stayed in close contact with the abuser. We spent a lot of time together, but that reality did not link in any way to the reality of my childhood. They existed as two completely separate worlds.*
>
> *Later, I recognized the same phenomenon in others. A child lives between the two incompatible realities of the mother and the father, each of whom accuses the other parent. At the father's house, he has to act like his mama is horrible. Regardless, she is still his mother, and he loves her. This situation induces trauma, because the child is presenting a facade, acting, and being something that he is not. Similarly, at the mother's place, the same kind of conflict toward the father exists. Since every child wants to be accepted and loved, he has to switch between these two conflicting realities. He will try to please the parent with whom he is living at the moment. It is very hard for a child to find a middle ground, so he will say exactly what each parent expects him to say. This creates a split in the child's mind. He has no idea how to choose or which is the true reality. Since he loves both parents, he is forced to constantly feel 'wrong'.*

According to her, abusing others was another way to gain personal agency in a conflicted situation, perhaps an alternative to psychotic creation. In this option, creation was more concrete instead of illusory. Whereas a psychotic exerted power over imaginary objects, an abuser exerted power over real people.

> *Abusing someone else was his way of taking revenge and creating his own reality that he could control. That is how people become abusers. Initially, every time, they are victims. Victimized children lose control over their lives. For example, in such a divorce, the child will be completely torn between his parents, and has no control over his own life, his reality, or what he can create. Or maybe his needs and desires are constantly invalidated or judged. He may be considered 'never good enough' or greedy. For a traumatized child, there is no right or wrong, only the desire for reparation. Through finding someone more vulnerable, and doing something in his power for this person, he creates a reality over which he has control. By validating his desires, his actions make him feel powerful. And because what he did was a secret, he could not be judged.*

Bullying someone in school or sexually abusing someone were both caused by the same mechanism. The difference was perhaps that sexuality was 'a vital force'. Sexual assault and sexual abuse were ways of expressing this vital force, but in a wrong way.

> *If a trauma is very deep, it affects the vital core of a person and is manifested through sexuality. It is not actually sexual: it is only vital energy that needs to be released without getting judged while feeling powerful enough to release it. This is the core issue, and it is how people become rapists or sexual abusers. It is easy to call them monsters, but they are not that. They can become monsters, but the process itself is always explainable. It would be important for our society to dare to look at these issues and begin talking about them more openly.*

The reason why the abuser's trauma manifested as sexual abuse rather than other kinds of violence was because sexuality brought (more) pleasure. According to her, a traumatized person is always severely depressed. Being depressed meant that one could no longer find pleasure in anything. Yet all animals sought pleasure. It could come through affection, understanding, or other forms, but when one lacked all of those, one resorted to shortcuts: 'any easy, animalistic way to find pleasure' (in other kinds of cases, pleasure-seeking could manifest as substance abuse or other addictions, including porn addiction).

She expressed surprise that these mechanisms were usually not clearly explained anywhere. Even therapists rarely explained them to patients. Yet, many would have benefited from clear explanations, such as: 'You were in this situation, then you did this, and maybe it was a mistake, and subsequently this and this happened, and now you need to stop splitting and hiding'. She said that these issues were currently treated in a wrong way.

> *People with experience of these mechanisms should talk about them. They are actually quite simple, and understanding them makes many things much easier. It would prevent people from getting lost on non-essentials such as diagnoses, and instead enable them to work on their core issues, core traumas. There are a few therapists who can actually arrive at anyone's core issue in five minutes, making it fully clear where that person's problem originated from.*

2.2.2 Bipolar disorder as a consequence of trauma

On the relationship between emotional trauma and mental disorders, the interviewee held that the root cause of all mental disorders was complex trauma (C-PTSD). With regard to bipolar disorder specifically, she held that the idea of bipolar disorder having a genetic background was an unproven assumption. There was a 'chemical imbalance' in the bipolar brain, but this imbalance was a normal reaction to the abnormal childhood circumstances of the bipolar person. In other words, it was the neurochemical manifestation of defense mechanisms developed against trauma—a consequence of a bipolar behavioral pattern instead of its cause.

Trauma was defined as what happened in a person as a result of what happened to that person. Trauma was not a direct cause of the event itself, but a consequence of an individual's reaction to the event. Trauma only developed when the event was experienced as overwhelming, i.e., when it exceeded the person's capacity to process it. In general, younger children had less adaptive capacity and were therefore more easily traumatized than older children or adults. Typically, in cases of abuse or neglect, the child could not talk about it to anyone, or the harm was done by someone in the family. The child was perhaps unable to conceptualize the issue, lacked trust in their parents to share their experience, or was forced into secrecy.

Depending on the age of onset and the intensity of the event, the child could develop a variety of defense mechanisms. One mechanism was grandiosity and independence as a defense: 'I can do anything, I don't need anything, I am all-powerful, I am strong, I can do everything myself'. This would often lead to perfectionism, overachieving, and hyperactivity. Due to the repression of a lot of emotions, the child would also be prone to impulsivity, acting out, and aggression. These features represented the mental patterns of mania. These patterns could later lead to paranoia about someone or something trying to harm the person; this represented the vulnerability related to the original trauma that the child had not been able to speak about. The paranoia was a 'metaphor of the trauma'.

The second pole of bipolar disorder was depression: a consequence of the person running out of energy to maintain the manic defense. As the person 'crashed' or burnt out, another feature related to the original traumatic experience surfaced: powerlessness; 'I am completely unprotected and vulnerable, I am hopeless, this is never-ending; what is the point of trying anything? I will just give up'.

Summarizing the above, bipolar disorder could be conceptualized as an energy level dependent fluctuation between repressing trauma symptoms and failing at it. In this perspective, resolving the underlying trauma would fully resolve bipolar disorder. To what degree the underlying trauma can be resolved likely depends on the resources of the individual and their environment. More specifically, the resolution likely requires that a sufficient level of subjectively perceived emotional safety be achieved.

2.3 Discussion

Noorani, who also studied psychoses in the context of psychedelics, asked whether the greatest contribution of the psychedelic renaissance might actually emerge from research into states labeled as psychotic and schizophrenic [143]. He advised against the normalization of the contraindication of psychedelics in people with family histories of psychosis and other 'major disorders'. He also warned against the excessive formalization of modalities of psychedelic therapy. As an example, he mentioned the dominance of the idea that psychedelic experiences were 'challenging journeys that ended by returning with a treasure'. Viewed from the perspective of infinite possibilities, attempts to restrict the psychedelic experience and psychedelic therapies into rigid templates,

[143]: Noorani 2022 URL

such as current medical conventions, might appear counterintuitive and counterproductive.

Indigenous and syncretic religious practices represent alternatives to the medical model. Many indigenous worldviews greatly differ from first world conventions, up to the point of incomprehensibility. Yet, as illustrated by this case, the applications derived from those worldviews and practices may result in more viable outcomes than the more familiar alternatives. Such differences illustrate the above mentioned arbitrariness in how concepts and practices may be chosen in societies.

Traditionally, ayahuasca and other plant medicines such as psilocybin, peyote, mescaline, and ibogaine have been used in spiritual-religious, community-centric contexts with purpose-built ritualistic structures that imply certain ethical and social principles. To ensure better treatment outcomes, instead of trying to subjugate these medicines to the medical context, their international adoption should broadly follow the community-centric models already established in the practices of various indigenous traditions and syncretic churches.

Another characteristic of the medical model is the often seemingly exaggerated pursuit of the minimization of risks. As seen, the described patient presented with all typical contraindications, yet failed to experience a single 'adverse event'. Unwanted effects might occur more often in people presenting with psychotic and/or bipolar traits, but as described by Mudge, methods to avoid most of such effects had already been developed. Also, as described by the patient, unwanted effects might serve as a screening method for identifying patients with deeper trauma.

In the context of psychedelic therapy, the traditional understanding of the concept of 'adverse events' is rarely, if ever, useful or applicable. Negative experiences are almost always due to the underlying trauma, i.e., due to reliving or re-experiencing emotions and somatic sensations related to the original trauma. The healing process explicitly requires the patient to consciously re-experience them. Usually, however, in the absence of resistance, the re-experiencing period is brief, as illustrated by the description of reliving the psychotic state. Another aspect is that in many clinical trials, adverse events such as suicidal thoughts or acute suicidality are counted, and interpreted as harmful effects of the substance. This likely indicates a misunderstanding of the therapeutic process. In addition, comparisons of the prevalence of suicidal thoughts or acute suicidality pre- and post-treatment are rarely, if ever, made. Consequently, no conclusions can be drawn; suicidality may have increased, remained unchanged, or decreased.

Concerning dosing, both Mudge and the described patient initially utilized ayahuasca in psychedelic doses. Later, Mudge adopted a practice of maintenance dosing with ayahuasca. The described patient appeared to have adopted a similar maintenance practice, but with antipsychotics (with regard to antipsychotics, McCutcheon et al. presented a new, receptor affinity-based classification system for antipsychotic medication [77]; it would be interesting to see where ayahuasca and its MAOI components would be located in this taxonomy). The maintenance practice likely allowed for a gradual processing of the underlying trauma. As to why it had not been fully resolved, in general, reliving trauma requires a suitable mindset and environment. There must be sufficient

[77]: McCutcheon et al. 2023 DOI

safety. If the patient does not feel safe enough, the traumatic events cannot be relived. Also, as is the case with C-PTSD, there may be hundreds of traumatic events. While similar events may at times be processed 'in bulk' (according to Stanislav Grof's concept of 'systems of condensed experiences', or COEX [144]), processing hundreds of events usually takes years. Also, new 'adult' personality structures may need to be formed where they were missing.

[144]: Grof 2019

A group setting may partly enhance safety, but due to the need to take others into account and possible fears related to others, it may also prevent achieving a state of complete safety. The most important factor, however, are the characteristics of the facilitator of the ceremony; in the present case, details were unavailable. Similarly, in an individual therapy setting, the therapist's characteristics can either allow or prevent the patient from feeling safe [1]. Therefore, a general rule would likely be that when a sufficient outcome was not achieved, the situation did not allow it. In other words, sufficient safety to relive the traumatic events was not yet reached. It should be noted, however, that there was continual, gradual progress.

[1]: Turkia 2022 DOI

One reason for the lack of expected outcomes may be a lack of safety. Another reason may be excessive mental power or energy, which allows for resistance. Stimulants (e.g., caffeine) enhance resistance. One likely purpose of the plant diets is to weaken the person. Counterintuitively, a person in poor health may be easier to heal than a person in better health. As the person gradually (re)gains energy, healing residual issues may become more difficult, as the person is in possession of more energy to counter the energy of psychedelics, which try to push one 'across the threshold'. Also, residual issues are typically more deeply ingrained and about personality than more superficial post-traumatic symptoms. In this sense, psychedelic therapy could be conceptualized as a fight between the person's mental power and the power of the psychedelic substance.

The described practice of mixing psychedelic dosing to access trauma with psycholytic or maintenance dosing to balance mood would likely be applicable and necessary in many cases of treatment-resistant depression. In previous case studies, it was estimated that in the absence of re-traumatization (i.e., under optimal conditions), a ratio of one to ten existed between years of psychedelic therapy and years of previous traumatization [145]. In a less optimal situation (i.e., in the presence of constant re-traumatization), a ratio of one to four was more likely [140]. In the present case, the patient had been traumatized for approximately thirty years. Thus, an optimal process might have taken three years; a less optimal one might take approximately eight years. In the present case, the ayahuasca treatment process had been ongoing for four years, thus falling somewhere in the middle.

[145]: Turkia 2022 DOI
[140]: Turkia 2022 DOI

This particular patient was highly educated, exceedingly capable of introspection and analysis, and may not represent a typical psychotic patient. Regardless, her case illustrates the immense potential of psychedelics in psychosis. Her process also aligned with the experiences of successful treatment of severely traumatized, psychotic children in the early 1970s in the US [137–139], as well as the previously mentioned case of the suicidal-psychotic boy [1].

[137]: Fisher 1970 DOI
[138]: Fisher 1997 URL
[139]: Walsh et al. 2005
[1]: Turkia 2022 DOI

Mudge proposed a religious framework as the most suitable for the management of bipolar individuals. The indigenous consider ayahuasca ceremonies a sacrament. Their practices may not be directly applicable to Western societies. Therefore, adaptations founded on a commonly agreed-upon conceptual core might be the most appropriate. The 'neoshamanic' ceremonies in which the patient participated represented such an adaptation.

Groisman et al. anticipated that the principles of religious freedom will trump those of political definitions of illicit acts and substances [37]. They proposed that 'hallucinogenic' use to access spiritual realms should be distinguished from the use of substances to deaden pain and anguish or to provide hedonistic experiences.

2.3.1 LSD in the resolution of bipolar disorder

An important area of research is the exact relationship between trauma and bipolar disorder: is trauma the sole cause of bipolar disorder, and why does trauma cause bipolar disorder in some cases but, say, treatment-resistant depression in others? Such an inquiry would likely also allow for a new kind of diagnostic system based on etiology, based on the age of onset of trauma and the intensity and other characteristics of it, for example, whether the perpetrator was a parent, sibling, or another person, and whether the trauma was caused by neglect or aggression.

The idea of manic defense originates from Melanie Klein [146–148]. From this perspective, mania would appear as a defense against depression caused by a loss of expectation of fulfilling one's basic needs, or against becoming conscious of a traumatic event. Subsequently, resolution of the underlying trauma would resolve bipolar disorder.

[146]: Klein 1940 URL
[147]: Schweitzer et al. 2005 DOI
[148]: Bowins 2008 DOI

One such case of resolution has been documented by Haden and Woods in 2019 [149]. At the age of twelve, a young girl's father was incarcerated, and she was ostracized by her peers. At the same age, she was diagnosed with an unspecified psychotic disorder, with psychotic depression, bipolar disorder, and schizophreniform disorder as possible diagnoses. She reported having heard intermittent voices in her head for several years as well as having been depressed due to various psychosocial stressors. Two of her paternal relatives had bipolar diagnoses and alcoholism. In addition, there was trauma in her maternal lineage. She was initially medicated with sertraline, which appeared to worsen her depression. A light-box treatment induced hypomania. She used cannabis daily and tried ecstasy twice. A bit later, her grandmother died. She was diagnosed with bipolar II disorder and prescribed a mood stabilizer. Later, she was hospitalized for a full-blown manic episode with psychotic features. Her diagnosis was changed to bipolar I disorder, and she was medicated with lithium and olanzapine.

[149]: Haden et al. 2020 DOI

At the age of fifteen, in June 2000, she accidentally ingested approximately 1100 µg of liquid LSD instead of the intended 100 µg. For the next 6.5 hours, her behavior was erratic. In the end, she was lying in a fetal position with her arms and fists clenched tightly; this was interpreted as a seizure, and an ambulance was called. When the ambulance arrived, she was alert and oriented, with no signs of a seizure. It was assumed that she had briefly lost consciousness or had been intensely preoccupied with

her experience. Regardless, she was hospitalized for surveillance. The next morning, referring to her bipolar disorder, she stated, 'It's over'. In 2019, she commented that after the incident, she had lived her life 'with a normal brain', whereas before, her brain had felt 'chemically unbalanced'. Her cannabis use had remained unchanged, i.e., daily. She had stable employment, stable positive friendships, and good work relationships.

Compared to the present case, this patient was much younger, suicidality was absent, and her early traumatization was likely less severe. It may be that a similar intensity of effect cannot be reached with ayahuasca due to its propensity to induce vomiting. Also, LSD would likely be more practical in the medical context. High-dose sessions are typically self-guided. Such unsupervised sessions have been described in a recent book written by a professor of religious studies who underwent 73 solo sessions with 500–600 µg of LSD between 1979 and 1999 [150]. As exemplified by his case, an overly complex organization may not always be necessary. A treatment might consist of a 16- to 24-hour session, preferably supervised by an experienced facilitator, followed by overnight or one-day surveillance that could be carried out by, for example, a nurse. The primary requirement for the supervisor is the ability to remain calm and focused. It should be noted that subjectively, doses around 1000 µg may be qualitatively very different from lower doses such as 100 µg, but this is also the likely reason for the exceptional outcome in the case of the girl. Before such a session, lower doses should be experimented with. Further research and experimentation on this option are needed.

[150]: Bache 2019

2.3.2 The role of trauma in the etiology of psychosis

With regard to the present case, Moreira-Almeida and Cardeña discussed the differential diagnosis between non-pathological psychotic and spiritual experiences and mental disorders from a Latin American perspective [151]. Considering the chronic nature of this patient's condition and the excessive distress caused by her symptoms, her condition before treatment appeared pathological. However, the ayahuasca experience appeared to transform her condition into a 'spiritual' one: nearly all of the suffering dissipated, and the level of social and functional impairment was greatly reduced.

[151]: Moreira-Almeida et al. 2011 DOI

The patient had been diagnosed as bipolar and borderline by qualified clinicians, and it was suggested that she might present with a dissociative disorder. One clinician also suggested that she might have been schizophrenic. From an etiological point of view, the primary diagnosis could have been complex post-traumatic stress disorder (C-PTSD; ICD-11 6B41) [152]. With regard to early trauma, a more useful diagnosis might have been found in the category of dissociative disorders (e.g., dissociative amnesia, ICD-11 6B61). Due to the fact that her early trauma appeared to remain only partially processed, many of the dissociative symptoms remained even after ten ceremonies. In the 2.5-year followup, however, she mentioned that dissociative symptoms had largely been resolved.

[152]: Maercker et al. 2022 DOI

With regard to schizophrenia, she did not seem to have presented with Schneider's First Rank Symptoms: there were no auditory hallucinations, no thought withdrawal, insertion, interruption, or broadcasting, and no feelings or actions experienced as made or influenced by external agents

[153]. Somatic hallucinations and delusional perceptions might have been considered a delusional disorder (ICD-11 6A24).

[153]: Soares-Weiser et al. 2015 DOI

Khan et al. described a case of delusional parasitosis after sexual abuse [154]. Norman et al. noted that patients frequently inherently rejected the diagnosis of delusion, refused to accept psychiatric care, and requested an escalating number of diagnostic tests and anti-parasitic treatments instead [155].

[154]: Khan et al. 2021 URL DOI

[155]: Norman et al. 2021 DOI

In another undocumented and unresolved case of chronic, episodic psychosis caused by domestic violence and early childhood sexual abuse by the mother's brother, the girl attempted to tell her mother about the abuse, but the mother refused to believe the girl, got angry, and blamed the girl for lying. The mother's response thus amounted to an extreme betrayal of trust. In the present case, the patient stayed quiet about the abuse while the mother possibly 'chose not to see'; this could be seen as a similar but more subdued betrayal.

Mitchell, an IFS therapist, defined psychosis as an enormous internal conflict with two groups of 'parts' of personality with conflicting intentions: one group of parts needing something to be known, and another group of parts needing the same thing not to be known [156]. Mitchell referred to psychosis as a 'spiritual awakening'. Mitchell mentioned that her patients had described the psychotic, 'non-ordinary' states as the 'most terrifying they had ever experienced' [156]. The therapist needed to maintain a 'curious but thoroughly unafraid' attitude in order to support ('hold space') such patients. Mitchell's observations and suggestions were consistent with those made in the current case.

[156]: Mitchell 2021 URL

[156]: Mitchell 2021 URL

In an innovative manner, Fusar-Poli et al. utilized ethnographic methods and wrote an article about the subjective experience of psychosis together with patients [78]. They divided the subjective experience of psychosis into five phases: 1. premorbid; 2. prodromal; 3. the first episode; 4. relapsing; and 5. chronic. The premorbid phase was often asymptomatic and characterized by loneliness, isolation, loss of common sense, and bodily discomfort or alienation. The prodromal phase was characterized by a feeling that an important truth about the world was soon going to be revealed. The sense of self was perturbed, and contact with reality was compromised. These issues were typically kept secret. In the first episode phase, the onset of delusions triggered a sense of relief and resolution. There was a feeling that everything related to oneself. Boundaries between the inner and outer worlds were lost, as well as agency. There was a feeling of overwhelm and chaos, and a loss of trust in the world. The relapsing phase was about grieving for personal losses, feeling split between realities, and the uncertainty of the future. The chronic phase was about accepting the new self-world, hiding the inner chaos from others, feeling loneliness, and having a desperate need to belong.

[78]: Fusar-Poli et al. 2022 DOI

In the present case description, most of the features of these phases can be recognized, but there were no clear phases. Instead, she appeared to have been more or less psychotic for her whole childhood, without a clear 'first psychosis'. Her refusal to accept the diagnoses functioned as a way to maintain a degree of personal agency.

In contrast to the present case study, the study by Fusar-Poli et al. did not recognize or discuss the role of emotional or early trauma. They also

appeared to present psychosis as chronic and unhealable, seemingly focusing on schizophrenia, whereas the present case discussed bipolar disorder with psychotic features. Missing from their description of phases were gradual recovery and remission. In the present case, such a recovery phase can be recognized. The current state could be considered a nearly full remission phase: she was high-performing professionally, her relationships and family life were functional, and the main remaining issue was relatively mild dissociation.

With regard to transgenerational inheritance of trauma, in addition to epigenetic mechanisms leaving no cognitive trace [110], trauma could also be picked up from the behavior of parents, grandparents, relatives, or anyone. Reactions by triggered parents could overwhelm their children, causing exiled parts to emerge. Trauma would propagate, or evolve, with slightly different exiled cognitive content, but possibly (nearly) identical physiological consequences. Regardless, the essence of the cognitive content would likely be shame and inadequacy. Collective trauma, i.e., society-wide, shared trauma, would propagate in the same interpersonal manner, but also through any existing structures: group behaviors, habits, rituals, mindsets, institutions, and/or architecture.

[110]: Morin et al. 2021 DOI

As an aside, the interviewee mentioned that social pressure to conform had made her feel as if society was 'putting beliefs in her head', and that such beliefs 'had not fit her'. Hypothetically, this pattern of thought, when expressed in a more vague form (say, how a four-year old would put it), appears to resemble the concept of 'thought insertion' in schizophrenia. After all, external influence, say, in the form of propaganda, is essentially 'thought insertion'.

In the previous case study [1], it was proposed that antipsychotics should be used temporarily or intermittently instead of as a prophylaxis. There is evidence that in the short term, antipsychotics improve quality of life, functioning, and disability, reduce psychopathology, the severity of illness, compulsive behavior, and improve cognitive insight [157]. However, in a 19-year follow-up, moderate and high cumulative antipsychotic maintenance treatment within the first five years after first-episode psychosis was consistently associated with a higher risk of adverse outcomes (continuing use of antipsychotics, psychiatric treatment, disability allowances, mortality), as compared to low or zero exposure [158]. The present case aligned with the idea of intermittent use.

[1]: Turkia 2022 DOI

[157]: Verma et al. 2020 DOI

[158]: Bergström et al. 2020 DOI

2.3.3 The brain as a filter

The interviewee referred to the long-standing hypothesis in psychedelic discourse: the brain as a potential receiver of information existing in a universal field (an unpublished hypothesis proposed that information would be encoded as standing electromagnetic waves; due to the waves being standing, they could be accessed at any point, and any change to the waveform would immediately be reflected everywhere). According to the interviewee, the field manifested as 'absolute, unconditional love'. In the IFS terminology, such a field of absolute love might refer to the absolute powers of the Self; in the Christian religious terminology, it might refer to the concept of 'heaven'. The suggested interpretation would be that such a field of information could be accessed only in a certain state, and

this state would be characterized by the attributes of unconditional love, ecstasy, 'oneness', or 'ego dissolution'; in other words, through a complete absence of fears.

Concerning Christianity, a notable recent pursuit is the Ligare network (ligare.org): 'an open network of people who desire legal and safe access and believe that Christianity and other existing religious traditions offer paths for preparing, experiencing, and integrating mystical experiences, including those occasioned by sacred plants and compounds'. The network was founded by reverend Hunt Priest, one of the participants in a 2016 psilocybin study involving religious professionals [159]. A similar Jewish network was founded by another study participant (shefaflow.org).

[159]: Lattin 2022 URL

Huxley, who experimented with the plant psychedelic mescaline, held that psychedelics opened a 'reducing valve' in the brain and nervous system that ordinarily inhibited access not only to the subconscious but to 'everything that is happening everywhere in the universe' [160]. Filtering was helpful in preventing overwhelm in some ways, but it was also counterproductive in others. The field could be accessed by psychotic people, people under the influence of psychedelics, and children who had not yet been habituated to such filtering. Osmond noted that not only did the brain filter out the information, but it also provided no means of describing it [161]. Therefore, such experiences could not be properly put into words.

[160]: Huxley 2004

[161]: Huxley et al. 2018

Carhart-Harris et al. suggested that psychedelics decrease activity and connectivity in the brain's key connector hubs, enabling a state of unconstrained cognition [162]. Psilocybin 'appeared to inhibit brain regions that are responsible for constraining consciousness within the narrow boundaries of the normal waking state, an interpretation that is remarkably similar to what Huxley proposed over half a century ago' [163].

[162]: Carhart-Harris et al. 2012 DOI

[163]: Halberstadt et al. 2012 URL

Some indigenous traditions use plant diets and dietary restrictions to transform the body by turning it 'bitter' by consuming only bitter plants [118]. Such practices appeared to assume that consumption of salt or any sweet food, as well as any sexual behavior, prevented proper access to this information.

[118]: Pérez-Gil 2001 DOI

2.3.4 The three types of intuition

Such information could also be accessed without substances through serenity, i.e., in the absence of fear, through euphoric, harmonic, or 'connected' states of mind (perhaps through the Self). Raami, who researched Finnish inventors, noted that most of them described having acquired their ideas through 'unexplainable' methods or 'intuition' [164, 165]; better known examples included Nicola Tesla and cytogeneticist Barbara McClintock [166]. For comparison with the EBM paradigm and as an example, McClintock utilized a rather different, perhaps more 'psychedelics-compatible' method for knowledge acquisition [166]. Her method was described as mystical and was based on intuition, dissolution of the ego, and the concept of plant consciousness [167]. Subsequently, she was ridiculed for decades. In 1983, she was awarded the unshared Nobel Prize in Physiology or Medicine. With regard to other methods, the family

[164]: Raami 2015 URL
[165]: Raami 2019 DOI
[166]: Keller 1983

[166]: Keller 1983

[167]: Owl 2022 URL

constellations method often appears to produce similar 'unexplainable' information about the participants' lives [108].

[108]: Wolynn 2016

Raami classified intuition into three types: instinct based, domain specific, and 'superintuition' [168]. With regard to time, the first concerned the present, the second history and the future, and the third lacked the concept of time. Various individuals and groups emphasized different types. In a very rough categorization, it might be considered that medical professionals emphasize the second type, which may lead to rigid single-lens perspectives. Indigenous people appear to emphasize the first type. Psychedelics and psychosis appear to open the third type, also occasionally accessible with other means. Relationships between groups using different types may become tense. From the domain-specific perspective, the third type appears based on superstition, and the first type appears irrational. From an instinct based perspective, the second type appears as hairsplitting, rigid, elitist, and impractical, and the first type as weak and lazy. From the perspective of the third type, the first may appear as selfish, brutal, and unethical, and the second as arrogant, heartless, immovable, cold, and boring. All these disconnections were based on and fed by fears and separation.

[168]: Raami 2019 DOI

In practice, from the indigenous perspective, the need to 'research the efficacy and safety' of the methods they have successfully used for centuries may appear ridiculous, especially if the people in question refuse to test the methods for themselves, subsequently appearing pusillanimous. On the other hand, medical professionals may consider the application of these methods 'without evidence base' completely 'irresponsible'. To the extent possible, the present case study aims at illustrating that such polarized views are unnecessary, and that the required kind of societal progress can only follow from the adoption and application of all three approaches.

2.3.5 Victimization/object-perspective versus agency/subject-perspective

With regard to victimization, a large proportion of the population may see themselves as victims. While understandable, it is counterproductive from the perspective of regaining agency. More generally, this attitude may result from seeing oneself and the world as conceptual objects instead of subjects or processes. In this condition, perceptions appear to the consciousness primarily as predefined concepts and logical relationships between them (a 'historical' view). An alternative is perceiving oneself as being in the present in an immediate sensory field, which is a continually changing process. Such 'pre-conceptual' experiences may be experienced with psychedelics. In everyday life, pre-conceptual experience may be more common in, say, dancers and children. It may also be more typical for the indigenous, who may refer to the rigid, conceptual way of experiencing as 'white person's mind'. In the sensory, or 'sensual' approach, the world may appear as more fluid, immediate, and changeable: things, including oneself, are processes, not objects. They may appear primarily as 'energies' or impressions; the experience may feel more 'direct', unfiltered, or immediate. Such experience may

be related to reacquiring an embodied feeling of agency—a difficult-to-describe sensation of experiencing oneself as a subject instead of an object; as powerful, or as someone who can create.

An embodied sense of agency is required to implement the necessary changes in everyday life. While psychedelics may show what should be done, and resolve some triggers preventing certain actions, in the end, they don't do things for you. As an example, let us assume that overwhelming traumatic events caused chronic tension to accumulate in the body, and this tension prevented proper functioning of the lymphatic system, which led to somatic disease. Psychedelics may reveal that such tension is present and even dissolve the triggers. However, somatic work such as yoga may be needed to resolve the effects of the chronic tension [169, 170]. As another example, psychedelics may reveal that you reside in a constantly re-traumatizing social setting (e.g., marriage, workplace), but they don't change that environment for you [140, 145]. This brings us to the communal aspect: as illustrated by the present case, both illness and healing are processes, not states. They are also systemic instead of individual phenomena.

[169]: Namkhai Norbu 2008
[170]: Wangyal et al. 2002

[140]: Turkia 2022 DOI
[145]: Turkia 2022 DOI

2.3.6 Societal aspects

In the context of the 'psychedelic renaissance', there has often been a certain caution about not repeating the backlash of the 1970s. Hughes et al. noted that the Portuguese decriminalization of all illicit drugs in 2001 did not lead to major increases in drug use; instead, evidence indicated reductions in problematic use, drug-related harms, and criminal justice overcrowding [171, 172]. The continuous availability of psilocybin in the Netherlands has been uneventful [173]. Holoyda noted that large-scale epidemiologic surveys suggested that psychedelics may reduce individuals' risk of interpersonal violence [174]. Roberts outlined a program to enhance human capabilities to match or surpass the increasing capabilities of artificial intelligence [175].

[171]: Hughes et al. 2010 DOI
[172]: Rêgo et al. 2021 DOI

[173]: Amsterdam et al. 2011 DOI

[174]: Holoyda 2020 URL

[175]: Roberts 2013

Since the 1980s, on a societal level, after a few decades of apparently borderlinish developments, overt psychotic episodes seem to have emerged in some nations in the 2020s. In this situation, even a widespread, uncontrolled, adoption of psychedelics might merely add clarity, enforce boundaries, and clarify long-term visions of societal goals. In general, people tend to avoid facing their traumas, and consequently, even when offered a chance, they tend to come up with any kind of excuses in order to avoid the use of psychedelics. To put it differently, they actively seek out psychedelics and express interest in taking them, but when offered the opportunity, they ultimately choose not to partake. In the short term, the free availability of psychedelics would likely not lead to much, as has been observed with the legalization of cannabis. In the mid- and long-term, however, it would likely lead to significant improvements in mental health and leadership skills.

Democratic practices appear to be failing in many societies due to a decreasing ability to understand how societies function (everyone must feel that they have a personally meaningful task and a purpose, there must be a shared understanding of which tasks and methods are necessary and useful and which are not, and the useful tasks must be executed in a

harmonious, synchronized manner). Many healthcare systems appear lost in shortsightedness, a lack of perspective, and a pursuit for profits, as well as stuck in an ever-increasing pursuit for 'evidence' through archaic methods. If Western societies wish to retain some relevance, they need to significantly improve the clarity of thinking and decision-making of people in leadership positions. It has seemed impossible to achieve with the current methods. As stated in a famous quote, 'problems cannot be solved at the same level of awareness that created them' [176], or 'a new type of thinking is essential if mankind is to survive and move toward higher levels' [177].

[176]: Geus 1997

[177]: Foster 2011 URL

Celidwen et al. proposed that the ethical principles of traditional indigenous medicine could guide psychedelic research and practice [178]. A global indigenous consensus process identified eight interconnected ethical principles, including: reverence for Mother Nature, respect, responsibility, relevance, regulation, reparation, restoration, and reconciliation. In practice, the intention appeared to be, roughly, that indigenous authority should be prioritized in anything related to psychedelics, indigenous actors should lead or participate in leading all psychedelic-related practices, indigenous actors should be included in ethical review boards, and profits should go mainly to the indigenous.

[178]: Celidwen et al. 2023 DOI

From the above, it could be inferred that a largely irreconcilable conflict might persist for some time. A practical solution would be that ayahuasca would remain primarily, within reason, in the control of indigenous peoples, while first-world therapies would be primarily based on the patent-free application of LSD, DMT, MDMA, and 2C-B [60], for example. In other words, at least the synthetic psychedelics and therapies based on them should be free of any profit motive, and available to all without restrictions. On the other hand, neither should an indigenous dictatorship resembling 'Big Pharma' be built around plant psychedelics. A reasonable balance between interests is needed. Both the abusive, ignorant practices of profit-driven psychiatry and the psychedelic industry, and indigenous peoples' poverty and bitterness are issues that must be addressed. Regardless, the response to abuse should not be counter-abuse [179]. All parties should overcome their destructive patterns. For example, in some tribes, despite the use of ayahuasca, women are still occasionally subjected to extreme sexual violence.

[60]: Meckel Fischer 2015

[179]: Turkia 2023 DOI

To be fair, while, in many cases, current indigenous practices may be considered 'university-level' and the corresponding first-world practices 'kindergarten-level', the indigenous are not the only inventors of psychedelics or psychedelic therapies. LSD was invented in Switzerland, MDMA in Germany, and 2C-B in the US [180, 181]. Independent of indigenous practices, therapies based on these have a relatively long history in Western countries. Notable examples include the treatment of psychotic children with LSD in the US in the early 1970s [137–139], and the use of MDMA in Europe and the US [182]. The case of psilocybin is complex, as psilocybin mushrooms grow naturally in most parts of the world.

[180]: Shulgin et al. 1997 URL
[181]: Shulgin et al. 1991 URL

[137]: Fisher 1970 DOI
[138]: Fisher 1997 URL
[139]: Walsh et al. 2005
[182]: Passie 2018 DOI

2.3.7 Neurobiological aspects

The origin of the dimensions without time or causality is an interesting open question. From a modeling perspective, in a simple control system lacking memory and only capable of fixed, reflexive reactions to stimuli, each reaction is causally independent, and there is no experience of continuous time. Adding rudimentary learning capabilities (e.g., classical conditioning and habituation) allows for the learning of trauma triggers.

If the 'life experience' of such a system were observed from the outside, it might resemble a series of flashback-like images occurring at irregular, apparently random time intervals (determined by the environment), with each stimulus causing an instant reaction with no understandable rationale. The system would react only when 'triggered', and the reactions would appear incomprehensible to an observer lacking an understanding of the physical structure. In the presence of an upper layer with its own control system, reactions triggered at the lower layer would override decisions at the upper layer. Apart from the minimal capacity for conditioning and habituation, from the perspective of the observing upper layer, life would appear uncontrollable and randomly disrupted.

Together, the brainstem, the cerebellum, and the autonomous nervous system might form the closest approximation of such a system in humans. They are considered responsible for regulating basic life-sustaining functions such as breathing, heart rate, blood pressure, and the control of movement, including instinctual, automatic, survival-related behaviors (fight, flight, and freeze). Severe trauma might alter connectivity between these and other parts of the brain so that the person could observe their internal functioning. Psychedelics have been observed to enhance connectivity between some areas of the brain [183]. Hypothetically, increased connectivity might allow for such direct inspection, and the same phenomenon might be present in severe traumatization.

[183]: Preller et al. 2018 DOI

The survival-related behaviors could be seen as fixed programs. Freeze should end in reactivation, fight in victory, and flight in a successful escape. In this context, trauma would be an interruption of these programs. Healing trauma would be letting these programs run to their ends.

In 2017, Roelofs reviewed neurobiological mechanisms in animal and human freezing, proposing a research agenda to stimulate translational animal–human research in the emerging field of human defensive stress responses [184]. This agenda would likely involve the role of implicit or procedural memory in trauma [113]. The fundamental control structures responsible for survival-related behaviors might currently be the most promising direction for further research.

[184]: Roelofs 2017 DOI
[113]: Levine 2015

Most people never experience a dysfunction involving severe trauma and uncontrollable dissociation. A lack of direct, personal experience may hinder both research and therapy. This may be why some indigenous traditions require prospective ayahuasca ceremony facilitators to undergo extensive training that induces prolonged starvation and near-death experiences: the mechanisms differ too much from conventional emotional-cognitive logic, and may only be comprehensible through personal experience.

2.3.8 The practice of self-experimentation

With regard to research, while psychedelics may be seen as a somewhat progressive approach, a more interesting question, however, is: what comes after psychedelics? Largely, psychedelics deal with the limits of observing the process of observing. Is there a yet another, never seen a level or way of experiencing? Is there an even deeper explanation of the process of being alive?

Self-experimentation, i.e., scientific experimentation in which the experimenter conducts the experiment on themselves, has a long history in medicine [185]. Notable recent examples include the development of the opioid detoxification product Heantos-4 by a traditional Vietnamese herbalist, Tran Khuong Dan, who tested his method by addicting himself first to opium and then heroin, confirming the efficacy of his invention based on twelve non-toxic, non-addictive herbal components [186]. Tetrahydroprotoberberines were later identified as the most likely active ingredients [187, 188].

[185]: Weisse 2012 URL

[186]: Turkia 2024 DOI

[187]: Ahn et al. 2020 DOI
[188]: Nesbit et al. 2020 DOI

The instance of self-experimentation conducted by Mudge aligns with the historical tradition of similar endeavors undertaken by previous investigators. As noted by Weisse, several of these investigators received Nobel Prizes. He added that 'although self-experimentation by physicians and other biological scientists appears to be in decline, the courage of those involved and the benefits to society cannot be denied' [185].

[185]: Weisse 2012 URL

2.4 Conclusions

This article aims to deepen current understanding of bipolar disorder and psychotic episodes caused by early trauma. As demonstrated by the present case, contrary to common belief, psychedelics may increase mental clarity and add structure to life. Low-dose maintenance treatment of bipolar disorder with certain preparations of ayahuasca shows promise. Larger doses may alleviate suicidality and facilitate the processing of traumatic events, but the process requires commitment and patience. Although a single session with ayahuasca or LSD may resolve acute suicidality, resolving the long-term effects of early abuse can be challenging. Thus, preventing complex trauma remains critical.

Psychedelic therapies may primarily benefit individuals with high cognitive capacity and intrinsic motivation for their use, but with proper guidance, they could be beneficial for the majority of people with severe trauma. In this particular case, it seemed that while neither mood stabilizers nor ayahuasca alone were sufficient to resolve bipolar disorder in the short term, in combination they enabled continuous progress in healing her complex trauma in the long term. The research in progress may provide further perspectives on the use of ayahuasca in the management of bipolar disorder. With regard to full resolution instead of the management of symptoms, high-dose LSD treatment might open new perspectives on the issue.

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Ayahuasca in the treatment of the consequences of chronic childhood sexual abuse in a religious community

3

This retrospective case study features a woman in her mid-50s who spent her childhood in a religious community plagued by sexual abuse of children. She was abused by her father for more than a decade. The church and her mother ignored her reports about it. In her early twenties, she enrolled herself in the Erhard Seminars Training program that destabilized her, inducing a first-onset psychosis, decades later used as the main rationale for diagnosing her with bipolar disorder. For the following decades, she suffered from severe depression and emotional isolation but was functional professionally and became a medical doctor. 35 years of talk therapy helped somewhat but did not resolve trauma ingrained in her body nor her at-times catatonic depression.

In her early 50s, she experimented with psilocybin, which resulted in somatic improvement but did not resolve her depression. She wanted to attend underground ayahuasca ceremonies but was rejected because of her bipolar diagnosis. Eventually, she decided not to disclose her diagnosis and attended four ceremonies in two different ceremony groups, with excellent outcomes. She considered that the core of her embodied trauma had dissolved.

The rationale for assigning diagnoses is questioned; a focus on etiology combined with the broad-spectrum nature of psychedelic therapy may mostly eliminate the need to discern between 'psychiatric conditions'. Trauma is considered socially contagious, similar to infectious diseases. The prohibition of psychedelic therapies is interpreted as a society-wide refusal to recognize trauma: a refusal to see what actually happened and happens.

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3.1 Introduction

The present study concerns a case of childhood sexual abuse in The Church of Jesus Christ of Latter-day Saints (LDS), the largest and most prominent denomination within the broader Mormon movement in the US. It features a biographic presentation that also details the subjective consequences of the abuse as well as describes the process of healing from it.

In 2002, Chieko N. Okazaki (1926–2011) [1, 2], a woman of Japanese–Hawaiian origin and the first person of color to hold a church calling on the general board level, stated that *'many friends, acquaintances, and troubled Relief Society sisters have honored me with their confidences'* about having been sexually abused; *'this evil must be exposed before it can be repented of, and it must be repented of . . . betrayal is not too harsh a word for the situation in which the trust of innocent and powerless children does not protect them against physical and sexual abuse from a parent, a sibling, a teacher, or from another member of the Church, someone, in short, whose responsibility before God is to protect and nurture'* [3].

[1]: Okazaki 1996 URL
[2]: Okazaki 1996 URL

[3]: Okazaki 2002 URL

Okazaki had eight messages she wanted to share [3]: 1) according to

[3]: Okazaki 2002 URL

her knowledge, sexual abuse concerned 10-33% of women and at least 10% of men; she did not know about systematic studies concerning LDS members, but counselors and therapists working with LDS members had said that they had *'no reason to believe that the statistics are any different for them than for the national population'*; 2) sexual abuse was not the child's fault. She quoted a former Relief Society president, a woman who had been sexually abused by her father when she was a child: *'I often find myself wondering why even we who know our parents as abusers continue to protect them by idealizing them. At the heart of them, I think it is my child's self-interested hope of escaping pain. She thinks, 'He's not bad; I'm bad. If he's bad, I'm inevitably at risk. If I'm bad, I can be safe because I can stop being bad. If I can believe that I'm making my father do this to me, I can believe that I can make him stop.' Accepting such responsibility becomes a way of not feeling the absolute despair of conscious powerlessness and the inevitability of recurring attack without the possibility of rescue. Of course, the hope is in vain, but the time blocked at the price of guilt and shame can save one's sanity. Eventually the little child must go back and feel the despair, but only when she has matured enough to bear it.'* 3) the abused probably needed professional help because sexual abuse, and particularly incest, attacked the very foundation of their identity; they certainly needed personal support because they had learned not to trust other people and not even to trust themselves, and *'such profound isolation from other people can come close to a kind of insanity'*; she quoted a man who had been sexually abused by his father: *'normal happy voices, respectful listening, and simple trust can sometimes be lifelines'*; 4) women and men coming to terms with sexual abuse needed *'all the spiritual help they could get'*; she described an experience of another woman: *'her mother had played a role in her abuse . . . her mother did in fact know about the abuse and had refused to help her . . . think how much strength you would need to bear that terrible knowledge'*; 5) teachers and leaders had a special role to play in supporting a man or a woman who was going through the aftermath of abuse; *'think of a seven-year-old girl whose father sexually abuses her. What does she feel when the Primary sings, "I'm so glad when my daddy comes home"?'*; she had had *'several survivors of sexual abuse tell me that the consistent concern of a priesthood leader, even when he did not fully understand the issue or what was happening, literally kept them from committing suicide. Blessings and respectful listening are very important. They validate to a survivor that he or she is not making it up and does not have to go through the healing process alone'*; 6) healing from sexual abuse was a very long and very painful process; according to one study that included LDS women, being able to reach the ultimate step of forgiving the perpetrator and moving on took an average of fifteen years; 7) women also physically and sexually abused children; *'as women, we know the victims and hear their stories, but we also know perpetrators. I implore you not to shield perpetrators out of mistaken sense of love. I've never seen any studies suggesting that those who sexually abuse children will alter their behavior without direct intervention. We must believe this message'*; 8) everyone could do much to stop the abuse before it started by holding standards; by refusing to accept rationalizations and twisted logic, and labeling abuse for the crime that it is; by refusing to accept abuse, to make excuses for an abuser, to turn our heads away, to keep the guilty secrets.

[3]: Okazaki 2002 URL

Okazaki stated that [3]: *'In many ways, the whole topic of sexual abuse is strange to me. I feel unskilled in thinking about or in knowing how to help someone who is a survivor. I'm one of the other two women, not the third . . . I*

tell you that I love you. I pray daily for you, for your help and healing. For those of you who have been spared the scourge of abuse, I ask you to open the circles of your sisterhood and brotherhood. Include those whose trust has been betrayed by those who should have been their protectors. Open your hearts to them. Let them open their hearts to you.'

3.1.1 Recent reports of cases of sexual abuse in the church

An investigation by Dearen and Rezendes of the Associated Press (AP) reported on cases of abuse [4]. The investigation was initiated when AP obtained nearly 12,000 pages of sealed records from a child sex abuse lawsuit against the church in West Virginia. Families of survivors who filed the lawsuit stated that church leaders diverted abuse accusations away from law enforcement and instead to church attorneys who buried the issues, leaving victims on their own.

[4]: Rezendes 2022 URL

A case in Arizona involved a father sexually abusing her five-year-old daughter [4]. He confessed the issue to a local bishop who was also a family physician, i.e., a licensed medical doctor. The bishop contacted church officials who told him not to call police or child welfare officials; subsequently, the bishop kept the abuse secret. One of the officials, a church lawyer, was also a Republican lawmaker; he advised the bishop not to report the abuse to civil authorities [5, 6]. Another bishop rotating into his position was informed about the issue but also decided to keep it secret [4]. All in all, the abuse continued for seven more years. His wife was aware of the abuse but did not react to it. Later, he began abusing a baby daughter of his since the age of six weeks. He was eventually caught after having posted videos of the abuses online for a long time. He described the abuse as 'a compulsion he couldn't stop'. He committed suicide in custody. An attorney representing the church commented that, 'These bishops did nothing wrong. They didn't violate the law, and therefore they can't be held liable'. The girl, 16 years old at the time of the AP interview, commented that, 'I just think that the Mormon church really sucks ... they are just the worst type of people, from what I've experienced and what other people have also experienced'.

[4]: Rezendes 2022 URL

[5]: Dearen et al. 2022 URL

[6]: Rezendes et al. 2022 URL

[4]: Rezendes 2022 URL

A case in Idaho involved a woman whose father, a former bishop, had routinely sexually abused her [7]. The lawyer of the risk management division of the church offered her USD 300,000 for a non-disclosure agreement; it was refused. A witness refused to testify due to 'clergy-penitent privilege', a law exempting clergy from the requirement to report child abuse if they learn about the crime in a confessional setting. Prosecutors dropped the case. The church opposed a new law attempting to remove the privilege [5]; an AP review revealed that of more than 130 bills introduced since 1987 to amend child sex abuse reporting laws, none of them succeeded in closing the clergy loophole. In 2024, the former bishop was eventually arrested [8].

[7]: Rezendes et al. 2023 URL

[5]: Dearen et al. 2022 URL

[8]: Dearen et al. 2024 URL

With regard to other cases, in 2022, another bishop and former city mayor with the church was arrested on accusations that he sexually abused at least three children decades ago [9]. An advisory for victims reported cases of abuse from eight US states and Australia, detailing several cases in addition to those mentioned above [10]; 'the abuse happened all around the country, with the religious organization enabling the abuse to be

[9]: McCombs 2022 URL

[10]: Herman Law 2025 URL

rampant throughout the church'. In the most recent example, a child's mother 'conditioned her for sexual abuse by an older church member'; the child was disciplined for reporting it [11, 12]. In February 2025, a podcast discussed LDS facing new sex abuse and trafficking lawsuits [13].

[11]: Mulroy 2025 URL
[12]: Hattenstone 2025 URL
[13]: Mormon Stories Podcast 2025 URL

3.1.2 Academic studies

Gerdes et al. studied the experiences of Mormon women survivors of abuse (n=71) in their dealings with church leaders and the women's responses to these interactions [14]. 12 (17%) had positive interactions, describing their leaders as nonjudgmental and affirming. 49 (69%) had negative interactions, describing their leaders as judgmental, unbelieving, protective of perpetrators, intrusive, nosy, or impatient. One woman was excommunicated and five disciplined. 10 (14%) chose not to disclose their histories of sexual abuse due to lack of confidence in their leaders' ability to help them or due to feeling threatened. Of 80 perpetrators, only 3 (4%) were disciplined in any way.

[14]: Gerdes et al. 1996 DOI

Pritt surveyed 115 women in the LDS who reported having been sexually abused before the age of 18 [15]. 9% of cases were noncontact abuse and 91% contact abuse. Of the latter, 59% involved penetration (61/115 or 53% of total cases). 49% had been abused before the age of 5 years, 72% before the age of 8 years, and 86% before the age of 12 years. In 68% of cases, the abuser was more than 10 years older. In 28% of cases, the duration of the abuse was more than 10 years, and in 12% of cases 7-10 years; thus, in 40% of cases, at least 7 years. In 39% of cases, the abuser was father figure (father, stepfather, grandfather), in 30% of cases another family member, and in 30% of cases non-family. In 37% of cases, there was one abuser, in 35% of cases 2-3, in 20% of cases 4-6, and in 8% of cases 7 or more. In 17% of cases abuse happened once, in 17% of cases 2-5 times, in 17% of cases 6-10 times, in 12% of cases 11-20 times, and in 37% of cases more than 20 times. In 28% of cases the level of force was manipulation, in 25% of cases coercion, in 29% of cases force, and in 17% of cases torture.

[15]: Pritt 2021 URL

Hamilton examined the beliefs mandating secrecy that created and perpetuated cycles of child sex abuse within mainstream and fundamentalist religions [16]. Concerning Mormons, Hamilton quoted a survivor who described that reporting abuse led to 'absolutely nothing', and the abuse continued. Instead, LDS employed principles and legal tactics that imposed barriers to victims to obtain justice and to the authorities to aid in the cessation of abuse. Hamilton noted that LDS had no professional clergy; instead, the clergy consisted of 'untrained laypersons' who performed their ecclesiastical duties in addition to their vocations; the lack of professionalism could increase the danger for vulnerable children. There was 'a commitment to keep the image of the LDS Church pure . . . the image is a driving force permeating the faith'. The 1998 Church Handbook discouraged LDS leaders from cooperating in cases involving abuse. It was not allowed to distribute these guidelines to the members. Although the leadership was not professional, it was 'made up of prophets said to speak for God . . . members are told to do that which the prophets tell them to do, because a prophet will never be allowed to lead the Church astray'. It was strongly discouraged to 'look for flaws in the church or in its leaders'. Victims could be ostracized: 'When I confessed it and all the

[16]: Hamilton 2011

abuse I had been subjected to, I was made to feel like I was victimizing my abusers'. Hamilton concluded that there was 'a rule against scandal' within religious organizations that perpetuated and fostered abuse.

Around 2012, LDS was the fastest-growing and the fifth largest religion in the US [17]. Whiteley noted that LDS drew 'from Puritan values regarding sexuality, rape myths that remain prevalent in the US, and victim-blaming regarding sexual abuse ... because of its fundamentalist values, the LDS church may be seen as a somewhat extreme case of prevalent U.S. values surrounding sexuality and sexual abuse ... the faith is as much a lifestyle and an identity as it is a religion'. A still commonly recommended guidance from 1968 implied that 'it is better to die in defending one's virtue than to live having lost it without a struggle' (compare with, e.g., [18]). In the 1990s, people who attempted to do academic research on the subject were excommunicated from the church. Around 2015, at least in public, the handling of the issue became somewhat more constructive.

[17]: Whiteley 2019 URL

[18]: Roelofs 2017 DOI

Pritt reviewed the history, organization, and practices of LDS factors that could contribute to abusive relationships, possible misunderstandings from church teachings and the Bible, possible misunderstandings of forgiveness, premature forgiveness, and numerous other aspects related to LDS [19].

[19]: Pritt 2015 DOI

Barker and Galliher surveyed sexual assault among LDS [20]. In a sample of 131 female university students associated with LDS, 40% of women reported any form of sexual assault, including coercion; 12% reported attempted rape, and 9% reported completed rape. 5% of men (n=77) reported any form of assault.

[20]: Barker et al. 2017 DOI

Raine and Kent showed how some religious institutions and leadership figures in them could slowly cultivate children and their caregivers into harmful and illegal sexual activity. Uniquely religious characteristics facilitating such cultivation included theodicies of legitimation; power, patriarchy, obedience, protection, and reverence towards authority figures; victims' fears about spiritual punishments; and scriptural uses to justify adult-child sex [21].

[21]: Raine et al. 2019 DOI

A dissertation by Whiteley presented a literature review and an overview of the history of handling of sexual abuse in the LDS [17]. Whiteley is an adult survivor of childhood sexual abuse that happened elsewhere. She joined LDS only later, at the age of 16, finding comfort from the church leaders. However, after disclosing her history, men of her age began discriminating against her, and she 'internalized this lesson with shame', feeling ashamed that she was not a virgin and feeling as if no one would want to date or marry her. Whiteley presented a qualitative analysis of the healing processes of childhood sexual abuse survivors within LDS (n=25) [17]. Religion could either help or impede the healing process. The analysis focused on the internalization or rejection of shame and presented a theoretical model of four different healing paths (p. 114).

[17]: Whiteley 2019 URL

[17]: Whiteley 2019 URL

Pradere et al. noted that the Mormon-dominated state of Utah ranked the fifth highest of any state in the US for child sexual abuse [22, 23]. They described that 'the early years of the Mormon church were beset with suspicion and persecution from the wider society and the state authorities ... the promotion and practice of polygamy contravened both

[22]: Pradere et al. 2020 DOI
[23]: Riess 2016 URL

civil and accepted moral law ... the church continued to experience confrontation with civil authority and conflict with mainstream society ... its history of conflict and secrecy may, however, still influence the response of the church to perceived criticism or attack from outsiders. In fact, the church has a tradition of lying for the Lord to protect the church's reputation'. In addition to describing cases similar to the ones described above, involving nonaction after receiving first-person reports of abuse, Pradere et al. described a case of 'a serial pedophile who was embraced by the church in the 1970's. He won the confidence of the church hierarchy and became a high priest, Boy Scout leader, and Sunday school teacher ... he greatly impressed parents ... parents trusted him implicitly. ... most of his victims were unwilling to speak out at the time. Church authorities allowed him to transfer from one community to another, even after being made aware of his behavior. In this way, he was able to continue his predatory activities in Oregon, Michigan, and elsewhere ... an abuser can be readmitted to his church community or join another congregation, with a 'clean slate' and any transgressions prior to the rebaptism are officially forgotten. This made it difficult for lawyers to obtain adequate information on his background when compiling evidence from the church. Eventually the church disciplinary record was made available. It transpired that he had been disciplined three times, including two excommunications. After each disciplinary action, he was forgiven and allowed to continue working with children. Meanwhile, the church denies that it has a serious problem'. Pradere et al. noted that 'there is little discussion or education on sex. For females, their ultimate goal is to marry as virgins and devote their lives to their husbands and children. Ignorance concerning sex and consent may result in both girls and boys lacking understanding of abuse'. They added that 'support for victims in the main comes from former members who are themselves survivors of abuse or from governmental or other secular agencies'.

Hinderaker discussed 'Protect LDS Children', a 'counter-institutional movement seeking the end of private youth interviews with male LDS bishops that ask sexually explicit questions' [24]. Choruby-Whiteley and Morrow interviewed fourteen childhood sexual abuse survivors in LDS [25, 26], exploring, among other aspects, the relationship between the harmful cultural messages that survivors internalized and the subsequent impact on their sense of self. McCoy et al. discussed secrecy regarding child sexual abuse in LDS [27].

Givens discussed the foundations of Mormon thought and practice [28]. Jackson discussed the doctrines of Mormonism [29]. Hoekema provided an opinionated overview [30]. Bushman provided a short introduction [31]. Grow et al. discussed Mormon history, theology, and culture [32]. Balmer et al. discussed Mormonism and American politics [33].

Hinds and Giardino provided an overview of child sexual abuse [34]. Prior discussed the psychotherapy of the sexually abused child from the perspective of object relations theory [35]. Strand discussed the treatment of mothers [36]. Thompson-Cooper discussed encountering the incest family in a child welfare context [37].

Westermarck discussed incest in his book about the history of marriage [38]. Sacco discussed father-daughter incest in American history [39].

[24]: Hinderaker 2020 DOI

[25]: Choruby-Whiteley et al. 2021 DOI
[26]: Richmond et al. 2023 DOI

[27]: McCoy et al. 2023 DOI

[28]: Givens 2015
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[30]: Hoekema 1988
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[32]: Grow et al. 2016
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[34]: Hinds et al. 2020 DOI

[35]: Prior 1996
[36]: Strand 2000
[37]: Thompson-Cooper 2017 DOI

[38]: Westermarck 1891 URL
[39]: Sacco 2009

Forward and Buck discussed the motivations of perpetrators and the consequences to survivors [40].

[40]: Forward et al. 1981

3.1.3 Insiders' perspectives

Solomon provided an insider's perspective into the lives of Mormon women [41]. She acknowledged the existence of child abuse. Once, she gave a lesson on the subject, wondering 'why the priesthood hadn't been taught the lesson about abuse before'.

[41]: Solomon 2007

> *When a man discovers that he can change the rules in the name of God, he can appoint himself the maker of laws and can give himself reason to ignore even the most ancient codes, including taboos against incest and abuse of children.*
>
> *When children are regarded as appendages or possessions, parents (especially fathers and stepfathers) often believe that they can do what they want with them. The surprisingly high rate of child abuse found in Utah during the 1970s was ascribed to this fact, among others. Many people included in this category of abusers were those on the periphery of the LDS culture, people who felt alienated from the mainstream and somehow wrong. But a startling number were church members pretending to be something they were not. . . . Some were fathers who felt that they should be able to control their families. Currently, any member of the church who abuses a spouse and/or children may be denied temple privileges. The child abuse rate has dropped significantly since the 1970s, which may indicate that screening through temple interviews is working in favor of the children.*

First-person testimonies and reports from former members of LDS focusing on issues other than sexual abuse have also been published [42–44]. Another former member, Harris, produced video documentaries about the history of the church [45–49].

[42]: Worthy 2008
[43]: Benson et al. 2011
[44]: Decker et al. 1994
[45]: Harris 2024 URL
[46]: Harris 2024 URL
[47]: Harris 2024 URL
[48]: Harris 2024 URL
[49]: Harris 2024 URL

3.1.4 On disclosing details of abuse

The following information was acquired from two semi-structured retrospective interviews with a total duration of four hours conducted in January 2025. A review of the manuscript was conducted afterwards.

In most studies involving childhood sexual abuse, such as the ones included in an earlier book by the author [50], not many details of the abuse were described. This was mostly due to not asking for too many details in order to avoid the risk of retraumatization of the interviewees, as well as to avoid sensationalizing the subject or alienating the audience.

[50]: Turkia 2025 URL

On the other hand, the practice of not disclosing details may mystify the issue of sexual abuse as well as maintain the shame related to it. By leaving the core of the issue undefined or vague, it, in a way, makes the discussion unscientific: it could be considered an omission of data. The resulting vagueness would, in turn, limit what can actually be inferred, concluded, and understood.

In the previous studies, the main focus was on psychedelic therapies; in other words, the cure instead of the cause. Furthermore, the current study will argue that exact definitions or diagnoses of underlying conditions are unnecessary in the case of treatment with psychedelics. These perspectives may appear contradictory with each other.

Regardless, in this case, it appeared possible and possibly beneficial to go into more detail in order to enhance understanding of the family dynamics and systemic failures. Even though some might consider these aspects obvious or common knowledge, they might not be that for everyone. Therefore, in order to demystify the issue, illustrate the role of dissociation, and the handling of the case in social services and the legal system, the following description may contain more details of abuse than typical studies on this subject, and may therefore not constitute recommendable reading for sensitive individuals.

One, perhaps overlooked, aspect in studying topics such as this was also observed. Notably, psychiatrists and medical personnel have been observed to often ignore or dismiss patients attempting to tell about their traumas. For example, they may, as described in one case study discussing ketamine in severe depression [50], answer nothing to a patient's mention that they were raped and simply walk away, or continue the discussion as if she said nothing. Patients typically interpret this as not caring, i.e., rejection, which usually retraumatizes them to various degrees of severity. Often, they refrain from attempting to try to disclose their most hurtful experiences again.

[50]: Turkia 2025 URL

Prolonged exposure to suffering may induce emotional depletion and burnout, often referred to as compassion fatigue. Such a dismissal could also be seen as an attempt to avoid traumatizing themselves, i.e., avoid exposure to vicarious trauma or secondary traumatic stress (STS) [34, 51–54]: a more acute reaction involving immediate distress, anxiety, or intrusive thoughts related to the traumatic stories heard. STS may occur unexpectedly and catch one off guard. There may be a fine line between what one can tolerate and what one cannot, and one may not know where this line is exactly.

[34]: Hinds et al. 2020 DOI
[51]: Henderson et al. 2024 DOI
[52]: Leung et al. 2023 DOI
[53]: Rigas et al. 2023 DOI
[54]: Leong 2008 DOI

One reason for why psychedelic therapists, such as ayahuasca ceremony facilitators, undergo years of 'plant diets', is to build stability and resilience against STS and compassion fatigue. In ceremonies, facilitators trained in such ways are said to be able to directly access the internal experiences of participants. Thus, when a participant is reliving a traumatic experience, their somatic and mental state, including the accompanying somatic sensations, are accessible to facilitators who may feel them in their own bodies. Sensing and feeling as if, say, they are being raped may be very disturbing without being prepared for such experiences.

In everyday life and research context, this phenomenon may occur in more subdued forms; for example, as a sensation of discomfort leading to avoidance of a person who is traumatized or depressed. In many ways, trauma is contagious, similar to an infectious disease. Others may intuitively avoid going into too many details. The survivors are then, however, left isolated and alone. On the other hand, the survivors may not be able to handle going into details either. Therefore, there are no easy answers for these situations.

On community and society levels, avoidance of contagion of trauma may lead to dismissal of survivors. Widespread dismissal leaves the phenomena causing the trauma hidden. Depending on the circumstances, the phenomena may then die out by themselves, remain unchanged, or transform and grow. In the present case, the phenomena appeared to have been rather widespread.

A journalist who investigated child abuse material involving 'torture' in the darknet described how he could not tell anyone what he had seen, 'because no one wanted to hear about such horrors' [55, 56]. He appointed several psychotherapists, but 'not even the therapist wanted to hear about the details' [57]: *'All of the therapists were so shocked that they got even more messed up than I was. For example, when I ended up in trauma therapy, upon hearing what the topic was, the trauma therapist got so upset that she stated that she did not want to hear any of it. I believe that, after meeting me, she probably needed trauma therapy herself'*. The example illustrates the reason for the emergence of underground psychedelic therapy practices: an unmet need caused by a lack of competence in the official arena; in this example, a vulnerability to and a complete inability to handle secondary traumatic stress. This may reflect the fact that psychotherapists predominantly coming from an upper middle class background may have never learned actual resilience.

[55]: Malin 2022
[56]: Jussila 2022 URL
[57]: Kurra 2022 URL

Somewhat unexpectedly, the present study also appeared slightly complex in this sense. This may illustrate the importance of not attempting to verbalize deeply traumatic events. Instead, they should preferably be revisited as they were: inexpressible, incommunicable, indescribable. The key in resolving them would likely be 'becoming seen and accepted' in that state. Through it, the isolation would be broken and replaced by a sense of someone sharing the experience and understanding one's individual perspective. The exact mechanism of action would likely be the validation of one's judgment: 'When I felt abused, it actually was abuse'. The inability to believe in one's own judgment may be a key component in the induction of psychoses. By restoring one's confidence in one's ability to judge, predictability is restored. Predictability, in turn, restores the feeling of safety, which subsequently resolves the psychosis.

3.2 Case description

A woman currently in her mid-fifties was born to a Mormon family in the late 1960s. Her mother came from a long lineage of Mormon pioneers who settled the area. Her father's background was 'a little more of a mystery'. Her paternal grandmother died when her father was two years old, potentially due to homicide by the husband. Her father and uncle were 'abused quite terribly by that man' and 'carried a huge burden into their lives'. Her uncle was a bit older than her father and 'had a little more memory of some of these events'. One of them was that he saw her father 'get beaten to where he thought my father was dead'.

Her father was 'unable to really overcome those traumas, and so he perpetuated that into our family'. She was 'not sure how' her mother 'became such an absent, neglectful person'. She suspected that the religion might have contributed to 'her devotion to the marriage over the children', and that for self-protection, her mother was 'using ways of just checking

out to be able to withstand being in that relationship'. In the community, preserving marriage was seen as virtuous, so the community supported her 'to stay with somebody who was a wildly abusive tyrant'.

She had a brother and younger sisters. She spent her childhood tolerating abuse from her father and essentially being a mother to her younger sisters. She commented that 'if you look at family photos, I am holding a child in every photograph'. She had their cribs in her bedroom and really wanted to protect the younger ones from some of the abuses that she was receiving, 'and succeeded, possibly'.

She described that their father 'was actually quite a brilliant man and was able to kind of create division' between the children so that they 'didn't even see each other as safe'. The family felt like 'a competitive environment for resources and safe space'; they 'were not allies to each other at home'. She wished for 'a rule book' to follow because 'how to behave appropriately to be safe was always a moving target'. In addition, being excommunicated from the church was 'always a threat'. If one did not follow their principles, one could no longer go into the temple or take the sacrament; one was 'exiled somewhat'.

She experienced cognitive dissonance very early in her life. The church taught that 'bodies are temples' and being 'pure' was not just virtuous, but one's acceptance in the church was dependent upon it. Yet, she was being abused by her father, and the church did not intervene but protected him.

> *I was just always so perplexed by this. You could be excommunicated for premarital sex, but a pedophile was not excommunicated. Fascinating. I knew this at 12 years old.*
>
> *I never knew not being sexually abused. I don't remember the beginning of it. But it went from the earliest acknowledgment of having a human body like that was part and parcel until I was well into my teens. And we could not get help. With my younger sister, just younger than me, we acknowledged to each other that this was happening. We also acknowledged that we couldn't find a way out. We went to the bishop of the church, but he just sent us home. I learned as an adult that he was sexually abusing his daughter. We told our mother, and she did not do anything. So we really didn't have a way out.*
>
> *It was, I actually don't know. Everything. I mean, it was unrelenting, just all the time. I was an object for him to do what he wanted with. It was just an unrelenting thing.*
>
> *I don't have much memory up until five to six years old. Then I started having some sporadic memories of what life was. It would probably be about seven to eight when I started getting more memory of my life. I mean, this is when I started remembering what was going on.*
>
> *He would just molest me in bed, with my mother lying in the same bed, and have me molest him. A tiny, tiny hand on what seemed like a penis that was just gigantic.*
>
> *He would just call me in their bedroom. I would try not to go. I had a bathroom near their bedroom. He said, Come in here when you're*

done there. I was like, No. I didn't say no. I just took a long time and then went to my own bedroom. And then he would come out into my bedroom. It was just. . . really terrible.

Mormons wear these, what they call garments. They are very sacred. Everything was just so perverse spiritually. They wear these as big, long underwear that is supposed to ensure modesty. But it was also as a protection, like you have God's protection when wearing the garments. They would be sleeping in them.

His penis would be coming out the pee hole of his garments, his temple clothes representing sanctity. My mother would be lying next to him, either pregnant, nursing, checked out, or aware but not caring, as if it was just the usual. And, you know, it was. It was just always like this.

He would put us all in the bathtub and scrub us. It was always, like, excessive cleaning. Taking showers with us. His penis was always, like, head height, and he'd be cleaning us. It was erect. I didn't know that penises could not be that.

When I was eleven, he was super excited about a road trip that he was taking me on. Camping was always a horrible time for me.

I didn't feel like I really had a choice to say, No, I don't want to go on this road trip with you. I got tricked into it. You don't even know what you're signing up for. I thought we would be going to the city to run some errands. I thought we would be driving home, but we didn't drive home. We camped.

And this is something that I just don't know what happened. I remember being molested, and then I just have no memory. The next memory that I have, he was wiping up semen next to me. Soon after that, I had just really, really terrible vaginal pain and discharge. Now that I'm an adult, I know the difference between what's healthy. It was just itchy, yellow, terrible discharge. I told my mom about that. She totally ignored it, like, Oh, whatever.

Months later, we were at a doctor for a school exam, I think before school started or something like that. Out of the blue, my mother says, Oh yeah, she also has uncontrollable urine, like she interpreted it that I was peeing my pants. So the doctor does this very cursory exam and says, It looks fine; you're all good.

Soon after, around when I was thirteen, I started drinking alcohol and smoking pot and stuff. Like, learning about how to check out and not be present. And I stopped talking, like, just quit talking. I was just so pissed. And my mother would be like, Why don't you talk? And I'm just thinking, like, Really?

She spent less time at home and more time with friends or boyfriends. She 'barely went to high school', instead 'staying in the parking lot with people with motorcycles smoking cigarettes and drinking during the day'. She described that she was 'actively running interference with the younger kids . . . I had their cribs in my bedroom . . . I would actually tell them, if you feel uncomfortable, you come to me. I was actively trying to create barriers for them'. She could not have friends over because her

father had molested them too. As a result, she felt 'very isolated, very alone'.

> *I was very mature. Look at my face in these photographs: I've got a mission. I'm stern, and I'm pissed. Like, I'm just pissed. Growing up, like what kind of God keeps giving this man more girl children, one after another coming out. I'm in this religion that's overriding everything: it excuses this behavior like God.*

Eventually, her younger sister told her mother what was going on, and the mother 'finally believed that he was actually putting his hands on our genitals and molesting us'. Her mother's response was that she took her and her younger sister to the store and instructed them to pick out a bathrobe and not be concerned with the price. The message was that the daughters were responsible for the abuse by not covering our bodies well enough; 'and that was the last we heard of it'.

Money was a 'big thing' in the household. Although the family had enough to be 'reasonably comfortable', the father was very rigid and controlling about it. While he bought himself expensive, high-quality clothing, her mother was 'just tortured' over money, with him tracking and criticizing every dollar spent.

She considered herself 'the stupid one in the family'. Her brother was 'the academic one'; 'that was how he handled things'. He focused on his studies and 'finding his avenue out of the house'. He 'knew his intelligence and went with that'. Her own education was devalued: 'My only role was going to be getting married and having children'. High school classes focused on domestic skills such as 'planning your wedding colors'. One exercise consisted of 'practicing motherhood by carrying an egg for a week', with the implication that dropping it made one 'a bad mother'. Currently, she described her brother as 'a sweet man' whom she 'loved through and through'.

> *We finally got my dad minimally disciplined by telling somebody at school. That's a whole different story. It's crazy. Nonetheless, he was taken from the home for a year in a correctional institute. This was my last year of high school before graduating, and I was like, 'At least I don't have him at the house'. But my mother was completely out there, with really bizarre behavior. She continued to clean the house and feed us, but other than that, there was no caretaking of the children. We were neglected, abandoned by her.*

Her younger sister had eventually reported the abuse at school. She was uncertain what the interactions between her sister and the school had been, as well as what was communicated to social workers and further on to police. A copy of her father's court records that she had acquired later, as an adult, indicated that the trial 'in no way captured what actually happened to us: they diminished it down to... he was found guilty of maybe fondling the breasts of a 12-year-old or a 10-year-old, like, just inappropriate conduct ... this is how bad the system is'. She considered it 'a kind of gaslighting even by society'.

> *I had been trying to get help for years. Finally, I was just drinking alcohol, barely going to school, sneaking out the window at night to go hang out with friends and drink, whatever. That was my*

> *life. Then I get called to the school's principal office during the day, like, at two in the afternoon. I go down there; I sit in a small room with two social workers, male and female. They say, Has your dad touched you in places, like molested you? Well, yes. Has he ever put anything inside of you? Yes. What? A finger. Well, one or two? One. All right. Then they sent me back to class, like nothing happened.*

Before she got back home, her father had been arrested and put in a county jail. 'It was really funny because a friend of mine, one of my drinking friends, her dad was also in the county jail for drunk driving. We're like, our dads are in jail right now. Like we're the same. And life is just carrying on, essentially.' Everyone was 'just trying to stay alive in this really crazy situation'. Neither her mother nor anyone else ever asked her what had really happened. The neighbors knew that her father had been incarcerated and the reason for it. Regardless, her mother was 'deluded, thinking that nobody knows, going to church like normal'. It was 'a very strange time'.

Precipitated by learning that his dad was a pedophile, her brother lived through 'a string of challenging manic episodes followed by depression'. Later, he was fine for three decades but then developed sepsis and became psychotic in the hospital. She could not say whether this indicated that he was bipolar or whether bipolar disorder ran in the family.

Referring to a book [58], she commented that 'having a safe place is a key to development', and she and her siblings 'just did not have that'. She became unable to attach to people; instead, she loved cats. Being a Mormon 'never resonated' with her, and she left the church 'at the first opportunity'.

[58]: Kolk 2014

During the years, she had acquired two physical injuries. One was due to neglect by her mother at the age of sixteen. She frequently had streptococcal infections in the back of her throat. One of them developed into a dangerous phase.

> *My dad would be at work. He had a very regimented way: you had to have fresh vacuum lines on the floor, with no footprints through the vacuum. Mind you, there were a lot of kids. The food had to be ready. He would actually run his finger across the top of the refrigerator, and if it was dusty or the baseboards were not clean, he'd be angry. He would actually check them. So my mother had to vacuum all day long and get the house ready for when he came home.*

She was feeling very ill and was sitting on a chair. Her mother took her to a doctor early on, but the doctor didn't consider it urgent. She continued to 'sit in that chair day in, day out, getting sicker, sicker, and sicker'. Her mother 'would just be vacuuming' around her while she was 'going downhill', until her mother finally took her back to the same place. There was 'a bulging retropharyngeal abscess' in the back of her throat. The medical personnel immediately sent her to the emergency room.

Because she had not been able to swallow, she had not eaten for days and had been spitting saliva into a cup. She also had not drunk water; at the ER, she had first needed to drink. As the doctor was puncturing

the abscess with a needle to anesthesize it before draining it, the abscess burst, with its contents flying out of her mouth. Afterwards, the untreated streptococcal infection caused rheumatoid fever, which attacked her heart, joints, and kidneys; she was 'really sick'. The infection contributed to chronic pain. Another contributor to the pain was an earlier accident.

> *My dad was a very physical person. He thought it was a blast to do things like throw us in the air as high as he could and catch us, or take us and spin us around in a circle. He had these crazy games. He was an imposing figure by his height and temperament. He'd hold you pinned down and tickle you; it is like the worst thing in the world. He'd play dead, pretending the house was on fire, and we would have to get him out of the house. He'd like to do these very provocative, emotionally charged things. It could be funny until we all started crying or something. It was his way of having fun. He would do this all the time. We'd go for drives on Sunday, and we'd go up a canyon. Going downhill, he'd be like, Ooh, the brakes are out, the brakes are out. And all the kids are screaming. He liked to elicit fear.*

Once, when she was exercising, her father intended to playfully interfere with her sports exercise, but the equipment failed. Her feet got stuck up while she swung headfirst on a hard floor.

> *I remember seeing my dad's face as I was falling, and I saw that he was, like, This could be really bad, like, really bad. I hit the floor and bounced up like nothing happened. I acted like nothing happened, but I had amnesia after that. I've had just horrible pain. I've had tinnitus. I've got neck issues and scapula issues. It's been a constant battle to be comfortable in my body.*

It felt like 'always having a metal claw hand over this part of my head'; she was constantly rubbing the area. Acupuncture, physical therapy, yoga, and sound healing had been 'incredibly beneficial to start to work through this', but had not resolved the pains.

> *I think that injury had the potential to have killed me. For whatever reason, I wasn't meant to die. It felt almost a shamanic thing, like, I can't die of this. My fascial system, the innate elasticity and buoyancy in my body decided that, Okay, we're not going to let the back of your head smash or your neck vertebra break: we're just going to take it all in. But the impact, the actual physical force of it, is still in my body, in those elastic fibers. It's still in there. That's how I interpreted it. About how to get it out, that's the work I do in the ceremonies. It's always about this.*

The chronic pain associated with these events continued until her last, very recent ayahuasca experience that was 'all about getting that last bit of that pus out of there'; 'the purging was insane'. She felt as if she was 'in a pool of blood', with her head broken open, as if she was at the intensive care unit.

After high school, she married a man working in the military whom she described as 'very controlling'. In her early 20s, she attended an institute that organized an unregulated 'pop psychology' program called Erhard Seminars Training (EST) [59]. Her mother and siblings had attended it

[59]: Fenwick 1976

and considered it useful, leaving them 'feeling pumped up and a little positive'.

The program involved a charismatic leader, sleep deprivation, and other provocative techniques. She described that 'they broke you down and built you up, just messing around with your psyche, leading you through the dramas up and down, but they were not trained at all'. The program destabilized her, precipitating what she long considered her 'only true psychosis'. In retrospect, she no longer saw it as a psychosis, but for decades, she believed that she had experienced psychosis and identified as bipolar.

Back home, in the early 1990s, she was 'going around the house, breaking his weird military money piggy bank thing. . . for some reason I felt it needed to be shattered, and so I was taking it to the bathtub and throwing it and trying to break it'. They ended up going to a military hospital that referred her to a psychiatric ward for a few weeks.

She referred to an interview of a woman who was relaying a story about surfing into and out of what appeared to be a parallel reality, or altered consciousness. She would live for a few weeks with remarkable synchronicities, hearing repeated phrases that seemed to be a unique message for her, announcements that were unusual and also appeared to be unique messages for her. She saw a mental hospital and knew that people with similar experiences as hers were pathologized and medicated. She said there was a fine line between exploring consciousness and reality and insanity. It was essential to avoid becoming a target of the attention of others, as they would 'lock you up, and we don't want that'.

> *And that's what happened when I became psychotic: I got their attention, and they locked me up. I was married to a person in the military. He said I was doing things that were insane. But it made perfect sense to me, and it kind of still does.*
>
> *Things such as: everything is precious, that we really shouldn't have very much plastic, but if you do, take care of it and use it again and again. I had a pair of glasses that had plastic frames, and I was just like, You're plastic, but I'm going to take care of you. I had a drinking cup, and I was like, I'm going to take really good care of it.*
>
> *I was about 23. My husband was working in the US military during the time frame of Bush number one and the Gulf War [60]. In my psychotic state, the world was imploding; everything was war. It was crazy, end-of-the-world-type of destruction. But there was a diamond light, and I was the diamond. We needed to save that, the light and the true essence.*
>
> *I remember thinking that I menstruated honey. I was like, But of course, why wouldn't I, it's just like the biology of it or something. It was about saving the world and about the pure diamond light that needed to be protected. I wasn't taking my medicines because I was like, you know, this is really important, and I don't want to check out.*
>
> *So they tackled me on the bed and shot me full of haloperidol, which is horrific: you end up like a zombie. I remained a zombie until I got this known side effect of it, acute dystonia, where you*

[60]: Chomsky 1991 URL

> *get uncontrollable movements in the jaw and face. My teeth were clamped down, with soft tissue of the cheek caught between my teeth, and my teeth were actually breaking like shards, and blood was coming out. So they took a human who was provoked to the point of instability but traveling in beautiful places and shot me full of medicine that caused me to shatter my teeth.*

She was later released into her husband's care 'on a bunch of medicines'. The next year was 'really, really hard', with her being severely depressed, searching for therapy. She found a female therapist, 'a Tibetan Buddhist practitioner, an elder', 30 years older than her, with whom she continued for 35 years, with a few short breaks in between. She 'had got a psychotherapist early on and had done talk therapy like crazy'. The therapist had some experience with psychedelics and had been acquainted with Stanislav Grof, the pioneer of LSD psychotherapy and Holotropic Breathwork [61–63]. Therapy 'woke her up to a lot of things . . . the talk therapy was not without great benefit, but it just didn't clear out the poison that was stuck in my tissues and bones'. It appeared impossible to 'either think or talk her way through it'; at least, she had not been able to do that. She had also tried 'moving it out' with yoga, sauna, and lifting weights, with limited success.

[61]: Grof 2010
[62]: Grof 2001 URL
[63]: Grof 2019

She considered suing the Erhard Seminars Training organization and acquired her medical records. Reading through her medical records afterwards, she encountered a psychiatrist's note describing her as having 'above-average intelligence'. It elicited the thought that 'the first time I hear I'm smart is when I'm crazy in the hospital'. It became a turning point. Before that, she had seen herself as 'the stupid one, drinking and just barely staying alive'.

She wanted to end her marriage, go to college instead, and engage in a sporting pursuit within the realm of extreme sports. She had to repeat high school but enrolled in a college and took remedial courses. Surprisingly, she kept getting the highest grades. Initially, she thought they were just flukes, but her streak continued: she got the highest grade in every subject almost without trying, without studying for the tests. 'It was not a challenge, and I was like, okay, maybe you're smart'.

After her brief marriage, she didn't feel like doing that again and realized that no man was going to pay her way through life: she needed to work. As she had an interest in the human body, fitness, and working out, she considered becoming a physiotherapist, but since getting into physical therapy school was difficult, she thought that she could as well go to medical school, and she 'never looked back'. She had to prove her parents wrong, show that they underestimated her. In retrospect, she commented, 'I did that, and I did it huge'; 'in my drunken stupor, I made good choices for myself, and I'm thankful for that'. She became a medical doctor and spent decades in the mountains; 'It's been an amazing adventure'.

Regardless, alcoholism was another struggle she faced, particularly early in her medical career. She quit drinking when she realized that she could not excel as a medical doctor if she kept on drinking.

Until the early 2010s, she had been diagnosed with depression and had 'tried SSRIs here and there'. She met with a psychiatrist approximately five times in the course of one year. Then, she was diagnosed with bipolar

disorder. The diagnosis appeared to have been made in a situation perhaps unsuitable for making long-term diagnoses and was based predominantly on her one-time psychosis two decades earlier.

> *That week, I quit drinking: I went from 100 miles an hour to zero overnight. I also ended a long-term relationship. I was feeling hypomanic and scared that I was going to become psychotic. I was trying to find a good psychiatrist and found somebody. He gave me that diagnosis. At the time it felt like a kind of a relief, a place to rest, like that's what this is. Then I looked further and realized that so many people with this disposition also have adverse childhood developmental journeys that are particularly challenging.*
>
> *He said, Yes, you are bipolar because you had a psychosis. I had depression, and at that point I was presenting as hypomanic, I suppose, and I was afraid I was going to become psychotic. Why was I afraid? I felt like I was really on the edge of instability due to the removal of alcohol, the ending of a relationship, and I had just become a full-fledged doctor. Maybe the distress of that.*

The psychiatrist also prescribed her lamotrigine and bupropion. She used them for 5-6 years but remained uncertain what their effect on her had been. She suspected that they dulled her mind and reduced her appetite by making food taste bad. That caused her to cease cooking healthy food and eat 'crackers, cheese, and cookies, things from the refrigerator that didn't go bad' instead, likely causing nutritional deficiencies.

She was thankful for her situation but still struggled with 'all the things that come along with that kind of childhood'. She was feeling 'very alone, isolated in this world', unable to really know or feel that people loved her. She 'destroyed relationships for the smallest perceived inadequacies in them' and retreated into being alone. 'Relaxed relationships with humans' were challenging as she was 'always on guard'. She attributed this to 'the vigilance of post-traumatic stress disorder'.

> *For the longest time, I was like, I really healed from this because I got my shit together because I could cognitively say: these were not my fault, and I'm smart and thriving, playing in the mountains, I have a career, I have the resources that I need, and my life is running really well. The mail gets opened, and I go to the dentist.*
>
> *But I still felt like shit and got so depressed and became catatonically depressed, and it was just a struggle. We could talk about it and talk about it. And I did. I talked to the same therapist like crazy. I had a 35-year psychotherapy relationship. She was just tired of me talking about it.*

Because a lot of the abuse had happened in her father's office, she had 'a very hard time setting up an office' for herself. Everything in that context, including finances, accounting, files, printers, and stamps, triggered her. Her therapist could not talk her out of it because she felt that the issue was 'in her body'.

Around 2016, she was living in a 'beautiful place', working as a doctor. In addition to psychotherapy, she was seeing a psychiatrist and had 'tried all the meds already', and was tired of being on psychiatric medication.

She noticed a change in some of her sporting friends who had 'really struggled with excessive drinking'. She described that 'we spend a lot of time together and get to know each others' ways'. At that time, she saw them 'start doing mushrooms'.

> *We'd be out of the crag. And I was like, They're different people now: they are no longer drinking, they're quitting their jobs, they're saying that this shit doesn't matter, I can't engage in the world like this anymore, these are the things that matter to me.*

In 2018, a book on psychedelics by Michael Pollan was published [64]. The book and every other source were 'just so casual about saying, you know, contraindicated for people with bipolar; it's not safe. Just no, no, no'. She compared these recommendations with the reality of having been psychotic. She 'really did not want to go there again because getting back on your feet kind of sucks: the things you do while truly psychotic are regrettable, and afterwards, you're pretty much guaranteed one of the worst depressions forever'. In any case, she knew that she wouldn't want to mix the psychiatric medications that she was on with psilocybin.

[64]: Pollan 2018

Concurrently, she was enrolled in an integrative psychiatry course, 'getting educated in all the lifestyle interventions one can do for depression', because depression was her biggest challenge to grapple with. The organization trained psychiatrists in integrative psychiatry, trying to reduce conventional medications. Many of them were 'getting trained in the psychedelic renaissance'. She failed to share their perspective.

> *It was very interesting to have listened to them as gatekeepers for this medicine that I think is our natural right. About how they were going to be psychotherapists to help the participants integrate. And I was like, I think that's inherent in the process. You know, I don't need your help. Psychotherapy can be very helpful, and I experienced great benefits from therapy. However, I'm dubious about combining psychotherapy with psychedelics. I think it would be helpful for therapists to be familiar with, and have personal experience with, psychedelics. But talking is such a limited way to grow after these medicines. I'm more interested in art, music and nature.*

Regardless, her sporting friends were growing psilocybin mushrooms and were willing to tripsit for her; the option was available for her. She decided to get off her medication but did it very slowly over at least six months. Eventually, she was off all of the medications, had enough time off work, and had reconnected with her friends who were growing the mushrooms. She 'started microdosing a bit here and there and then taking a little more, medium doses', i.e., psycholytic doses [65]. She considered these 'medium doses' the most useful, inducing 'a kind of in-between state where it's not a journey'.

[65]: Passie et al. 2022 DOI

Finally, she was 'brave enough for her friends to come over' and took a 'hero's dose' with them at her house, describing it as 'a fascinating experience'. Her 'psilocybin work' had always been done either with friends or alone, and it was very different than working with ayahuasca. Interestingly, she considered that psilocybin had predominantly produced somatic changes: 'I think it's had huge healing effects, physical body changes that are evident on radiographic imaging'.

> *It was amazing, but I was still very depressed, really mean to myself, having the internal dialogue of my shortcomings, imperfections, and anger. All that was still pretty entrenched. Then, during the pandemic, I left my job. I wasn't working and had all this time at home. I was just smoking weed all day long and kind of spiraling, like something's got to give. I became so depressed. I was catatonic.*
>
> *I had built a beautiful home in the beautiful desert. I could maybe get myself from the bed to the sofa. And then the dishes. I'd be like, I'm going to be able to do those today. No, but I can't do those today. It went on and on. Talking to the same therapist, I could hear it in her voice: I was annoying her. She was so tired of hearing it, and so was I. We were all tired of it. It was tedious as hell.*
>
> *I ended up needing to go back to work because I would be losing my license if I didn't participate in the system again. There wasn't a local job for me, so I needed to sell that house. So, during this catatonic depressed state, I sold a beautiful home.*

During the pandemic, it was challenging for her to find people who had 'a shared perception of reality'. To her, many of the decisions made during the pandemic didn't make any sense: there was 'such an absence of logic' that she had 'hard time with that dissonance'.

Due to injury, she also had to give up her sporting pursuit which was her main emotional outlet. Two years before the interview, getting back into a job that she no longer really believed in, she became suicidally depressed for the first time in her life. She spent thousands of dollars on neurofeedback [66], EMDR [67, 68], and ketamine treatment [69]. Regardless, she thought that 'I'm going to hang myself on that doorknob'. Alone in the house, she was testing a rope on the doorknob: 'I'm like, yeah, I think this would work'. Realizing what she had been up to, she called a friend who checked her into a hospital, where she ended up having 'the worst experience ever, you know, ever'. Still 'super depressed', she moved to another state and took another job, 'slowly starting to come out of it'.

[66]: Choi et al. 2025 DOI
[67]: EMDR Institute 2025 URL
[68]: Laurel Parnell 2013 URL
[69]: Lassalle 2023

Mary Oliver, a poet and the author of 'Dream Work' [70], had also been 'a frightened child sexually abused by her father' [71]. The interviewee referred to her encounter with Oliver's poems as 'one of the first times she really felt heard'.

[70]: Oliver 1986
[71]: Cristene 2019 URL

> *I heard an interview with her in her later life. She was saying that these things just affect a life in a pretty profound manner. In this interview, she says to the interviewer, My life was really hard, for a really long time. When she said it, I was, like, Yes, it was really hard, for a really long time.*
>
> *Stanislav Grof once said about his wife, Christina Grof, that she was an extraordinary person. He said that she had been sexually molested as a child [72], and that even with all that psychiatry, all those psychedelics, and all that breathwork, her life had been poisoned by her stepfather. I was, like, Yeah, that sounds about right.*

[72]: Grof 2014 URL

The exact mechanism of this poisoning remained unclear; she had been unable to clearly define it intellectually. From the point of view of

molecular regeneration, her adult body was 'no longer even the same body'. Also the reliability of memory was uncertain: what one did not remember, one could fill up with something imagined. One could repeat a story and start believing in it; a story could be filtered or mutated in the course of time; objectivity was largely out of reach.

She had asked her therapist about why sexual abuse was so painful and life-defining; the therapist's view that it was just because it was so painful. In her own view, she considered that 'there was something very fundamental about the absence of bodily autonomy: it seemed to be quite fundamental to feeling safe and protected and belonging to a community'.

Regardless of slight improvement produced by psilocybin, she still felt 'like there was poison' in her and she 'didn't know how to get it out'. She attempted to 'logic her way through it all day long', not even knowing 'what reality is because everybody's experience is so different'. Yet, nothing changed where she was 'right now': how she was feeling in each moment. By then, approximately nine months before the interview, she had been turned away from three different ayahuasca groups.

> *And I'm like, f_ck you all. So I find this group, and I don't tell them the truth at all. I went for three nights in a row. And yeah, there will be life before ayahuasca and after ayahuasca. I do not have that poison in me anymore. I just don't. Thank you. That is so amazing.*
>
> *In my ayahuasca journeys, my work with the medicine is hard. I don't get the feeling of love and oneness and awe and wonder and 'you're so cared for now'. I go to where there's death, decay, mayhem, and bodies crashed up. That's my work. I watch things fall apart; I see where the entropy is happening; I see where the life, the right energy, the organizational vital life force is not happening. That's where I go. Then I come out better for it. And I'll go again.*
>
> *My last journey with ayahuasca was in the desert. I was reduced to a purging, breathing, smashed head with a pool of blood and a transected spinal cord. Awesome. Painful. I was lying there like a paralyzed body, shaking for three hours, every now and then coming to a purge. It was actually kind of scary: the first time I had any sense of fear through the experience.*
>
> *But I trust it so much. Where it's hard, just go deeper; surrender into it. I feel taken care of in this group. They are so amazing, so attentive to my safety. I trust them that I am safe. I know that, so I just breathe. If you're breathing, you're alive. That's it, your only job right now: breathing. And you're alive. Surrender through that experience, to be sung to by these people who are channeling, singing to you: you are loved; let it go.*
>
> *Our language does not describe these experiences in any way that captures it. I believe that everything about it is divine: all the participants who were there that night needed to be there that night, and the music that was chosen was divinely channeled. When you hear it during the ceremony, it is like time has stopped, with just this one, crystal-clear, crisp voice with such a steadiness and resonance flowing through you.*

All in all, she had attended four ceremonies: three nights, two nights, three nights, and two nights. The first three ceremonies had been organized by a group with links to a South American country. The fourth ceremony had been organized with another group that sourced their medicine elsewhere. She thought that there were slight differences in the 'energy container' depending on where the medicine had grown. Both groups were good, but she was especially happy with the group she first sat with. She 'loved that community' and felt that she had 'found her people, her tribe'; it was 'so fun'.

She classified the ceremonies as 'community healing'. The facility was a round yurt with a cast-iron fireplace in the center, and there were sheep rugs for participants to lie on. The organizers were Americans who had been going to South America 'most years, spending a good amount of time there, and they had been doing that for some time'. Nobody was 'claiming any kind of shamanic skills' but one could see that 'they knew how to work in this space'. Ceremonies involved singing that was 'just amazing', as well as some bodywork that she had experienced as highly beneficial: 'It feels so good for somebody to just hold my cheeks and let my jaw relax . . . so it's bodywork within the medicine'.

She considered the resonance a physical, somatic effect, affecting her brain injury, as if her brain injury was getting vibrated healthy. She hasn't had enough experience to really know what it was about exactly, but it appeared 'vibrational, reorganizing all of my particles, vibrations, and wavelengths, getting rid of the density, getting rid of the fibrosis . . . it feels physical and neural. It's fascinating'. She also considered it likely possible to eventually regrow absent cartilage and heal bone spurs: that the body was capable of healing in ways that people could currently not even fathom.

Concerning the so-called 'integration' [73], a process of integrating insights acquired in ceremonies into everyday life, she commented on the ineffability of the ceremony experience.

[73]: Aixalà 2022

> *It's just so hard to even capture it enough that I don't lose it. It's like, what part of this can I conjure back up into my mind? Because if we're not careful, we become rigid again, returning to our previous identity, like, 'I'm this person at work and have this issue at work'. Instead, one would just need to relax into this space experienced during ceremony, remember our true nature. Recapture that freedom.*
>
> *About this most recent experience, we'll see if this is durable. I'm feeling stronger about changing my focus and working in a way that my most important contributions to our well-being can be realized: finding a way for that to emerge. I believe that it's in the arena of an alternate approach to understanding and becoming resilient to the diseases in my specialty.*

She wanted to attend more ceremonies in order to resolve issues related to her work. She was 'having a hard time' due to perceiving her work as meaningless because she considered her specialty based on wrong foundations or outdated science, and medicine in general plagued by the motive for profit over truth and patients' actual interests. She 'just didn't

believe in really anything *the industry* [of her specialty] was doing'; it had 'deviated so far off track'.

She described the industry as 'a machine of a corporation, rolling, sucking money from the people', originally put in motion by the collective energy of humans but then having acquired 'a life of its own, a consciousness, or an intelligence of its own'. In the meantime, everyone had forgotten how it had been built: 'on a house of cards'. She referred to the adage of a man looking for his keys under a streetlight instead of in the dark where he had dropped them because it was easier to look for them under the light. Medicine was 'looking where the money is instead of where the truth is', and she was tired of it. She was expected by the system to look for the root cause of illness in genetics, but she believed that 'it's not where it's at'.

However, alternative approaches were not favored by the industry. Adopting an alternative approach was 'the fastest way to get your clinic shut down, the fastest way to lose your license'. She mentioned 'this terror that the industry has upon the sweet humans who are coming down with painful ways for the body to disintegrate: it's a travesty'. Evidence did not actually matter. Methods for acquiring it were unsuitable for the purpose: 'randomized, placebo-controlled, double-blinded bullshit that works only for single-point interventions, not for holistic care'; regardless, it was required. It was 'trying to reduce something whole down to something that's measurable and published in the New England Journal of Medicine'. Yet, even if one succeeded in all that, their inventions were dismissed by some authority figure. She considered that the United States was 'quite famous for our health care: a contradiction in modernity and dogma, so commoditized'. The US had 'developed an economic system around arbitrary human body health systems. It is our largest economy. They make the money. Bizarre'. It was all about a fixing mentality: 'Oh, we gotta fix you'.

Yet, she felt that 'the concrete was now breaking'. Her attention was being focused on finding better methods with significantly better efficacy as well as fewer side effects and adverse outcomes in her specialty, a new approach based on a new kind of science and aligned with her personal ethics. She did not yet know what the new kind of science was going to be, but she felt thrilled about the possibility: 'a lot of people could be helped with that'.

She also considered that in medicine and in general, death was perhaps being taken too seriously. Her perspective on it had perhaps changed somewhat. 'Okay. We die. Or we don't. What is death? Maybe we change form, reunite with our tribe, rejuvenate, and then come back in. I don't know'.

Her intentions 'created fertile ground' for her ceremony experience, but the medicine possessed 'such greater intelligence and knowledge of her path that it was beyond what she could encapsulate'. She believed that all life had 'a sense of true purpose and mission'. In her case, the true purpose was 'kind of big', and she felt that currently, she was 'dancing around it', looking for a way to 'get out of the way and let it emerge'. It was 'something bigger than her'. Now that she was no longer so depressed, she was 'back to being really excited'.

Reflecting back, two years ago, she was 'hanging herself off a doorknob'; currently, she was 'surrounding herself with as many alive things as she possibly could'. However, 'getting her body back' after the catatonic depression was 'really challenging, especially taking a three-year convalescence in your 50s: it's taxing on the body'. She got up early in the mornings and did a hard workout and was regaining interest in her athletic pursuit.

She 'really tried not to be evangelical about ayahuasca' as she didn't know whether it would be helpful for somebody else. People sometimes commented that she 'just had this look about you like you have a secret, and I'm like, Yeah, I do. I can share it with you. It's not that serious'.

She was 'having a blast meeting people along the way'. It was like 'entering into a parallel reality: even when you're not in the medicine, you're like, on for the ride'. Life had become more relaxed and bright. 'Oh, you missed your flight. That's terrible. Is it or isn't it? I don't know. Oh, this car just broke down. It's terrible. Is it? Maybe. I don't know. Who knows?' She referred to a Buddhist parable about a farmer responding to any event as if its utility was undecided. She was also less concerned about money; instead of accumulating it in her account, she was 'trying to turn it into things like art'.

She questioned the legitimacy of psychiatrists in determining the societal use of psychedelic therapies. In general, she opposed the medicalization of psychedelics, advocating instead for community-based healing models.

> *The psychiatrists, who are like, We can have fun at work, so we're going to gatekeep psychedelics. We're going to control. We're going to lay the patients down with their headphones on and the music we chose as we're sitting here with our notepads. And we're going to continue like that.*
>
> *They're taking psychedelics. When are they going to let the chips fall where they may? In some ways, they're still not thinking. I find it interesting. Attempting to put it through the US Food and Drug Administration system. A beautiful narrative of I don't even know what. Mass delusion, illusion.*

She also referred to the concepts of spiritual emergence [74, 75] and kundalini awakening [76, 77], saying that the US mental health care system could not differentiate these from psychoses. She herself remained unsure about the nature of her psychosis; it might have better been seen as a spiritual emergency.

[74]: Grof 1990
[75]: Grof et al. 2017 DOI
[76]: Woollacott et al. 2021 DOI
[77]: Turkia 2024 DOI

On the question of what the diagnosis of bipolar disorder meant for her in practice, she replied that she had 'gone through different perceptions of that throughout her life'. Academics, artists, musicians, and even psychiatrists [78] have been diagnosed with the condition. Perhaps some with a vulnerability to psychosis and deep moods were 'just living their life a little closer to the veil' (between matter and spirit, or this world and another). Bipolar people were perhaps just 'closer to the veil' and therefore more easily destabilized than others in situations that took them 'too far out of homeostasis'. Depression perhaps resulted from perceived dissonance between everyday realities and one's true nature. Regardless, 'finding one's ground again' could perhaps be better achieved with methods other than those of current psychiatry.

[78]: Jamison 2000

She said that the above might not apply in all cases, such as homeless people unable to maintain a life and constantly, say, hearing voices. Perhaps some people benefited from antipsychotics. Other cultures might have developed better strategies to handling such cases without diverting into pathology. She considered that her society rarely 'eased the way' for people; for example, veterans of war becoming addicted to opioids. The society was 'quite responsible for our downs and outs'; she did not have a solution to it. She questioned the legitimacy of the DSM-5 diagnostic system; she could 'only shrug at it' and 'didn't know what to make of it'. Her brother also had a diagnosis of bipolar disorder; she had seen both her brother and mother become psychotic. Concerning her own family, she didn't consider the diagnoses legitimate.

> *I don't believe it. We had a tyrant murdering grandfather who wreaked havoc upon two boys who were doing the very best they could in a very intelligent family. I don't think any of us are sick, but most of us have a diagnosis that we are sick.*
>
> *For me personally, I love living close to the edge of insanity. It feels good, right? That's what ayahuasca does. You can actually push through to that world and interact with it. It's a blast.*
>
> *When I'm at work, it's super serious; like, they could sue me and take all my money for a mistake. So serious. And people are having their little dramas at work. After the ceremonies, I get closer and closer to that being a playground also.*

Although she was doing much better emotionally, the events had left their somatic traces. It was not about just 'emotional trauma stored in the body' but actual physical injuries in her body. (As a side note, Earley discussed blood atonement and murders among Mormons [79].)

[79]: Earley 1991

> *It's multifactorial. I have literal scars, injuries in my body, such as head injury: an abscess, caused by having been neglected as a child. I've got scar tissue within that is the backdrop of neglect that allowed illnesses to go untended to.*
>
> *I've been raped outside of my father's abuse of me. There's so much I don't remember there. And there is, I believe, actual scar tissue in my body from these other things.*
>
> *I've ground my teeth down to almost nothing. The effect of psilocybin and ayahuasca is not instantaneous, but finally the jaw is starting to loosen up. And I have chronic pain in my neck. That is also starting to loosen up.*

[80]: Kolk et al. 2007

> *I think van der Kolk [80] is really onto something when he says that should an organism get traumatized and it doesn't have a discharge, it just stays in the body.*
>
> *I'll be completely frank: the degree of sexual abuse that happened to me, by the time that I was aware of my body and what was happening, I was completely numb. I could not have an orgasm. I could not experience pleasure. It was as if my genitals were the same as an elbow. You could not elicit a response from it. My body, my physiology, had turned off the nervous system to even be able to tolerate the abuse.*

> *How did I get to that point? I can only imagine even younger that my body was responding to it.*
>
> *So when I watch, there's this creepy documentary about people who like to be tickled. I'm watching this thing where it elicits a reflex response of the body. Even if you do it to baby kittens, as you see on YouTube videos [81], they'll be, like, doing cute little things, and the baby kittens do this little reflex. When I see these reflexive responses, I just want to hurl. Even saying this makes me so angry, you know, like my body being tickled and tickled and tickled like it was never mine.*
>
> *All of that goes somewhere. I think it stays within the organism, within the physiology, within the nervous system in it. And that has to come out. I don't know how it comes out, but in ceremony it does. I think there's a collective coming out.*
>
> *I have not personally had to re-experience it. While the experiences are challenging, maybe in the future that territory will be explored with mother ayahuasca or other medicines. Either that, or I might, and I believe this to be true, I might have suffered enough. I might just be spared.*

[81]: Gentile 2012 URL

For her, ceremonies were a 'physical experience', involving shaking and twitching. She referred to how organisms in the wild facing the worst thing ever got over it the next minute by physical vibration: 'they get it out of their system, and it goes back into circulation with the breath'.

> *Some people that go into a ceremony and come out of it feeling like they are in union with God, we are all one; we are not even our bodies. I know that: I live my life there every day. It's hard. I know that, but that's not what I do in a ceremony. I'm more in the material. It's painful. I have to work on the scar tissue and such. It's like, Oh, God, we're going to work on that? Really? Oh, okay. In this last one, I lay there like a dying, twitching thing for probably a couple of hours. It's just so physically excruciating. That is how it's coming out, whatever it is.*

Sometimes some individuals could be functioning 'as crucibles' for certain trauma lineages to transform them. Some people could also be functioning as crucibles to transform dysfunctional medical paradigms that hurt people and made them bankrupt. Such transformations involved 'pain, decay, fire, alchemy'. Regardless of how the body, the material, was conceptualized, whether as a vibration, a particle, or energy that had a density to it, trauma was about 'something getting stuck in there'. She said that 'for some reason, the murdering grandfather lineage got piled on' her; she was 'the dumping ground' for it and the rest of her parents' issues.

> *And yet I'm like, Yeah, but I'm strong enough to transform it.*
>
> *It's magic, but I don't have the poison in me anymore. Somebody asked, 'Do you feel like you have something dead and rotting in you?' No, no. I'm alive and vibrant. What a blessing, right, though?*

She referred to an article about 'someone finally questioning this prohibition, this contraindication, for certain populations: it summarized it quite well in that it took root with no basis'. In order to be accepted to ceremonies, she had needed to not disclose everything and omit some of her history, which created a dissonance. To eliminate that, she had to reconceptualize her history as it would have been conceptualized from another perspective or in another culture: as a spiritual emergency or kundalini awakening.

> *I'll just emphasize this: how disheartening it was that it took at least five years to be able to sit with this medicine. It required not disclosing everything. There's a dissonance when you enter into a medicine under an umbrella of deceit when it's all about trusting the container. I had to conceptualize it differently: that I am neither psychotic nor bipolar and never was, and what I experienced was a spiritual emergency that was mishandled by a bad system. That's how I view myself: through the eyes of someone from another culture. Then I could answer honestly, so that I didn't enter into a ceremonial space having that weighing over the experience.*

A concern was that when people really engaged with psychedelics, due to seeing all the discrepancies more clearly, society as it was currently structured made less and less sense. Not often, but occasionally, she had met people for whom the medicine had not opened up the vitality, the engagement, and the agency that she had experienced. Instead, it had left them despondent. Even if one ignored, say, the news, they were still there; perhaps, there was an overwhelming dissonance between everyday realities and one's 'true self' that one could briefly access with the medicine. The issue was about how to have solidity, stability, in the ever-changing, one-foot-so-close-to-insanity existence. It was 'no wonder one might retreat, take reprieve in a cave... that sounds more pragmatic all the time'.

She guessed that the difference between her and those who became despondent might have been the fact that she was older, had an education, a good job and financial security, had gone through 35 years of psychotherapy with a very good therapist ('I think that that helped a fair amount, probably more than one could give credit to'), and had been 'able to pull off life while the poison was still in her'. All in all, she had 'a really good foundation'.

The diamond was a motif that had come up also in other people's journeys; she referred to [82], whose high-dose LSD sessions resembled hers also with regard to their content being predominantly about the horrors of humanity. Pondering about it, she considered that the diamond represented 'the unknowable mystery: the pulsating thing that gives vitality and life force and causes the unfolding of the life cycles into such pristine organization and crystalline structure. I think it must be God, love, energy, the source of all'. At the age of 23, she didn't fully appreciate the diamond: 'it was too clouded'. Even now, it was 'still coming into knowledge'.

[82]: Bache 2019

> *I have a challenging time feeling connected to spirit and God. I'm so mind, science, and biology oriented, as if they're separate. Nonetheless, people come out of ceremony just like, Oh God, I'm one with God. And I'm just like. . .*

> *I know people love me. When we have a conversation, I can look in their face, in their eyes, and think that I know this person, and I know that they love me, just like I love my cat. But I don't feel it in my heart. I don't feel their love.*
>
> *In this last ceremony, I asked for that. And I think that that's starting to unfold slowly. With time, it starts to unfold and be realized. The God, love, oneness, the diamond is just starting to take form. I might actually be able to experience that. Let's see.*
>
> *I'm not sitting on my laurels. I'm still actively knocking on these doors because it feels like a new life to live, an unencumbered life with less pain. Maybe I will have something meaningful to contribute to humanity. I believe that my existence is a meaningful contribution. It's not one that's earned. Nonetheless, I also enjoy exploring my intellect and my talents: that's kind of cool.*

She commented that 'thankfully, we're all still alive, all of us kids, which is a miracle coming out of this. We're actually doing really well, which is another miracle'. Her personal life was 'a work in progress'. She had predominantly been single, with the exception of her short-lived marriage in her early 20s. Only now, later in life, had she begun to build relationships where she felt that she could trust others. She described it as 'amazing', commenting that she had had 'to live this long for her to be discerning and choose people who don't just suck me dry'. Earlier, she had been 'a nurturer and a giver in relationships, often to her own detriment'.

3.3 Discussion

A trauma-oriented explanation for this sexual abuse would be that may have predominantly been caused by transgenerational trauma. The physical abuse her father had been subjected to, such as beatings, likely induced severe suffering. As his personal boundaries had been ignored, he likely developed a mindset that legitimized ignoring the boundaries of others. For the alleviation of his suffering, nothing was out of limits, including sexual abuse of his daughters. Viewed from another perspective, trauma reduced his sense of agency. Abuse perpetrated by himself elicited a feeling of being able to produce pleasure for oneself, i.e., have power over one's inner world and negative emotions; in other words, it restored his agency, producing a feeling of power. A side effect of it was that it eliminated the agency of her daughters. In economics, this would be called an externality or external cost: an indirect cost to a third party that arises as an effect of another party's activity.

Sexual abuse of minors appeared to have been a convention supported by the authority of the church: it appeared more important to project an illusion of purity than actually be pure. Her suffering was ignored not only by the community but also by her mother. She was thus betrayed even by her mother, which, for a child, may be the ultimate betrayal.

Her mother's response might have been influenced by economic dependence on the husband; an expectation of total obedience to the husband and male spiritual authorities; fear of being blamed; fear of ostracization or damage to the family's reputation; a need to 'keep the family together'

to ensure the eternal salvation of the family; ideas such as that one should not interfere in God's ways; fear of children being taken into custody; possibly having sexual trauma or abandonment trauma of her own; dislike of sex or avoidance of pregnancy; inability to discuss issues related to sexuality; alexithymia; 'learned helplessness', i.e., depression; and an inability to understand the full legal, psychological, or physiological implications of abuse.

Forward and Buck described that in the father-daughter incest drama, the most enigmatic figure was the mother, playing a pivotal role in it [40]. In most cases, they were subconsciously aware of the situation but adopted the role of a 'silent partner'. She was 'often unable to maintain any sort of nurturing, affectionate relationship with either her husband or daughter'. One woman described the whole family as 'starved for feelings ... nobody ever seemed to feel anything'. The mother could be disenchanted about her marriage and pull back from the family into emotional avoidance, essentially passing her responsibilities, ranging from housekeeping to sex, to her daughter. Forward and Buck noted that 'once the maternal mantle is partly passed on, the remainder of the transfer—the sexual duties—frequently follows'.

[40]: Forward et al. 1981

Young children, for their part, in addition to factors related to dependence and obedience, might lack actual or explicit understanding of what constitutes abuse as well as a language or framework to articulate abuse; thus, there could only be an impression of something being wrong but an inability to point it out. There could also be shame about anything related to sexuality, resulting in an inability to address the subject at all. These aspects may have applied to this case in the beginning, but not in the later phases.

From the perspective of the perpetrator, sexual abuse could be viewed as an addiction to pleasure similar to any other addiction; in other words, a mechanism for coping with symptoms of severe trauma. The solution would then be to either introduce a harmless and acceptable way to experience pleasure (typical but not harmless ways include alcohol and opioids) or eliminate the trauma and the related need for acquiring pleasure by using external objects. This perspective has been mentioned in chapter 2 of this book. In that case, also the perpetrator later attended an ayahuasca ceremony, and the issue was confirmed, discussed, and, to some degree, resolved between them. In another case (chapter 11 in [50]), the issue was fully resolved.

[50]: Turkia 2025 URL

Forward and Buck described that out of various types of sex criminals, incestuous fathers were the most intelligent and the easiest to rehabilitate [40]. They were usually quite functional in society but had lost the ability to control their impulses. They had often been severely beaten by their fathers and had had distant, unapproachable, or hostile mothers. They were often churchgoers; one motivation for molesting their daughters was their unwillingness to have affairs or hire prostitutes, as it would have been against their religious norms. Their motivations were rarely purely sexual; instead, they attempted to satisfy emotional needs that they neither understood nor had ways of meeting appropriately. The need could be to defend against feelings of inadequacy or to look for revenge against a wife or mother with whom they were not satisfied with. They could be unhappy, compulsively seeking gratification, but finding

[40]: Forward et al. 1981

no fulfillment; they could be 'vainly seeking for tenderness . . . having no idea what it is'.

Concerning the phase where incest is discovered, Forward and Buck noted that the mother could find herself 'in the position of having to take sides . . . this no-win position is complicated by the financial and emotional security her husband provides, as opposed to the trauma of betraying her child' [40]. This could lead to paralysis and severe depression. The mother could also feel betrayed by herself: 'an outsider in her own home, inadequate, undesired, somehow guilty'. The most harmful reaction to such guilt would be turning her aggression towards her daughter and blaming her for the abuse or for 'breaking up the family'. By not reporting the issue to outsiders, the mother could perhaps regain some power over her husband.

[40]: Forward et al. 1981

Concerning the later phases of the interviewee, two somatic factors likely contributed to or aggravated her depression. The most important might have been her ever-present, quite severe chronic pain related to head injury. In addition to that, before she quit drinking, her use of alcohol likely also contributed to her depression. The role of the psychiatric medication remained unclear, but it appeared to have been of little benefit.

Recently, Scholkmann and Sjöstedt-Hughes proposed that the term 'psychedelics' should be replaced by a new term 'psychosomadelics' [83]. In their view, the term 'psychedelics' is psychocentric, i.e., focusing primarily on the effects on the mind and therefore neglecting the somatic (bodily) effects of these substances. The present case aligned well with this perspective.

[83]: Scholkmann et al. 2024 DOI

Rather than focusing on trauma and pathology, focus could be put on resilience; the present case featured an excellent example of it. A recent book by Miller-Karas et al. discussed community resilience models [84]. Wyatt proposed the term 'dynamism' to better align with non-Western contexts [85]. Also the term 'post-traumatic growth' has been used in the context of resilience [86]. Possibly a central factor contributing to her resilience was her unambiguity, i.e., clarity, about the abuse being real and being wrong. Such clarity may be central in the prevention of dissociation or dissociative identity disorder. When abuse is seen as external and unjustified, internal fragmentation may be reduced. Another likely central factor was that she was not alone but could discuss the experience with her sister; they validated each other's experience.

[84]: Miller-Karas 2023

[85]: Wyatt 2021 DOI

[86]: Cassidy et al. 2024 DOI

Concerning Whiteley's model of healing paths [17], in the present case, shame was rejected and experiences of the church were negative, resulting in her leaving the church. Comparing the religious approaches involved in this case, LDS appeared to represent a seemingly misunderstood interpretation and/or implementation of Christian values. In contrast, her therapist had a Buddhist background; also Okazaki, quoted in the introduction, came from a Buddhist ancestry.

[17]: Whiteley 2019 URL

Interestingly, ceremony organizers in the underground, technically and juridically outside the field of medicine, regardless, based their decisions on a psychiatric label assigned a decade ago on grounds that, in retrospect, appeared questionable. Her sole psychotic episode appeared to have been caused by intense, manipulative techniques, and there were no

further manic or psychotic episodes. If anything, her condition would have been better described as complex post-traumatic stress disorder due to severe traumatization in childhood. Concerning hypomania, being severely depressed was likely her baseline. If she had rarely experienced the state of not being depressed, she perhaps confused occasionally feeling 'normal' with being 'hypomanic'. The diagnosis and decisions based on it thus appeared haphazard and lacking rigor, yet produced an overpowering impact on her life over several decades.

For a long time, she believed that she was 'bipolar' because she had been told so, identified with the condition, and represented herself as 'bipolar'. Subsequently, she was excluded from receiving help. She decided to lie, felt guilt about that, and had to reconceptualize her identity to eliminate that guilt. However, as she was, in reality, unlikely to be 'bipolar', lying was actually telling the truth, and vice versa.

These complexities illustrated the problematic nature of using and believing in psychiatric diagnostic categories that are essentially arbitrary and often assigned to people in an extremely vague manner; in other words, getting lost in a labyrinth of misplaced intellectualism and concepts derived from that attitude and approach.

From an organizational point of view, the described community healing model featured another example of the phenomenon mentioned earlier (chapter 9 in [50]; [87]): the failure of the current psychiatric care system (35 years of conventional care not resolving the issue) leading to the development of independent, parallel, grassroots systems that could be significantly more efficacious and affordable (four weekends with ayahuasca resolving the issue).

[50]: Turkia 2025 URL
[87]: Kheriaty 2023 URL

Concerning the mechanism of action behind childhood sexual abuse being so damaging, simple explanations might take into account a 'compound interest' or 'butterfly effect' aspect, i.e., that even small disturbances in attachment, neurobiological regulation, stress level, identity, and socialization at an early age could compound up to exponentially later in life, leading to disruptions at all levels of functioning and in all aspects of life.

Assuming the foundational goals of an organism are self-preservation/safety and reproduction/sexuality, sexual abuse may distort both of them. Street violence, burglary, or war may disrupt the feeling of overall safety but not involve sexuality. Rape by an outsider may disrupt both, yet leave one's trust in family members unaffected. Rape by a family member to which no one responds likely disrupts trust in everyone. For a religious person, a non-response by God may lead to spiritual disillusionment. Trusting oneself in such a situation may be difficult; one's sense of agency may be very low. Without agency, there is little hope; one solution may be to disappear, either through dissociation, psychosis, sedatives, or suicide; another solution could be to escape the situation physically into a different kind of community.

Concerning decision-making, an inability to discern between safe and unsafe people and events disrupts the agency further. It may become difficult to act consistently or at all, resulting in, for example, avoidance, hypervigilance, or risk-seeking. Excessive uncertainty may deplete resources similarly to how military spending impoverishes a nation,

affecting other areas of life and long-term planning. Also, insecure situations may appear familiar but safe situations unfamiliar [80]; there may be a subconscious preference for dangerous pursuits and people, an addiction to the hyperaware-hypervigilant state.

[80]: Kolk et al. 2007

As for recommendations for action, the religious community could focus on truly healing transgenerational trauma rather than relying on ineffective approaches or merely covering up its symptoms.

3.3.1 Erhard Seminars Training (EST)

Fenwick wrote that 'based on currently accepted standards of psychotherapeutic practice, EST uses techniques indiscriminately that, in a certain proportion of the population, are known to be harmful and potentially quite dangerous' [59]. It involved a deprivation from one's everyday social environment and everyday methods of coping and distraction. It induced a state of deprivation by 'extensive rules and their authoritarian enforcement' and a subsequent heightened emotional arousal. Training sessions began at 8:30 a.m. and ended at 3:00 a.m., but participants' sense of time was distorted by omitting watches, clocks, and daylight. Between morning and midnight, no food was allowed, and only two bathroom breaks were allowed.

[59]: Fenwick 1976

> *There are no more institutions standing in loco parentis. We are orphans. EST fills the gap. It holds us in parental arms and gives us brothers and sisters to play with. The shared experiences of the training clearly increase the sense of affiliation trainees have with one another. They have bared their burdens and shared their sins. They'll never be lonely again. This family is classic, patriarchal, and autocratic. The training is a precisely articulated series of manipulations carefully designed to produce the desired effects. One of the effects is dependency, a dependency that approaches infantilization. The trainer tells you when to talk, when to eat, when to drink, when to applaud, when to sit, and when to stand. The authoritarianism of the training is a beginner's course in the totalitarianism you will be subject to if you join the EST organization . . . So our festering need for dependency, so unacceptable to express and satisfy in our day-to-day lives, finds gratification in the womb of EST. In the training, one can regress to the earliest phases of life. The trainer will feed you with emotional supplies, the nutritional content of which is certified by the conversions of other trainees. The Good Mother of one's most private fantasies has been made real . . . The price of obtaining her nurturance is surrender of autonomy to the all-controlling Father. The EST trainees, in their 'agreements', have contracted for dependency upon the trainer for the very definition of reality. [59]*

[59]: Fenwick 1976

Some of these restrictions may appear similar to those during 'dietas' of plant medicine facilitator training (see, e.g., [88]), which, however, are typically done in social isolation to facilitate maximal self-reflection, introspection, and connectedness to nature as well as to minimize interpersonal influences. In EST, the intention appeared to be a maximization of the influence of the leader and the group of up to 250 people, likely making the process quite uncontrollable and outcomes unpredictable.

[88]: O'Shaughnessy et al. 2021 DOI

Dietas appear to aim at enhancing connectedness to oneself and nature by minimizing interpersonal influences. EST, in contrast, seemed to maximize those influences. Due to the chaotic nature of group interactions, EST might as well decrease connectedness to oneself and the reality. In her case, it elicited a first-onset psychosis. In contrast, her mother had considered it useful. The difference may have been due to differences in the degree of submission to external authority: her mother experienced perhaps less dissonance with her behavior towards her husband and EST leaders and the group, whereas the interviewee perhaps refused to submit to any further loss of autonomy.

3.3.2 On the handling of 'spiritual emergencies'

The interviewee described her experience of, during a stressful situation, seeing herself as 'a pure diamond light that needed to be protected'. The response of the mental health care system was to inject her with medicine that turned her into 'a zombie' and broke her teeth. In other words, they literally attacked her using physical restraint and forced medication, causing permanent damage for which they did not take responsibility because it was just 'a side effect'. The episode appeared to be a perfect example of severe retraumatization of a person who was already extremely severely traumatized. It could also be described as torture.

Between the father, the church, and the hospital, there appeared to be little to no difference in either methods or values. All of them considered violence acceptable, and at least in the case of the hospital, also beneficial. The overall modus operandi of the society and the nation was violence and the legitimation of it. Psychiatric practices equated to institutional violence. From a patient perspective, the medical professionals in positions of power constituted just another group of violent perpetrators. While the conscious mind may attempt to rationalize such attacks away, the primitive part of the brain may not: it may interpret such events literally, as attacks and aggression. Gaining agency is central for healing (see, e.g., [89]); losing it is central for getting ill.

[89]: Lysaker et al. 2012 DOI

In the US, Christina Grof discussed the concept of a 'spiritual emergency' [74, 75]. It could be seen as a situation in which overwhelming stress has caused an individual to lose their capacity to conceptualize their environment in the conventional manner and in which their own coping mechanisms have proven insufficient. It may involve a regression into earlier states of development, along with a regression to the use of undeveloped conceptual frameworks. The level of regression may be related to the age when the individual was first or the most severely traumatized. To external observers, such regression may appear incomprehensible and be labeled as 'psychotic'.

[74]: Grof 1990
[75]: Grof et al. 2017 DOI

Her need to be protected during a period of turmoil was not represented in an overly symbolic or complicated way. She could likely have been calmed down by convincing her that she was safe and subsequently interpreting her situation to her.

Such an approach for the treatment of psychosis, advocated by the late Finnish psychoanalyst Tähkä, who worked in the context of object

relations theory, is called *presence understanding*: the understanding represented and mediated by a holding situation [90, 91]. Tähkä described this holding as 'the primary and often only form of stage-specific understanding of the analyst functioning as a new developmental object'. In Tähkä's three-layer model of psychotic, borderline, and neurotic states, presence understanding was intended for the treatment of psychoses. Deep trauma may involve fully or partially undifferentiated states, which may be considered similar to psychotic states. For example, rape might induce out-of-body experiences, and chronic sexual abuse might induce chronic, severe dissociation.

[90]: Tähkä 1993
[91]: Tähkä 2006 DOI

Another similar Finnish approach for the treatment of psychoses is the Open Dialogue model developed by Seikkula [92, 93]. Psychosis is considered a survival strategy in severe stress [94], and its treatment is based on listening to the patient in order to explore their inner world and connect their symbolic representations with conventional representations. Recently, a body of research on the approach has been produced [94–98].

[92]: Seikkula 2002 DOI
[93]: Seikkula et al. 2003 DOI
[94]: Bergström et al. 2022 DOI

[94]: Bergström et al. 2022 DOI
[95]: Freeman et al. 2019 DOI
[96]: Rosen et al. 2016 DOI
[97]: Bergström et al. 2018 DOI
[98]: Mosse et al. 2023 DOI

The Open Dialogue model could be considered similar to a Buddhism-influenced 'Zen coaching' method developed by Landfald since 2005 [99–102]. The focus is on 'listening in the form of an open, spacious, accepting, and allowing presence, based mainly on silence, open questions, and verbal reflections, ensuring that the life process of the client has space to unfold according to its own movement and wisdom'. The coach resides in a meditative state of 'presence, awareness, mindfulness, and relaxed alertness'. The aim is to support people 'in discovering for themselves their own inner resources and answers to their own questions'. It is said to be 'defined by its attitude, not tools; difficult to learn from books; a deep personal tour; not in competition with any other approach; more like a platform; something extra; a deepening'.

[99]: Landfald 2025 URL
[100]: Liebermeister 2009 URL
[101]: Almaas 2000
[102]: Rosenberg 2015

Graceffo emphasized the centrality of kindness for clinical psychology, advocating for 'compassionate psychotherapy' [103]. Commenting on a recent discussion on medical ethics arguing that kindness 'poses significant ethical challenges due to its discretionary nature', Cheung wrote that 'kindness, a concept difficult to define, may still have a role to play in healthcare. Different treatments of kindness show us that it need not be discretionary, and that kind care can be provided to all' [104].

[103]: Graceffo 2022 DOI

[104]: Cheung 2023 DOI

Combined with extensive personal experience of the utilized substances or meditation, the above approaches would seem to provide a solid basis for the practice of psychedelic therapy facilitators. Resistance, avoidance, and 'problem-fixing mentality' could be seen as reactions to fear. The opposite of fear could be a creative, playful approach, opening up new possibilities. By providing physical and emotional safety, fear could be slightly relaxed and underlying issues could be playfully explored. By staying open and curious, one could become in touch with somatic sensations and emotions related to the root of the issue (the original, underlying trauma) without resisting the sensations. For both the facilitator and the participant, it would be essential to stay in the moment, 'in the now', focusing on what is happening in one's body right at the moment, maintaining presence or an 'essential awareness', and either accepting what is or at least accepting that one cannot accept what

is. Connecting with oneself in such a manner could lead to the dissolution of the issue.

3.3.3 Ayahuasca in bipolar disorder

Chapter 2 featured a similar case about ayahuasca in the treatment of long-term early childhood sexual abuse and bipolar disorder. It discussed in length the pioneering work of Benjamin Mudge concerning the use of ayahuasca in the treatment of bipolar disorder. He emphasized the role of trauma as the underlying reason for this disorder. He mentioned the importance of avoiding alcohol and tetrahydrocannabinol (THC), a component of cannabis. Mudge advocated for a low-dose ayahuasca maintenance strategy that is non-psychedelic, intended for balancing the mood without accessing traumatic memories, and utilized without support at home in regular, self-organized 'microceremonies', depending on subjectively perceived need.

According to Mudge, the main risk is that in bipolar people, psychedelics could induce mania. Bipolar mood swings have been said to correspond to modulations in the frequency of the phosphoinositide turnover cycle in cortical neurons [105]. Mudge concluded that the crucial determining factor with regard to the suitability of ayahuasca for people with bipolar disorder was the cooking technique, because cooking variations affected the ratios of the four major psychoactive ingredients. Also, it was essential that ayahuasca did not ferment in order to avoid alcohol forming in it, as alcohol triggered depressive episodes. With these enhancements, adverse effects could be minimized or avoided.

[105]: Saiardi et al. 2018 DOI

The interviewee had consumed ayahuasca from two different sources, with no adverse effects. She participated in ceremonies using conventional doses of ayahuasca, without the use of Mudge's 'maintenance dosing' in between.

Individuals with bipolar disorder have been excluded from most clinical trials due to concerns about manic switches or psychosis [106]. In a survey of recreational users of psychedelics with bipolar disorder, Meyer et al. assessed mood symptoms, substance use, and other mental health-related variables in the month before and three months following their most recent psychedelic experience [106]. They found a significant reduction in depressive symptoms and cannabis use, as well as an increase in the number of days without mental health symptoms. No significant changes in (hypo)manic, psychotic, or anxiety symptoms were observed, indicating psychedelics as potentially safe and effective treatment for bipolar disorder. Also Morton et al. surveyed 541 people with bipolar disorder using psilocybin. Respondents, even those who experienced adverse effects, indicated that psilocybin use was more helpful than harmful [107].

[106]: Meyer et al. 2025 DOI

[106]: Meyer et al. 2025 DOI

[107]: Morton et al. 2022 DOI

Cassidy et al. found that childhood trauma exposure did not appear to pose a risk for a poor treatment response to ayahuasca or an increased risk for adverse effects [86]. The study included participants with bipolar disorder (n=11/231, 4.8%); also in this study, they did not stand out over other participants.

[86]: Cassidy et al. 2024 DOI

3.3.4 Other research

Reviews of research on ayahuasca have been presented in chapter 2 of this compilation. More recently, dos Santos and Hallak also reviewed research on the pharmacology, safety, and therapeutic effects of ayahuasca [108]. Lopes Guerra et al. discussed the effects of ayahuasca on fear and anxiety on the receptor level [109]. Doss et al. studied the effect of ayahuasca on episodic memory [110].

[108]: Santos et al. 2024 DOI

[109]: Lopes Guerra et al. 2024 DOI

[110]: Doss et al. 2024 DOI

Iberoamerican Transpersonal Association published a special issue on ayahuasca [111]. Ayahuasca users in a survey by Bartmanski and Basson commented, for example, that ayahuasca did not discriminate and was believed to address all types of trauma, but its way of doing that seemed to be beyond human understanding [112]. It seemed to function 'layer by layer', addressing issues in the order of tolerability. It was said to effect a physical release of traumatic memories stored in the body. It appeared to use strategies personalized for each participant individually.

[111]: Asociación Transpersonal Iberoamericana 2024 URL

[112]: Bartmanski et al. 2024 URL

Scuro discussed the secularization of ayahuasca, noting that it maintained strong ties to religious institutions and indigenous organizations deeply involved in its global spread, and it had undergone less medicalization than psilocybin; on the other hand, a form of 'ayahuasca guardianship' persisted, manifested in individuals and groups actively maintaining and asserting their cultural authority over the plant's significance and associated practices [113]. Scuro et al. presented narratives of three former patients with substance use disorder treated with ayahuasca rituals in a neoshamanic center in South America [114].

[113]: Scuro 2024 DOI

[114]: Scuro et al. 2024 DOI

Healy et al. found that the use of psychedelics with therapeutic intent reduced shame and C-PTSD symptoms in adults with histories of child maltreatment, including sexual abuse [115]. Rose discussed psilocybin therapy for post-traumatic stress disorder (PTSD) caused by sexual abuse, stressing the importance of memory and self-narrative [116], presenting two cases, the first of which involved a repressed memory of one-time sexual abuse between the ages of seven and ten by a neighbor, and the second repressed memories of repeated sexual abuse at the age of five.

[115]: Healy et al. 2021 DOI

[116]: Rose 2024 DOI

3.3.5 Diagnoses considered harmful

The practice of giving people diagnoses appears to be based on the idea that there are different diseases and conditions, each of which needs to be treated differently. The idea of different diseases, in turn, originates from another convention: the perceived essentiality of symptoms and an explicit dismissal of etiology.

A focus on etiology combined with the broad-spectrum nature of psychedelics in the treatment of trauma may reverse the situation so that the existing paradigm as a whole can be questioned. Let us assume that: 1) the root cause of most or all 'psychiatric conditions' is underlying trauma; 2) all trauma can be treated mostly in the same way, with some variation in the 'setting', including timing and selection of substances. It follows that diagnoses become largely irrelevant: psychedelics may transcend diagnostics.

For psychedelic therapy, it has appeared to make little difference whether a person is suffering from, say, 'recurrent depressive disorder, current episode moderate, without psychotic symptoms', 'generalized anxiety disorder', 'alcohol dependence, current use, episodic', or 'bipolar type II disorder, currently in partial remission'. In two observed traditional ayahuasca lineages [117], labeling, categorizing, or diagnosing participants according to symptoms appeared completely absent, likely because it was considered unnecessary and counterproductive.

[117]: Turkia 2024 DOI

As an analogy with infectious disease medicine, an infectiologist would not spend their resources on an exact identification of the causative organism when it was known that a broad-spectrum antibiotic such as doxycycline could resolve the issue regardless of the exact cause. Unnecessary pondering about details would be neither feasible nor necessary for effective treatment. From the perspective of psychedelic therapy, there would thus be essentially one disease and one treatment.

Current diagnostic systems, ICD-10/11 and DSM-5, in their sole focus on symptoms and dismissal of etiology, may reflect a society-wide dismissal of trauma: a refusal to see and acknowledge it. Instead of having been raped by their father, the patient had 'bipolar disorder'. This would imply a similarity between the practices of the LDS church and psychiatry: both appeared to attempt to hide what actually happened. Whereas LDS did this through explicit denial, psychiatry did it through not listening and administering antipsychotic medication instead, finishing up with labeling the issue to reflect symptoms only.

Complementing the symptom-oriented diagnostics, psychopharmaceuticals aim at suppressing symptoms. Also, the prohibition of psychedelic therapies could be interpreted as a refusal to acknowledge what actually happened and happens.

3.3.6 On the history and nature of the religious community

An overall impression, based on the sources presented in the introduction (e.g.,[43–49]), was that the group was founded on spiritual visions of a teenager in the folk magic context of early America. The founder later wrote an alluring book that attracted people to him, and he became a charismatic leader. The main concern was the Second Coming of Jesus Christ and the preparation for it. It was said to be upcoming in a few years at most, and to prepare for it, it was necessary to act fast and in a very organized manner.

[43]: Benson et al. 2011
[44]: Decker et al. 1994
[45]: Harris 2024 URL
[46]: Harris 2024 URL
[47]: Harris 2024 URL
[48]: Harris 2024 URL
[49]: Harris 2024 URL

However, not all were convinced, which led to conflicts with others who disapproved of his ideas and views. A particular sore point was polygamy. Reportedly, the founder had 30–40 wives, at least one of whom was underage [44]. Many of these wives were already married to other members of the group.

[44]: Decker et al. 1994

Conflicts with outsiders escalated into violence. Initially, the founder advocated for non-violence, but as the persecution continued, the group resorted to violence. Eventually, they destroyed a printing press and newspaper that had criticized the founder. He was imprisoned and killed by a mob while awaiting trial in jail.

His followers left the area and continuously moved further west due to continuing persecution. At one point, there was even a command for Mormons to be 'exterminated or driven from the states'. The conflicts led to a military confrontation between the Mormons and the federal government. Eventually, the group settled in Utah.

This history likely contributed to a policy of secrecy towards outsiders but also towards the members of the group by the leaders. For the followers, the idea of someone being persecuted for his beliefs in an unjustified manner may have resonated especially well. The religious practices involved secret rituals, suggestive techniques, and methods possibly inducing altered states such as fasting [118].

[118]: Johnson 1964

As the primary focus has been to prepare for a period of chaos preceding the Second Coming, church leaders have accumulated vast resources, estimated to be at least USD 100 billion in stocks, properties, and farmland [119, 120]. Members are expected to pay 10% of their income to the church, which creates a strong incentive for the recruitment of new members.

[119]: Fox 2023 URL
[120]: Prince 2023 URL

The church has also created the largest genealogical record in the world, with 2 billion names, stored in a climate-controlled repository designed to survive a nuclear impact [121]. Overall, the group could be characterized as a distinct type of 'preppers'. Their ultimate goal has been described as establishing a theocratic world fully controlled by the church, which some have referred to as 'totalitarian theocratic communism' [44]. In Utah, the church's influence extends beyond that of a typical religious organization, shaping legislation, economy, and public policy in ways that resemble a governing entity. As a result, it might be described as 'a state within a state'.

[121]: Public Broadcasting Service 2007 URL

[44]: Decker et al. 1994

According to Decker and Hunt [44], 'living oracles', i.e., the current leadership of the church, possess the final authority and may override written doctrines including the Bible and the Book of Mormon, and it is considered acceptable that doctrines may contradict each other. It thus appeared to follow that the knowledge of actual practices may be largely unavailable, geographically or hierarchically inconsistent, or inconsistently applied.

[44]: Decker et al. 1994

The tight-knit nature of the community, its power hierarchy, and the utmost demand of obedience (according to a former LDS president, 'If you are told by your leader to do a thing, do it. None of your business whether it is right or wrong.' [44]) may introduce military-like features into the community. Harris, a former member, stated: 'I'd always been in a setting of pressure, whether it was my home as a kid or my mission or Brigham Young University. In other words, there was always an incentive to believe. So I'd never really been in a situation where I could truly ask this question and not feel like there was some price to pay if I decided I didn't believe. I had anger towards the systems that made me feel like obedience was the most important thing ... The culture is not one of discourse and debate. It's one of obedience, obedience, obedience, obedience. Obedience is a hallmark belief and tenet of the LDS experience, and as a member, you feel it' [49]. He further described: 'What's complicated about this is I can't help but feel a deep sense of sadness for having lost my belief in [the founder's] story. I can't explain it, but these stories are incredibly comforting when you believe in them. They're motivating. These creative stories, unlike any other belief system,

[44]: Decker et al. 1994

[49]: Harris 2024 URL

can be really beautiful. And that is a paradox for which there's really no resolution' [45].

[45]: Harris 2024 URL

3.4 Conclusions

The fact that such abuse was possible appeared to indicate the existence of an unrecognized and unresolved community and society-level trauma. Having been molested and likely raped by her father for at least a decade in her childhood, as well as later raped by other men, caused sensory numbing, physical injury, and emotional injury, misleadingly labeled as 'bipolar disorder'. Psychiatric inpatient treatment further injured her both emotionally and physically. Conventional psychotherapy and psilocybin provided some but insufficient benefit. Participation in underground neoshamanic ayahuasca ceremonies gradually began resolving the consequences of abuse; the process was still ongoing. The case exemplified resilience and post-traumatic growth.

The case may support the lesser role of substances mainly targeting the 5-HT_{2A} receptor and the more prominent role of harmala alkaloids, as well as the essential role of the ceremony context and possibly physical resonance phenomena in the resolution of deep trauma.

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Indigenous ayahuasca ceremonies in the European context: structures, purposes, concepts

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Psychedelics are currently being studied intensively for the treatment of various psychiatric disorders. Ayahuasca, a plant-based extract originating from the Amazonian area, is traditionally consumed in ritualistic group events. The related indigenous traditions date back hundreds of years and have amassed vast amounts of knowledge on the therapeutic use of psychedelic and non-psychedelic plant-based substances.

These traditions require a prospective ceremony facilitator to undergo years of intensive training to acquire knowledge, mental power or self-confidence, stability, sensitivity, intuitive treatment outcome prediction skills, musical skills, and sufficient physical strength. These qualities of a facilitator, in the presence of integrity and love, largely determine treatment outcomes.

In Europe, predominantly in the first decade of the 2000s and in the early 2010s, some individuals began building connections with diverse indigenous groups and syncretic churches of the Amazonia in an attempt to find cures for their treatment-resistant psychiatric conditions. Small circles of other patients in need of similar treatment formed around them. This led to the formation of decentralized, diverse local ceremony cultures that either followed the principles of the traditional lineages of their origin or synthesized various influences.

These unofficial ceremony contexts appeared to complement official healthcare systems, offering efficient methods unavailable in the medical context and correcting the consequences of medical malpractice and neglect. These ceremony contexts appeared highly communal, were largely based on volunteering, and contained mechanisms for self-correcting possible emerging issues. They seemed to function as systems for collecting, preserving, storing, and distributing knowledge of psychedelic therapy methods; in other words, systems for knowledge base building and innovation.

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4.1 Introduction

Based on ethnographic observation of a small, selected subset of European ceremony contexts between 2017 and 2022, this study provides perspective on the societal role of psychedelic ceremonies utilizing ayahuasca in the care of treatment-resistant psychiatric conditions. It also aims at explaining some of the concepts and practices of the described contexts.

The use of Amazonian psychedelic plant-based brew ayahuasca has spread internationally in the 2000s [1–8]. Its effects are mostly due to the monoamine oxidase inhibitors (MAOIs) harmine, harmaline, and tetrahydroharmine, as well as N,N-dimethyltryptamine (DMT). An important mechanism of action may be anti-inflammatory. Flanagan and Nichols noted that psychedelics regulate inflammatory pathways via novel mechanisms, producing potent anti-inflammatory effects [9].

[1]: Labate et al. 2011 URL
[2]: Labate et al. 2013 DOI
[3]: Frecska et al. 2016 DOI
[4]: Santos et al. 2016 DOI
[5]: Santos et al. 2017 DOI
[6]: Palhano-Fontes et al. 2018 DOI
[7]: Hamill et al. 2019 DOI
[8]: Wolff 2020 DOI
[9]: Flanagan et al. 2018 DOI

Ayahuasca is typically used in ritualistic group settings in which trained psychedelic facilitators direct participants' experiences by singing. In European societies, ceremonies typically happen overnight during weekends, beginning on Friday evening and ending on Sunday morning. Participants usually present with treatment-resistant psychiatric conditions such as treatment-resistant depression, post-traumatic stress disorder (PTSD), and complex post-traumatic stress disorder (C-PTSD), and have exhausted other, official options for treatment.

Kaasik et al. analyzed the chemical composition of traditional and analog ayahuasca [10]. James et al. recently provided a narrative review about the current status of medical ayahuasca research [11]. Group therapy and communal aspects were discussed by Hartogsohn [12, 13], Gonzalez et al. [14], and Meckel Fischer [15, 16]. Aspects related to trauma and dissociation were discussed by van der Hart [17]. General aspects of the use of psychedelics in psychotherapy were discussed in a recent book edited by Read et al. [18].

O'Shaughnessy and Berlowitz studied the 'plant diet' practices of Peruvian Amazonian medicine [19]. Stiperski Matoc et al. described ceremony practices in Peruvian Amazon [20]. Callon et al. discussed ayahuasca ceremony leaders' perspectives on preparation and integration practices for participants [21]. Kettner et al. noted that intersubjective experience during psychedelic group sessions predicted enduring changes in psychological wellbeing and social connectedness [22]. Pontual et al. studied the importance of non-pharmacological factors such as setting to induce or promote mystical experiences or challenging experiences among ayahuasca users in neoshamanic and syncretic church contexts in the Netherlands and Brazil [23]. Durante et al. described self-reported risk factors and adverse effects of ayahuasca use in a religious context [24]. Kaasik described ayahuasca ceremony culture in Estonia [25]. Wolff and Passie presented an online survey (n=40) of ayahuasca drinkers [26]. Ambrosini et al. noted that there were no differences in ceremonial setting between Colombia and Italy [27]. Bathje et al. presented a qualitative study of intention and impact of ayahuasca use by Westerners [28]. Ona et al. described the essential features and benefits of traditional practices and the importance of incorporating them into a 'Global Mental Health' movement [29].

Fotiou warned against idealizing South American indigenous tribes [30], but also argued for the abandonment of the privileged position of the scientific paradigm, suggesting that there was a need for a new paradigm that acknowledged the validity of indigenous worldviews as equal partners to scientific inquiry [31].

Turkia previously presented a detailed retrospective case study about ceremonial ayahuasca in the treatment of long-term early childhood sexual abuse and bipolar disorder with psychotic features, noting that it was a feasible and beneficial approach in the discussed case (chapter 2 of this book; [32]).

Many kinds of ayahuasca ceremony contexts of varying quality exist. Perhaps the most organized are the ones related to syncretic churches such as Santo Daime [12]. Their approaches are quite demanding of the participants, requiring them to be able to sit up and sing pre-rehearsed songs for 5-6 hours (occasionally for 8-10 hours, with an one-hour break

[10]: Kaasik et al. 2020 DOI
[11]: James et al. 2022 DOI
[12]: Hartogsohn 2021 DOI
[13]: Hartogsohn 2022 DOI
[14]: Gonzalez et al. 2021 DOI
[15]: Meckel Fischer 2015
[16]: Sessa et al. 2015 DOI
[17]: Hart 2021 DOI
[18]: Read et al. 2021
[19]: O'Shaughnessy et al. 2021 DOI
[20]: Stiperski Matoc et al. 2023 DOI
[21]: Callon et al. 2021 DOI
[22]: Kettner et al. 2021 DOI
[23]: Deus Pontual et al. 2022 DOI
[24]: Durante et al. 2021 DOI
[25]: Kaasik 2022 URL
[26]: Wolff et al. 2018 DOI
[27]: Ambrosini et al. 2023 DOI
[28]: Bathje et al. 2021 DOI
[29]: Ona et al. 2021 DOI
[30]: Fotiou 2016 DOI
[31]: Fotiou 2019 DOI
[32]: Turkia 2023 DOI
[12]: Hartogsohn 2021 DOI

in between). In Europe, these ceremonies usually include a 'healing space' for people who need to lie down. Regardless, these religious practices are not intended for and largely unsuitable for people suffering from serious conditions and exhaustion who lack the energy and skills to participate in the accepted manner.

Kaasik and Kreegipuu presented a case-control study with 30 participants and 30 controls [33]. The interviewed participants had participated in neoshamanic contexts, Santo Daime, indigenous contexts, or consumed ayahuasca on their own. Their level of experience varied from facilitators to first-timers. They perceived their use of ayahuasca as a reasonably safe and self-limiting form of spiritual practice, with mostly favorable outcomes for their health and lives. Depression, anxiety, social phobia, and sleep disturbances were statistically significantly lower in the participants.

[33]: Kaasik et al. 2020 DOI

On the other end are ceremonies organized by people without any formal training and with little experience about the substance. In addition, some of these kind of organizations have appeared to be largely directed by business interests. While psychedelic experiences in such contexts may still be beneficial for many, quite often they are not.

The contexts described in this study adhered strictly to Amazonian indigenous lineages and contained no neoshamanic elements. The number of observed individual participants was difficult to estimate in retrospect, but likely between 200 and 300. The contexts described in this study may be considered high-end, and as such possibly untypical and unrepresentative of the field as a whole. Also the set of participants was likely untypical. The perspective is obviously narrow and somewhat subjective. The intention behind this study was to describe well-functioning arrangements, which does not mean that they were perfect. Regardless, they represented decades or centuries of knowledge acquired on the subject.

4.1.1 Materials, methods, and limitations

This research was based on unstructured ethnographic observation of six different ceremony organizing groups operating in Europe during a period of five years between 2017 and 2022. Observations included informal discussions with organizers, guides, and attendees. There was no formal data collection, systematic documentation, or statistical analysis. Data collection was predominantly memory-based. Where materials existed, due to the protection of anonymity, they have been destroyed. Comparisons between ceremony contexts and conventional psychiatry and psychotherapy were based on the author's thirty-year informal observation of various psychotherapeutic and psychiatric methods and organizations.

The observed contexts feature a very small subset of the European ayahuasca ceremony culture as a whole. They may also differ significantly from most contexts in that they were led by well-trained indigenous guides or non-indigenous guides trained directly by the indigenous. The observation period, approximately five years between 2017 and 2022, ended 1.5 years before the writing of this study. The situation may thus have changed significantly after that.

Concerning treatment outcomes, the unsystematic, memory-based nature of data collection did not allow for a detailed description of outcomes. Some summarizing observations may be provided. Estimations of outcomes were based on personal discussions, on statements shared in post-ceremony 'sharing circles', and on visual and intuitive estimation based on experience of typical trajectories of outcomes when left untreated or treated with conventional methods, with individual psychedelic therapy utilizing synthetic psychedelics, and with ceremonial ayahuasca.

4.2 Organizational structures

Twelve two-night ceremonies and one single-night ceremony (25 nights) in four different countries were included in the observation. A ceremony context typically consisted of: 1) invited visiting guides who were either indigenous or had undergone the same training, with one exception; 2) local non-indigenous organizers, who often were also apprentices to the guides; 3) local assistants or 'helpers'; and 4) participants.

Eleven ceremonies adhered to a specific Amazonian indigenous lineage (L1). Four ceremonies adhered to another Amazonian indigenous lineage (L2). However, cooperation and alliances between traditions were common. In three L1 ceremonies, a guide from South American syncretic ayahuasca church S1 was present. In two L1 ceremonies, an assisting guide from traditional lineage L3 was present. In one L2 ceremony, an assisting guide from another South American syncretic ayahuasca church, S2, was present. Some alliances were transient, while others were permanent. If cooperation between guides was not harmonious or if friction among guides or between guides and organizers emerged, alliances were broken up. All in all, the sample included twelve guides working with ayahuasca.

Two L1 ceremonies were organized by two different women working on their own. All other ceremonies were organized by male-female couples. The organizers were in their late thirties or early forties, except for one in their early sixties. Approximately a third of the organizers had university degrees. One organizer traveled between countries, while the others were specific to one country. However, many organizers were also considered apprentices and often visited ceremonies in other countries in that role.

Guides were responsible for ceremony practices and treatment. The number of visiting guides varied between one and six, with an average of two and a median of two. In addition to guides, one to three apprentices were usually present. Apprentices often functioned as local organizers who were responsible for the space, food, accommodation, and transport. They were assisted by two to six support persons, or 'helpers'. The role of helpers was to assist participants in practical issues during the ceremony (e.g., going to the toilet, providing support in case of difficult emotional experiences, etc.), and to keep the space clean and organized.

With regard to decisions on what and how to do in the ceremony, the structure was highly hierarchical, with experienced guides on top, apprentices following their instructions, and helpers following the instructions of guides and apprentices. During the ceremony, interactions between

participants were to be avoided completely, and all communication was conducted through helpers and guides.

The education required for leading ayahuasca group sessions took several years and was typically harsh, perhaps more closely resembling special forces military training than conventional medical education, at least in the case of the majority of the observed guides. It involved multiple 'plant diets' of varying durations with various plants under nearly full social isolation and malnutrition. The duration of a single diet varied from a few weeks up to a year. In some cases, guides were required to repeat a one-year diet twice before their development was considered sufficient.

The essential information about the properties of the ingested plants and plant brews, including ayahuasca, was acquired through an embodied method. The effects produced by the medicinal plant extracts were learned by feeling them in one's own body. The diets typically forced a prospective guide to face their unresolved emotional and somatic issues, a process that could be experienced as unbearably painful and exhausting, approaching a near-death experience for some.

The embodied method aimed at sensitizing the person to and familiarizing the person with the somatic and mental effects of the plants, building an intuitive understanding of their effects and applicability—a practice or skill perhaps unfamiliar to European medicine. This skill appeared to be largely based on reflexive, immediate pattern matching between one's own embodied experiences and observations of others' somatic and mental states. As a result, a guide was, without much conscious effort, typically able to intuitively estimate the suitable method and dosing for each participant.

The number of attendees was 30 on average and typically varied between 20 and 40. The average age was around 30 years, and there were approximately equal numbers of males and females. In two ceremonies, there were 15 and 50 attendees. The ratio of guides and helpers versus attendees typically varied between one to three and one to five. Most attendees were local, but some ceremonies included attendees from other European countries, occasionally also from the United States or the Middle East. People traveled abroad to join a ceremony led by specific guides, either in order to continue their process with the same guide or to meet a guide that had been recommended by people they knew and trusted. Due to relatively short distances, traveling to another country was common in Central Europe.

The decision on who could attend was based on a decentralized, multistep, bidirectional process. As the existence of these contexts was not public information and could not be found with conventional methods, participants were primarily selected by previous participants. Attendance was based on experienced or expected benefit.

A common observation is that people with similar qualities, in this case, similar psychological issues, tend to intuitively cluster or attract each other in an attempt to resolve their issues together. If one of them makes progress with some method, the others also adopt and test it. Ayahuasca use thus tended to spread circularly from a starting point, first to the

acquaintances of the organizer, and then further on to the acquaintances of the first-order participants.

At each point of connection, there were multiple considerations to take into account. After experiencing one or more ceremonies, a participant usually acquired an intuition about suitable uses and indications, as well as limitations and possible problems. In deciding who to tell about the method, participants usually took great care in estimating who could benefit and who did not pose a risk to the community. Invitations thus tended to be on the very conservative side, and the communities stayed small and relatively closed.

The observed high efficacy was largely based on this kind of selection: participants who had benefited invited others who were similar to them and could thus also be expected to benefit with high probability. Typically, invitations were considered solely for people with serious issues, with no other treatment options available. When there was too much dissimilarity or distrust, information about these contexts was not made available. Thus, evaluations of suitability were typically made before releasing information on the possible availability of the methods.

The pre-selection by participants was supplemented by a discussion with the organizer. If the organizer considered a prospective attendee suitable with respect to motives, goals, intentions, personality, issues, and counterindications (e.g., SSRI use), they were allowed to participate and were delivered more detailed written instructions on how to prepare and what to take into account.

Another aspect was the selection performed by prospective participants themselves. As many had extensive experience with treatments that had not helped and people who could not help, they appeared skilled in excluding methods and people with characteristics associated with previous unhelpful experiences and could thus decline to participate at any phase of the process.

The events happened in low-cost venues, sometimes partly outdoors, with accommodation on mattresses in shared halls or rooms, in the ceremony space, and occasionally in tents, with participants bringing their own bedsheets or sleeping bags. In many cases, the ceremony locations were quite uncomfortable due to low temperatures at night.

The lineages emphasized the importance of singing in guiding participants' experiences (see, e.g., [34, 35]). The healing effect was thought to reside in specific affects, tones, or vibrations that needed to be matched with the participants' needs and changed dynamically in response to changes in group dynamics, in a similar way to a DJ matching the music in a club to the participants' ages, tastes, expectations, and moods. This skill of matching was acquired as part of the extensive education period. The guides continuously observed the group as a whole and on a per-individual basis, adjusting the environment as needed.

The maintenance of a proper, efficacy- and safety-ensuring group dynamic was thus predominantly the result of singing. The observed musical skills of some of the guides appeared exquisite, with an unusual prowess to project, for example, an image of mental strength to recipients, which the recipients could then identify with in order to overcome difficult emotions. As many of the states experienced in ayahuasca sessions were

[34]: Mori 2009 URL
[35]: Beyer 2009 URL

regressive in nature, the role of the guide resembled the role of a mother or a father singing to a child with similar intentions (e.g. calming, uplifting, or energizing).

Before the ceremonies, there was a short presentation covering a brief history of the tradition, principles of the work, properties of the medicines, and instructions on practical issues such as food and accommodation, as well as more detailed instructions about behavior during the session. Usually there was also a 'sharing circle' with a duration of one to five hours, with an average of two hours. During sharing, each participant could describe their background, expectations, and intentions. The guides could provide personalized feedback and instructions. Participants were not allowed to comment on or react to each other's descriptions. The guides estimated the participants' situations, in addition to conventional methods, by careful listening to the affect in participants' voices.

Typically, a ceremony was initiated after sunset (around 10 p.m.) and lasted until the morning (around 8 a.m.). Participants could lie down on yoga mats or sit up according to their preferences. They were instructed to turn inward, avoid making noises, and avoid all interaction except when and where explicitly allowed. They were especially warned against 'helping' other participants. The rationale for this was that everyone needed to go through their own individual process, and the participants were not competent to guide other participants; that was the role of the guides, and as instructed by them, the role of the designated helpers. Also, the need to 'help' was said to typically originate from selfish intentions such as feeling helpless or becoming scared; the participants were instructed to process these feelings in themselves.

After a tradition-specific opening ritual, medicine was administered in the front of the room, where the guides, apprentices and helpers were sitting. Participants approached the guides and were administered an initial dose, which was personally adjusted according to the level of experience and the needs and intentions of the participant. Dosing was thus based on intuitive experience and varied between psycholytic ('psychotropic' combined with 'analytic'; approximately a half or a third of a 'regular dose'; see [36]) and 'regular'. High dosing was available at one ceremony for selected experienced participants with high tolerance for the effects.

[36]: Passie et al. 2022 DOI

Before the ceremony, the guides had tested each batch of ayahyasca on themselves. In the ceremony, they consumed psycholytic doses of it. This practice was also recommended by Meckel Fischer who, after leading group sessions both with and without consuming psychedelics herself, concluded that without them she was unable to properly observe the participants' states and direct them [15]. Another way to express the issue is that the situation would revert the balance of power: due to sensitization by the psychedelic, the participants' observational capabilities would exceed the capabilities of the guide.

[15]: Meckel Fischer 2015

After a brief period of silent meditation, the singing began. Traditionally, the singing or chanting had not been augmented by musical instruments, but recently the instruments had become an integral part of the ceremonies.

Reactions to the substance typically emerged after 30 to 120 minutes. They were individual, depending on participants' life histories (i.e., the type and degree of traumatization). Some participants could see psychedelic visions, while others had no visions but embodied experiences instead. As an example, one type of effect involved shaking of the body that could become synchronized with the music, with the participant feeling as if the body was able to predict changes in the music, although the music was previously unknown. Some participants experienced vomiting. Ayahuasca-induced states were said to be externally controllable by guides. An overwhelming experience (e.g., as a result of excessive dosing) could be toned down by the guides [35].

[35]: Beyer 2009 URL

Concerning visions, according to the lineages, in order to ascertain the truthfulness or information value of a vision, one needed to be mentally stable. As most participants were not yet stable, the best course of action was to ignore most of these visions; the essential information was instead better searched for in the somatic sensations of one's body. In the Zen Buddhist tradition, visions were considered 'makyō': the realm of demons, a self-delusion resulting from clinging to an experience and making a conceptual 'nest' out of it for oneself.

Approximately two hours after the first administration of ayahuasca, the participants could approach the guides for, within reason, additional doses as they wished until approximately 1.5 hours before the end of the ceremony. Tobacco snuff was also offered to those who requested it.

The group setting could produce interpersonal experiences of group cohesion and belonging, which could be essential in healing interpersonal trauma. Such effects would likely have been unachievable in individual therapy. One ceremony held outdoors around an open fire in a trance-like state generated the archetypal impression of being a part of a community thousands of years ago.

In the morning, at the end of the session, there was typically a sharing circle with a duration of one to two hours. Concerning the consumed substances, no adverse events related to the safety or quality of the substances were observed. This observation aligned with the published research indicating no safety issues in indigenous brews [10].

[10]: Kaasik et al. 2020 DOI

4.3 On the background of the guides

Concerning the background of the guides, some tribes had suffered from rather extreme trauma, both due to external factors related to colonialism and slavery-like conditions imposed by rubber barons as well as intrinsic factors such as difficult environmental conditions, poverty, and a high prevalence of domestic and sexual violence. In some cases, slavery-like conditions persisted up to the 1980s. Some other tribes had encountered less trauma. The tribes with more extreme trauma histories appeared more accustomed to treating more difficult conditions. In some cases, the preservation of psychedelic therapy practices had depended on two to three people who had stayed undercover for decades and transferred their knowledge to apprentices during the last decade of their lives.

Travel costs from remote Amazonian areas are typically very high. In contrast to traveling from some of the large South American cities, from

which one can reach Europe in a day, reaching those cities from remote areas may require several days: a day or two on a river by boat, travel by bus or car, and two intra-national or intra-continental flights. Also, travel costs inside Europe quickly accumulate.

Financially, the helpers and apprentices appeared to be unpaid in most cases. Typically, the events appeared to have been non-profit, occasionally at a loss. In one case, due to a low number of attendees, the organizers worked for several weeks without compensation, which endangered the continuity of the operation. Often, attendees were asked for various favors, such as bringing the guides and the team somewhere with the attendees' cars. Between ceremonies, guides and teams were accommodated at local organizers' or helpers' homes.

Typical operations appeared to happen at a subsistence level. Regardless, the visiting guides had usually been promised a certain amount. The income was typically used to fund the villages of the guides, for example, by buying boats for river travel, building community spaces, repairing flood damage, covering emergency medical costs, or buying drinking water filtration systems. All in all, the operations appeared to be best described as development aid.

In exchange, the locals could communicate directly with and learn from guides who had years or decades of practical experience in psychedelic therapy. This verbal and undocumented information remains generally unavailable. However, due to language barriers, cultural differences, and differences in knowledge bases and conceptual frameworks, usually only small fragments of knowledge could be received at a time. Building knowledge bases thus required long-term commitment.

The approach of the guides appeared to be to show, not tell. The general assumption appeared to be that relevant information could only be learned first-hand through personal embodied experience in ceremonies. In the European vocabulary, this method might have been called seeing for oneself; in the Amazonian vocabulary, one might have said that the medicine itself taught one what one needed to know.

The function of the ceremonies could thus be described as development aid being traded for knowledge and healing that were unattainable by local methods. In other words, the operations could be described as an exchange of technologies and wealth. The European societies lacked knowledge of technologies for healing with psychedelics, whereas the Amazonian indigenous people lacked technologies for producing clean water (filtration systems), electricity (solar power), protein (e.g., fish cultivation ponds in villages), communication (mobile phones), and education (books, etc.).

This technological trade had emerged because it appeared beneficial for both parties. Lack of resources, however, hindered this knowledge transfer. With better resources, these opportunities could have been used much more productively. For example, the received information typically remained verbal, i.e., undocumented, most of it only known by the apprentices. Proper documentation would have required significantly more time and personnel resources. Learning was bilateral, though: the indigenous people learned about European behaviors, habits, and practices (anecdotally, for example, how to use a shower).

Observing expert guides in operation appeared invaluable for understanding the possibilities of these forms of therapy. In contrast to the current state of medical research, which still largely deals with trying to prove 'efficacy' within the paradigm of evidence-based medicine with statistical generalizations lacking context, participants could observe firsthand an experienced guide conducting a ceremony for a group of thirty people who had, for decades, suffered from treatment-resistant depression, PTSD, or C-PTSD, including a few attendees with a history of transient psychotic disorders, with many of the issues ending up fully or partially resolved in one weekend.

A difficult environment placed selection pressure on people and technologies. In order to ensure survival, inefficacious methods needed to be swiftly discarded. The Amazonian jungle featured a difficult environment due to natural conditions (heat, humidity, insects, predators, protozoa, etc.), a history of tribal wars, a history of slavery in rubber plantations, a high prevalence of domestic, sexual, and other interpersonal violence in some tribes, and more recently, the consequences of climate change (severe flooding), as well as pollution of rivers caused by illegal mining, the decline of animal populations for hunting, and large-scale loss of forest cover due to agriculture and fires. Some of the involved tribes still partially relied on a hunter-gatherer lifestyle. The little electricity they had was produced by a few gasoline generators or solar panels, and they resided out of reach of modern telecommunications networks.

4.4 Sexual misconduct

Therapeutic and organizational incompetence or malpractice may exist in official healthcare contexts as well as in unofficial contexts, including ayahuasca ceremonies. Linden has provided definitions for various types of unwanted effects of psychotherapy [37]. Unwanted effects include adverse treatment reactions caused by correct practice, malpractice reactions caused by incorrect practice, and treatment non-response, which can be a result of either correct or incorrect practice. Malpractice reactions are the direct fault of the therapist, who can be held accountable. The deterioration of illness may or may not be connected to treatment.

[37]: Linden 2012 DOI

Lindgren and Rozental have described general issues in psychotherapy, including a lack of continuity of care (e.g., frequent cancellations and rescheduling), a lack of progression in the administration and implementation of care, a lack of patient involvement in treatment choice and planning, compromised clinical routines (e.g., errors in patient records and diagnostics), and a lack of transparency regarding limitations of competence [38]. Issues regarding therapists' attitudes and behavior included role confusion with transgressive behavior (e.g., self-centeredness, sexual invitations), negative attitude and communication, lack of empathy, insincere or disrespectful advice, and a lack of collaborative stance.

[38]: Lindgren et al. 2021 DOI

Overt malpractice such as intentional sexual abuse in the psychedelic context has appeared common in areas of 'ayahuasca tourism' in South America where ceremonies are led by non-indigenous males [39, 40], and to some degree in the United States where MDMA therapy is common [41–44]. In European contexts, guidelines have been written to diminish

[39]: Monroe 2021 URL
[40]: Maybin et al. 2020 URL
[41]: Goldhill 2020 URL
[42]: Hall 2021 URL
[43]: MacBride 2021 URL
[44]: Bourzat et al. 2019

the risk of abuse, which in the US has been mostly associated with MDMA due to its pharmacological profile and widespread use [45].

[45]: Peluso et al. 2020 DOI

Some of the South American indigenous female guides told about having personally treated significant numbers of female victims of such male abuse in their own countries. The dividing line appeared to be whether the ceremony contexts were indigenous or not. In the observed two indigenous traditions, due to the concept of the sacredness of the medicine and the ceremony context, sexuality was strictly out of bounds.

According to the author's observations, sexual misconduct in the ceremony contexts following traditional lineages was nonexistent. The traditions recommended or demanded sexual abstinence several days before and after ceremonies. All sexual activity during ceremonies was forbidden. Absolute sexual abstinence was also required during plant diets, which were part of the training of guides and apprentices.

In addition, all of these ceremonies were organized fully or partially by women; the visiting guides or apprentices always included women; and most helpers were women. Most of these women had been either personally subjected to some degree of sexual abuse or sexual violence, or had otherwise witnessed it firsthand. In one case where such experience was missing, the female organizer appeared to overemphasize these risks, leading to an underemphasis of other risks concerning the well-being of male participants abused and traumatized by women.

4.5 Perspectives on non-sexual malpractice and adverse events

The risks and observations of non-sexual malpractice must be evaluated, taking into account the context in which the work was performed. First, the participant population consisted almost solely of participants with treatment-resistant conditions that official healthcare systems had given up on or who had been unable to obtain any feasible treatment at all. Many of the participants had suffered from severe medical malpractice in the field of psychiatry or psychotherapy. This population was extremely sensitive to re-traumatization by any kind of treatment, even by many kinds of everyday social interactions. Second, in comparison to the highly compensated psychiatric and psychotherapeutic context, the work was performed with exceptionally low resources, being either volunteer-based or otherwise practically unpaid. Many of the guides resided below poverty levels or at subsistence levels in their own countries. Third, the evaluation must take into account the personal and tribal histories of the guides. Fourth, positive outcomes must also be taken into account.

All events that could be considered malpractice concerned unintentional re-traumatization. One case involved a beginning local female organizer/apprentice with high standards and expectations who had recently introduced a multi-step application process for prospecting ceremony participants. The process involved approximately a hundred pages of written materials, an application form, and an audio or video call interview. Only people with a 'serious intent to work on their issues' were selected. Persons with psychotic disorders and other conditions deemed 'too serious' were excluded. Safety and trauma-informedness

were emphasized. Three visiting expert psychedelic guides represented over one hundred years of experience in the therapeutic use of various plant medicines. Six helpers were also present. There were approximately thirty participants, giving a ratio of one team member per three participants. Two of the participants were first-timers, while most others had between one and five years of ceremony experience. The quality of the location was above average.

At the end of two flawless ceremonies, assumedly out of personal stress and frustration, the local organizer announced that unspecified participants had not sufficiently 'respected the medicine'. They had assumedly taken too much of it (to avoid dissociation, the written materials had recommended smaller amounts). They had 'kept coming back to ceremonies for more and more medicine' instead of doing their 'integration work' at home between ceremonies, and would therefore not be invited to future ceremonies. These unexpected and unspecified allegations were experienced as re-traumatizing by some participants. Such incidents are typical in the official healthcare system: almost by definition, treatment-resistant patients have been subjected to numerous similar events. In contrast, the indigenous never commented on anyone's progress or lack thereof.

A visiting male guide attempted to remedy the situation, both immediately at the ceremony and a week later in a personal discussion with one participant. There was also a pre-specified post-event protocol that involved an online video conference 1.5 weeks after the ceremony (approximately half of the attendees were present), as well as an option for on-demand personal appointments with the organizers and/or helpers. Some helpers also spontaneously contacted a few attendees. In addition, some attendees informally discussed the issue among themselves. As a result of this process, the organizers acknowledged the issue, which had mostly affected two participants with previous experience of malpractice in various settings. It should be emphasized that in the official healthcare systems, such re-traumatizing events have appeared to occur daily, yet they are rarely acknowledged as such, even less discussed or resolved.

In this case, the personal stress appeared to have been caused by the scarce availability of the medicine, which in turn was caused by current legislation. In an attempt to maximize the utility of available medicine for attendees, the organizer resorted to increased control, which proved counterproductive with respect to outcomes. The adverse effects were thus a result of a mindset emphasizing productivity and control in the context of outdated legalization concerning psychedelics and psychedelic therapies. Had there been no such legal pressure, the issue might not have emerged.

Regardless, the organizer's inability to contain the stress appeared due to relative inexperience and insufficient stability. Excessive standards led to the phenomenon of 'perfection being the enemy of good', i.e., unintentional self-sabotage. The example illustrated the harmful effects of formalizing informal processes. An attempt to copy official procedures also introduced their counterproductive, bureaucratic, and re-traumatizing elements into the unofficial context. One of the visiting guides later pointed to the counterproductive nature of excessive control.

Another, earlier ceremony by the same organizer also appeared unsatisfactory. It was led by a non-indigenous male guide of mixed background,

assisted by a younger indigenous male guide representing lineage L2. In this case, the issue was caused by the instability and cannabis use of the non-indigenous guide. He was not reinstated. Later, in another country and context, he was sanctioned and excluded from the community. In lineage L2, cannabis appeared to be allowed but not openly used in the other observed ceremonies. In lineage L1, cannabis use was prohibited. The viability of the latter policy seemed to be more appropriate.

In one case, although it caused no issues, a guide appeared to have lost the fine edge of his focus; it was suspected that he had consumed cannabis. The problem appeared to be the sedative, relaxing effect of cannabis, which counteracts the 'visionary' effect of ayahuasca. Cannabis likely distracts a participant from facing the issues they should be facing in a ceremony, making attendance pointless. In one ceremony, a participant facing difficult emotions took a break, secretly consumed cannabis to sedate them, and returned to the ceremony in a counterproductive, dissociated state, unfeasible for processing trauma.

A second case involved a non-indigenous female guide trained by an experienced indigenous guide. She was exceptionally talented, often producing outcomes one could not have believed, had one not witnessed them firsthand. Regardless, she had a long personal history of abandonment and neglect, and despite years of training and years of experience, she had not resolved all of her personal trauma. This led to vulnerability to trauma triggers, fluctuating energy levels, and instability. When tired or exhausted, she could suddenly become angry for little reason, which was problematic for people previously traumatized by angry people in authority positions. Although her intent was to clearly point out the issues that participants needed to work on, her manner was often harsh and judgmental. The issue appeared to be related to an imbalance between the rather excessive demands of the work and getting enough recognition and compensation for it.

Due to her personal characteristics, she often attracted an extraordinarily sick population, to the extent that whereas in others' ceremonies there were a handful of attendees with difficult conditions and twenty or thirty with milder conditions, in her ceremonies the ratio was routinely reversed. Regardless, the ceremonies were generally very successful. Concerning her frustration tolerance, some community members tried to advise her, but she refused to listen. Eventually, one very difficult-to-treat, easily re-traumatized participant was severely re-traumatized by her. The organizers and other guides gradually stopped cooperating with her. She experienced this as an abandonment, which, together with a series of other abandonments, severely re-traumatized her once again. The consequences of the participant's re-traumatization were mostly corrected by an indigenous guide with whom this guide had previously worked. Several years later, another guide trained in the same tradition began co-leading ceremonies with the female guide, assumedly with success again. The ceremony context thus contained mechanisms for self-correction, both for participants and guides.

A third case involved an experienced indigenous female guide with a personal history of extreme early sexual and other trauma. By European standards, her history was practically incomprehensible. Similar to the previous case example, despite years of training and years of experience,

a significant amount of trauma related to men remained unresolved, leading to instability that was not expressed as anger but as subdued bitterness and a tendency to retaliate. In part, these tendencies may also have been due to income and wealth inequalities. An experienced female organizer/apprentice, referring to unspecified 'unethical behavior', discontinued cooperation with this guide. A male organizer in another country continued cooperation, however.

Treatment non-response appeared likely in one case in which a woman had attended at least twenty different non-indigenous mixed-inluence or neoshamanic ceremonies before attending a ceremony led by the above-mentioned non-indigenous guide. This guide advised the woman to not attend any ceremonies or use any psychedelics for at least a year. She did not follow this advice, and later, the above-mentioned indigenous guide stated that it was not necessary for her to avoid ceremonies. Later, she was subjected to repeated sexual violence in South America in another context unrelated to ayahuasca. This caused a psychotic disorder, which was later treated with antipsychotics.

The only obviously problematic issue was related to tobacco-based snuffs, which guides reportedly needed to enter altered states required for diagnosis and healing. While this posed no issue for the guides and was perhaps also useful for many participants inside a ceremony, it was also offered for use outside of ceremonies. Subsequently, some participants with a tendency toward addiction appeared addicted to the snuffs due to their nicotine content. In contrast to tobacco snuffs, ayahuasca use outside ceremonies was prohibited, and it was unavailable to participants.

With regard to safety in general, one participant accidentally hit his head on a wall during a ceremony. There did not appear to have been long-term consequences. Other notable safety-related incidents were not observed.

With regard to psychoses, in one case, a male participant had been treated for psychosis in a hospital and discharged two weeks before a ceremony. The ceremony was uneventful and the treatment outcome good. In another ceremony, two women with no background or obvious tendency towards psychosis appeared to become slightly transiently psychotic for half an hour. In the other case, in practice, the 'psychosis' exhibited itself as her standing up, walking around, and talking to herself, repeating the words 'I don't understand!', disturbing others. She was taken to another room by the helpers to calm down. Later, she described that the situation was caused by an unfathomable surprise when she realized that the death of her child had not been her fault; in other words, by a release of guilt. In the end, the trauma related to the death was resolved. In the other case, a woman began to shake excessively and was also taken aside to calm down.

A return to mainstream society after a short visit to another world put severe pressure on many of the attendees: going home could feel like 'hitting a brick wall' [46]. This aspect distinguished ceremonies led inside indigenous communities from ceremonies led in the European context. The re-traumatizing effect of residing in an unsatisfactory environment often canceled some of the progress made in a ceremony. This appeared to be the main issue with respect to the permanence of improvements

[46]: Turkia 2022 DOI

acquired in ceremonies. If participants always returned to the environments that caused their issues in the first place, they were able to resist the effects of the environment for a while but eventually burned out, and the environment forced the original issue onto them again. This aspect has been discussed in more detail in another case study [47]. Therefore, to the extent possible, either the societies would need to be rid of their re-traumatizing aspects (e.g., social isolation) or treatment efficacy somehow needs to be raised to a 'next level', giving full immunity against re-traumatization.

[47]: Turkia 2022 DOI

All in all, problems appeared to be primarily related to guides' lack of stability, which was due to unresolved trauma, except in the case of the non-indigenous male guide, for whom the root issue remained undetermined. For their part, the observed indigenous male guides featured unsurpassed mental stability, with women presenting with more variation, regardless of background. Stability appeared to be inversely related to the degree of residual trauma, which appeared to be higher in female guides. Regardless, the two female guides brought a considerable amount of knowledge to Europe with them. They successfully treated participants with a history of psychotic disorders and participants with traumas as severe as their own traumas had been, whereas everyone else had either refused to treat these participants at all or given up on them long ago.

In one observed case concerning a young woman with extremely severe early sexual trauma who had been through every available health care facility without any improvement, the non-indigenous female guide appeared to rebuild her whole identity in a weekend—something that, at least in the short term, appeared akin to a miracle cure. There was no possibility for follow-up in this case.

From a societal cost-benefit point of view, treating the most difficult patients first often appeared to be the optimal strategy. The strategy of the official health care system appeared to be the opposite. All in all, these examples illustrate that successful treatment of extreme conditions may require in-depth experience that may be impossible to obtain by other means than previous personal experience of having resolved the same condition in oneself. Personal experience with a resolved condition allows for detailed knowledge of its etiology, structure, and symptoms. Successful resolution of the condition allows for either explicit or intuitive knowledge on how to resolve the condition.

In the presence of insufficient resources and external support, guides' personal experience of trauma, where insufficiently resolved, may lead to complications. The obvious solution would be to offer them the necessary resources. The low-resource unofficial context did not possess such resources at the time. It should also be noted that simply being surrounded by severely traumatized people all the time is extremely taxing, something that most people could likely not tolerate at all.

4.6 Conceptual framework differences as a source of confusion

Conceptual differences between the indigenous traditions and European biomedicine were colossal. Indigenous concepts often appeared as foreign to the participants as the concepts of, say, 'evidence-based medicine', appeared to the indigenous. Neither framework appeared superior; both had their strengths and weaknesses. In practice, the largely undocumented, apprentice-taught, often intuition-based indigenous conceptual frameworks produced observations and action plans that appeared more to the point, producing better treatment outcomes. An optimal framework would likely result from a fusion of various frameworks.

Rodd elaborated on the practice of the acquisition of knowledge from the 'integrative mode of consciousness', i.e., from altered states induced by ayahuasca and other plant-based medicines [48]. The training of a guide involved conditioning the mind to achieve optimal perceptual capacities that facilitated accurate prediction and successful psycho-social prescription. Technologies of consciousness were described in terms of gods and spirits, but also in terms of studying and the acquisition of information. These methods could be explained in neurobiological terms. Diagnosis was primarily based on schemas or templates of human behavior based on years of social analysis performed with heightened information processing capacities induced by ayahuasca. Observations of the ceremonies aligned with the principles described by Rodd.

[48]: Rodd 2003 DOI

The concept of spirits appeared to be the most central. Often, 'spirits' referred to the pharmacological properties of plants. A 'spirit' of a tree being of certain quality meant that the tree contained a certain pharmaceutical component. Various components had been found suitable for resolving certain medical conditions. The pharmacopoeias of some tribes contained hundreds of plants for various uses, including birth control or the treatment of infertility, infections, and poisonings. Spirit could also refer to pathogens. For example, water in a pond could be governed by 'bad spirits', i.e., contaminated by some pathogen.

Pharmaceutical interactions could be referred to as 'jealousy between spirits'. These interactions occurred not only between two external substances but also between the external and the internal. The most common interactions to avoid included: 1) ayahuasca and sex hormones; 2) ayahuasca and sweet-tasting carbohydrates; and 3) interactions of monoamine oxidase inhibitors (MAOIs) with certain pharmaceuticals and foods. It was considered that these interactions either caused adverse effects such as nausea or prevented subtle effects of ayahuasca, preventing the participant from accessing certain states, thus limiting or eliminating the treatment effect.

Therefore, one important difference between Amazonian people and European participants was the state of their bodies. The Europeans were largely saturated by decades of sugar and salt consumption and subsequently required stronger brews and higher doses to experience an effect. Still, their experiences likely differed from those with different body constitutions. The indigenous lineages required the consumption of bitter herbs for long periods of time in order to modify the body.

The concept of 'spirit' could also refer to historical social interactions. A condition (trauma) could be said to have been caused by a specific spirit (historical event caused by an external party). This spirit could be evicted, i.e., the condition resolved, with a specific song when the participant was in a specific altered state. This could be understood as the combination of ayahuasca and a song producing a certain mental state that would allow for the processing of the related traumatic event.

A more psychedelic-specific feature was that one could occasionally see visual representations of illnesses being extracted from the body. Obsessing about the ontological quality of these experiences appeared counterproductive; it was often best to simply accept favorable outcomes and ignore incomprehensible details.

A major conceptual difference concerned the etiology of psychiatric disorders. While European traditions conceptualized disorders as internal properties of individuals, indigenous tribes typically maintained the opposite view, conceptualizing everything as a result of external influences. Diagnostic systems such as ICD-10 describe collections of symptoms and explicitly ignore etiology. Conversely, the indigenous perspective paid little attention to specific symptoms and emphasized interpersonal causes.

The concept of spirit did not appear to refer to something immaterial. The common understanding of 'spirituality' as immaterial thus appeared unfitting to these contexts. Rather, 'spirit' appeared to be used as a general, somewhat vague reference to various common concepts.

Another central concept was sacredness. 'Spiritual' often actually referred to 'sacred', and anything related to sacredness was to be taken seriously. The dismissal of the concept and the implied disrespect of the medicine were considered serious insults. For most, the personally experienced life-changing effects of ayahuasca had been substantial. Especially the guides had made great personal sacrifices, endured years of suffering, and taken extraordinary risks to devote their lives to the service of the plants and people. In this sense, the context was not only highly religious but also highly serious, i.e., strict.

The sacredness of nature was also the motivation for the healing work. A guide described that they followed a prophecy from pre-colonial times. The prophecy was said to have predicted climate change and the subsequent collapse of societies. The solution was to build alliances with the non-indigenous in order to heal them from their diseased state with the rainforest medicines and subsequently make them realize the value of the rainforest and nature in general. In this sense, the work of the indigenous was missionary, intended to save their sacred forest by awakening non-indigenous people from their undiagnosed, subconscious, historical trauma-related, society-wide state of dissociation.

It has been said that while in churches one can read, talk, and hear about divinity, with psychedelics, one can experience it firsthand. While experiences of divinity may also occur in 'recreational' use of psychedelics, the indigenous traditions represented a completely different level of respect for the divine aspects. Therefore, the concept of 'respecting the medicine' was considered essential, and real or assumed transgressions against this concept could cause severe conflicts.

4.7 Discussion

The described unofficial ceremony contexts appeared irreplaceable for the treatment of patients that had proven impossible to treat in official healthcare contexts. The contexts also functioned as unique sources of expertise on psychedelic therapy. While privacy regulations prevent patients from getting to know and communicating with each other in official contexts, the unofficial contexts were communal, allowing for the exchange of positive as well as negative experiences and the exchange of best practices. Not even guides appeared to hold 'tenured' positions or excessive influence; as invited visitors they were largely replaceable. There was a relatively low threshold for presenting criticism as well as praise. Best practices spread within and between groups. Whereas official contexts appeared formal, inflexible, and extremely slow to change, informal contexts appeared flexible and better in adopting innovations.

Despite these contexts being relatively non-academic and primarily adhering to indigenous traditions, some recent developments in psychotherapy were also followed (e.g., [49–53]; as a detail, international expertise on therapy for sex trafficking-related sexual abuse was also noted and taken into account [54, 55]).

[49]: Porges 2022 DOI
[50]: Schwartz et al. 2020
[51]: Maté 2019
[52]: Kolk 2014
[53]: Levine 2010
[54]: Liana 2021 URL
[55]: Liana 2021 URL

Likely because of the described kind of pre-screening process, there was little to no history of or tendency for 'recreational' use of psychedelics among participants. In traumatized people, ayahuasca primarily caused one's traumatic experiences to surface, which was typically felt as the opposite of 'recreation'. In general, ayahuasca may be considered unsuitable for any recreational or poorly structured use.

Participants had clear goals for their participation. As complex trauma was gradually processed and resolved in consequent ceremonies, these participants tended to leave the ceremony context and, say, start a family or acquire a suitable vocation. Treatment of C-PTSD is slow, and it is likely that in many cases, ongoing treatment is necessary and all issues might never be resolved. Regardless, significant improvements can be obtained. Recently, two Swiss psychotherapists pointed to this phenomenon concerning their experiences treating C-PTSD patients with MDMA and LSD group therapy in Switzerland [56]. The indigenous guides, likely having followed hundreds of such cases for years, appeared to take this into account. In contrast, some non-indigenous organizers featured a more short-term goal-oriented mindset and impatience, wanting to focus on conditions that could be resolved in a single ceremony (e.g., PTSD) or in a few ceremonies. While understandable, someone should also treat people with C-PTSD.

[56]: Oehen et al. 2022 DOI

Issues of scaling apply both to the medical psychedelic therapy training as well as to the indigenous training, although training for group settings is slightly more scalable, perhaps twenty-fold more scalable, than training for individual therapy. Despite that, due to a large discrepancy between demand and supply of affordable therapies, self-treatment methods also need to be considered. Their principles have been preliminarily described in an article and a preprint by the author [47, 57]. Self-treatment appears to be the only solution to the issues of scalability and cost. Properly organized, it is also sufficiently safe. The safety of self-treatment with psychedelics needs to be compared to the safety of doing nothing or

[47]: Turkia 2022 DOI
[57]: Turkia 2022 DOI

preserving the status quo, and the conclusion is simple: doing nothing is almost always less safe. Self-treatment should be combined with group therapies and, where possible and necessary, with individual therapies.

With regard to aspects mentioned by Lindgren and Rozental [38], including continuity of care, administration and implementation, patient involvement, diagnostics, transparency regarding limitations of competence, attitude, empathy, and collaborative stance, according to the author's observations, the situation appeared relatively good.

[38]: Lindgren et al. 2021 DOI

These unofficial contexts could have been completely destroyed by a single phone call, as happened, for example, in the case of psychiatrist and psychotherapist Friederike Meckel Fischer in Switzerland, when a jealous ex-partner of a participant informed the police about Meckel Fischer's underground therapy work [15, 16]. The incentives for competence and ethics appeared significantly higher in underground contexts than in official psychiatric contexts.

[15]: Meckel Fischer 2015
[16]: Sessa et al. 2015 DOI

The fact that this never happened in the contexts representing the two traditional lineages was not due to fears, cult-like behaviors, or similar reasons, but simply to the fact that their work was experienced as uniquely beneficial, either for the participants themselves or at least for the other participants. It provided them with efficacious treatment that had been unavailable anywhere else. Compared to conventional psychiatry and psychotherapy, the treatment efficacy and cost efficacy in the observed ceremonies seemed ten- to hundred-fold higher. Official contexts appeared to be decades behind the lead. However, these indigenous contexts were highly selected and possibly unrepresentative of the field as a whole.

On the other hand, where integrity and competence were obviously lacking, sanctions followed, as in the case of the non-indigenous male guide of mixed background. It was notable that this guide was the only one who lacked training in traditional lineages. In the case of the non-indigenous female guide, harms were evaluated against realized and expected benefits, and the latter were considered more important. Personal trauma was assumed to be resolvable, and she was given the time to resolve it.

It appeared that integrity in itself was a protective factor. Social groups may intuitively protect things of value, such as people with integrity and competence, so that useful structures are cultivated, regardless of the current legal environment. Like resistance movements, they may offer a way forward from societal dead ends; they are paradigm shifts in the works. Typically, after a decade or two, their methods may be considered obvious, and no one will remember why they were resisted in the first place. A Finnish example of this was the history of the buprenorphine substitution treatment for opioid addicts, which, for two decades, was considered completely inappropriate even as an idea, then reluctantly accepted, and is currently obligatory, with practically no other treatment options available [58–60].

[58]: Tammi 2005 DOI
[59]: Turkia 2016 URL
[60]: Turkia 2016 URL

Concerning outcomes in the five-year period, many participants were observed for long periods. The progress was often slow and gradual; there were setbacks, and typically about half of the issues got resolved. Considering the starting point of many, and the difficulty of resolving

decades of trauma typical for complex trauma, outcomes seemed very positive on average. The worst cases could still not, say, study or work, but they were no longer in a constant state of shock and dissociation. The most favorable cases appeared to be fully healed. Left untreated, most would likely have either stayed unchanged, deteriorated, or died. It should be noted that, similar to the knowledge of treatment methods spreading in waves from a center point, untreated trauma also spreads in exactly the same way.

As mentioned above, the determining factor with regard to the permanence of acquired improvements was whether the participants resided in a constantly retraumatizing environment and always had to return to the same disadvantageous conditions that had caused their issues in the first place (poverty, social isolation, etc.). It was thus difficult to utilize temporary interventions to permanently heal individuals whose daily environment was unsupportive of their health; it would have required even greater individual impacts.

The idea of combining different paradigms or methodologies to drive innovation and productivity is a known concept in various fields, including science, technology, and business. Many scientific breakthroughs have occurred at the intersection of different disciplines. In the context of the current study, it appeared that the interaction between different paradigms (i.e., the indigenous 'spiritual' and the European 'scientific') was a key aspect of productivity. The interaction appeared to produce more progress than work inside each paradigm separately could have produced.

The timing and dosing of psychedelics were necessarily person- and situation-dependent. Treatment processes cannot and should not be standardized in the contemporary biomedical sense. Psychedelic therapy may best be understood as a form of intuition and personal experience-based art. A mechanistic application of some simplified, standardized ruleset is unlikely to be successful; instead, outcomes will likely be negative. In the end, healing is about love. When it is missing, it will be obvious, and no healing will occur.

4.7.1 Comparisons with public healthcare systems

Taking into account that the participants appeared almost exclusively to be people who: 1) had been unable to acquire any psychiatric healthcare due to bureaucratic complexity or financial or other reasons, or who had been denied treatment because of various administrative rules or contraindications; 2) had acquired ineffective care or were considered 'treatment-resistant'; or 3) had been traumatized by public and/or private health care systems, some comparisons between the observed contexts and conventional healthcare systems may be helpful.

The author's experience almost exclusively concerns the Finnish healthcare system, of which the author's experience has been very negative. Concerning public discussion, it was recently claimed that the official psychiatric health care system has already collapsed [61]. A widespread discontent with the system exists. For example, parents of young patients have complained about the impossibility of accessing psychiatric care [62], and about its inefficiency, calling it a 'storage system' without any

[61]: Rajamäki 2023 URL

[62]: Aalto 2023 URL

treatment effect [63]. Treatment guidelines reflect psychiatrists' interests only, with other professions and viewpoints excluded from guideline committees [64]. The diagnostic system remains arbitrary.

[63]: Aalto 2023 URL

[64]: Service 2023 URL

Psychiatrists avoid committing to full-time roles within the system and assuming complete responsibility for it; instead, they opt for short-term and part-time engagements with double or higher pay, as the employer has no choice but to try to find anyone [65]. Those who still work in the system spend up to 70% of their time writing medical certificates due to impractical laws and regulations [66]. In public healthcare as a whole, almost 40% of personnel feel dissatisfied [67]. Its cost crisis has appeared unsolvable [68]. Constantly lowering standards is not a sustainable solution, and at some point, healthcare organizations, having become empty shells devoid of life, cease to count as healthcare of any kind.

[65]: Saari 2024 URL

[66]: Rajamäki 2023 URL

[67]: Paananen 2024 URL

[68]: Paananen 2024 URL

The problem with discussing these issues is the public's prevailing lack of experience with better or even any alternatives, which leads to a lack of vision and attempts at fine-tuning the existing structures. Attempts at explaining that alternatives exist hit a wall because psychedelic therapy is apparently incomprehensible without personal experience, and acquiring that is prevented by current legislation. Even where personal experience exists, it is typically either very shallow or exhibits paranoid tendencies. The eventual outcome of attempts at improving the system is thus a dead end.

With regard to aspects mentioned by Lindgren and Rozental [38], the observed contexts appeared to be significantly better than conventional psychiatric healthcare in Finland. In theory, there are laws to protect patients' rights, and there are instances for making complaints. In practice, these laws are of no consequence, and if patients have the skill and energy to complain, these complaints lead to nothing (see, e.g., [69]). Little may have changed since Foucault [70, 71]: the mental health care system is often no different from a totalitarian system of institutionalized, typically unconscious violence. From the point of view of patients, psychiatry may resemble a casino: the house always wins. Naturally, these qualities do not contribute to healing but to exacerbating and propagating the original traumas, creating the need for more treatment and subsequently creating a feedback loop that inflates the psychiatric system, transforming it into a self-perpetuating drain of resources.

[38]: Lindgren et al. 2021 DOI

[69]: Turkia 2022 DOI

[70]: Foucault et al. 1964

[71]: Foucault 1977

Lysaker et al. noted that recovery from mental illness involved recapturing a sense of agency [72]. In public health, social services, and unemployment benefit systems, patients typically have no influence on the selection of personnel, facilities, or methods. They may be implicitly or explicitly sanctioned for declining treatment or for 'disobedience'. The ceremony contexts appeared better in allowing for autonomy and agency to develop.

[72]: Lysaker et al. 2012 DOI

Due to the style of training in the traditional lineages being overly demanding for most, medical personnel cannot be easily re-trained into exactly the same practices. The required apprentice-style of learning, the years-long duration of training, the demanding nature of plant diets carried out in social isolation, the central role of musical skills, as well as the lack of written documentation of the methods, make direct adoption difficult. Adaptations more easily suited for integration

with European healthcare contexts include 5-MeO-DMT [73–75], MDMA, psilocybin, and LSD-based treatments. Several examples of tested, readily implementable European adaptations exist [15, 46, 56, 76].

The evidence-based medicine (EBM) methodology [77] has proven an ill fit for healthcare innovation in general and psychedelic research especially, due to, for example, the practical impossibility of blinding and its extreme slowness, with decades having been wasted to reinvent therapeutic methods that were widely and successfully used in the 1960s. There has appeared to be *no evidence* for the feasibility of the 'evidence-based' methodology in this context. The EBM paradigm has turned counterproductive. In the observed ceremony contexts, inquiries about or discussions of evidence from clinical trials were absent. Concerning decisions about competence and efficacy, the attendees appeared to rely on direct observation and on their own judgment.

The current societal mindset, with an implied necessity of depending on 'experts' on every issue, appears to have become severely counterproductive. Illich has noted that 'medicine does for health what education does for learning: it converts a good that people might autonomously cultivate into a scarce commodity only accessible through an institution that monopolizes its distribution' [78]. The commercialized, medicalized, regulated-to-be 'psychedelic renaissance' may be about to do exactly that: convert something that should be autonomously cultivated into an inaccessible, bureaucratic monopoly. Unless revised, this approach may be the last straw in the possible upcoming fall of 'European values' and societies.

From the point of view of competitive advantage between Europe, Asia, and the US, the adoption of more efficacious mental health care practices would significantly benefit Europe by reducing public finance deficits and improving population health. From an intra-European point of view, efficient, affordable methods for resolving trauma resulting from the war in Ukraine are urgently needed [79]. The observed methods appeared especially suitable for resolving sexual trauma caused by rape or childhood sexual abuse. More broadly, methods for changing the ways societies are led are urgently needed internationally.

While the uncertainties related to unfamiliar methods are overestimated, the risks of continuing with the current practices are severely underestimated. Societies are getting increasingly chaotic and wars are increasing, but the responses to these are increasingly primitive: militarism and the threat of violence, instead of undertaking even elementary attempts to observe the actual causal pathways behind the developments as well as adopting a therapeutic approach.

4.8 Conclusions

The observed ayahuasca ceremony contexts appeared to had emerged to help patients that official healthcare systems had proven unable to treat or excluded for various reasons. The ceremony contexts thus complemented the official healthcare system. Due to the legal situation, incentives for competence and ethical conduct appeared equivalent or stronger than those of official healthcare systems. In the observed subset,

[73]: Ragnhildstveit et al. 2023 DOI
[74]: Reckweg et al. 2022 DOI
[75]: Reckweg et al. 2022 DOI
[15]: Meckel Fischer 2015
[46]: Turkia 2022 DOI
[56]: Oehen et al. 2022 DOI
[76]: Turkia 2022 DOI
[77]: Solomon 2011 DOI
[78]: Shullenberger 2022 URL
[79]: Yaffa 2022 URL

the ceremonies appeared relatively well organized by competent and ethical actors. Malpractice appeared rarer than in official psychiatric care, whereas treatment outcomes appeared significantly more favorable. Due to a high degree of communality and the strong presence of expertise from traditional, indigenous lineages of psychedelic therapy, these contexts appeared to contain mechanisms for self-correcting possible emerging issues. The ayahuasca ceremony contexts functioned as nexuses of treatment method innovation and development.

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5 Touch and play—'spiritual attacks' in ayahuasca ceremonies

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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.

5.1 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 [1]. 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 [2–16]. The pharmacopoeias of the tribes include over a hundred commonly used plants; recently, one Brazilian tribe documented their knowledge in a book [17]. 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 [18, 19].

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 [20]. 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

[1]: Durante et al. 2021 DOI
[2]: Labate et al. 2014 DOI
[3]: Frecska et al. 2016 DOI
[4]: Mudge 2016 URL
[5]: Santos et al. 2017 DOI
[6]: Palhano-Fontes et al. 2018 DOI
[7]: Kaasik et al. 2020 DOI
[8]: Jiménez-Garrido et al. 2020 DOI
[9]: Oikarinen 2020 URL
[10]: Roseman et al. 2021 DOI
[11]: Ruffell et al. 2021 DOI
[12]: Ona et al. 2021 DOI
[13]: Buller et al. 2021 URL
[14]: O'Shaughnessy et al. 2021 DOI
[15]: Hartogsohn 2021 DOI
[16]: Gonzalez et al. 2021 DOI
[17]: Muru et al. 2019 URL
[18]: Santos et al. 2016 DOI
[19]: Hamill et al. 2019 DOI
[20]: Pérez-Gil 2001 DOI

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 resonation 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) [20]. 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.

[20]: Pérez-Gil 2001 DOI

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 [20]. 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.

[20]: Pérez-Gil 2001 DOI

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 [21]. One possible function of the diet may be to suppress all inflammatory processes. Some effects might be related to dopamine deprivation.

[21]: Flanagan et al. 2018 DOI

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 [22]. 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.

[22]: Mori 2009 URL

The maintenance of a proper, efficacious, and safety ensuring group dynamic is thus predominantly the result of singing [23]. 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).

[23]: Beyer 2009 URL

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 [23].

[23]: Beyer 2009 URL

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 [20]. 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).

[20]: Pérez-Gil 2001 DOI

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.

5.2 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 prespecified 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'.

5.3 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' [24]. 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 [23].

[24]: Maher 2009 URL

[23]: Beyer 2009 URL

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 [25].

[25]: Cohen 2006 URL DOI

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' [26]. 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.

[26]: Fotiou 2010 URL DOI

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 [27]. 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 [28]. 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' [27].

[27]: Rodd 2006 DOI

[28]: Rodd 2008 DOI

[27]: Rodd 2006 DOI

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-psychic 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 Piaroa 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 [29]. 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

[29]: Rodd 2003 DOI

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' [26, 30]. 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.

[26]: Fotiou 2010 URL DOI
[30]: Greene 1998 URL DOI

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 [31]. 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.

[31]: Kontoghiorghes 2021 URL DOI

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') [32]. 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 presumedly remain the same.

[32]: Kasprow et al. 1999 URL

5.4 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.

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6 The clinical trial as a ritual

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Ritual creates a shared and conventional world of human sociality, and humanity brings order to the world through the creation of rituals. Modern societies rely on the paradigm of evidence-based medicine for deciding whether an intervention should be adopted. The paradigm is based on the concept of evidence and defines routines to provide acceptable evidence. A flawless execution of predefined routines produces a binary outcome: adoption or rejection. The cornerstone of these routines, the clinical trial, serves as an instrument for building consensus about a medical intervention. Simultaneously, it serves as a symbol of the superiority of modern medicine.

Through the need to follow the rituals of evidence-based medicine, psychedelic research is also ritualized. It forces measurability on the immeasurable and projects an image of an order on a mystery. The outcome of the research ritual is a mindset that projects an expectation of safety and efficacy on the unknown.

Ritual creates a shared and conventional world of human sociality, and humanity brings order to the world through the creation of rituals [1]. Ritual is a human construct to maintain social cohesion—an attempt to organize chaos.

[1]: Seligman et al. 2008

In this role, ritual sets a narrative: through ritual, order is achieved. Order allows for prediction; prediction allows for an expectation of safety. On an individual level, the ritual determines an affective state based on the discounted expectation.

Broadly understood, a ritual is a set of stereotyped behaviors carrying symbolic meanings [2]. The ritual content of behaviors may have positive, negative, or neutral symbolic or instrumental outcomes. Many behaviors are commonly assumed to be undertaken purely for their utility, yet they may contain a ritualistic component whose symbolic meanings and effects may be overlooked. Rituals locate participants in certain social roles and may define hierarchies of authority and power. They can stipulate, control, and constrain behaviors in multiple ways.

[2]: Arnold et al. 2020 DOI

Wearing a white coat may have instrumental effects. It may protect from contamination and serve as a uniform that indicates the wearer's role in a hierarchy (e.g., by differentiating medical doctors and nurses). The coat may also have symbolic effects; it may be interpreted to indicate that the person wearing it is highly trained, competent, has a high income, is influential, and possesses 'healing powers' perhaps bordering on magic. Symbolic and instrumental effects overlap; indicating a role may be both instrumental and symbolic.

The status of a person wearing a white coat is derived from a larger system with instrumental and symbolic effects. A medical doctor is both a product, an instrument, and a symbol of the system. The system of allopathic medicine is a symbol of the modern scientific mindset.

Modern science itself is a large system with instrumental and symbolic effects. It may be the primary symbol of a modern society, its most fundamental defining characteristic. Modern science has replaced religion as the enforcer of order. Science is presented as a rational alternative to ritualized religion. Despite that, science is largely ritualized in its nature.

The main instrument and symbol of modern medical science is the clinical trial. The trial is presented as a guarantee of the validity of modern medicine: the clinical trial ensures the superiority of modern medicine over alternative mindsets [3]. The trial is both instrumental and symbolic. The trial may produce a decision about the adoption or rejection of a specific intervention. The trial has a predefined intention; it is designed to produce a decision. Simultaneously, as a ritual, it maintains the symbolic meaning of modern medicine: its undeniable correctness and the self-evident nature of its superiority.

[3]: Barry 2006 DOI

The psychedelic therapy trial

Psychedelic therapy attempts to resolve emotional suffering with the help of psychedelic substances. For the preceding few decades, in the mindset of modern medicine, these substances have been considered to have no accepted medical use. To be included under the protective umbrella of the symbolic system of modern medicine, psychedelics must be medicalized [4], and psychedelic therapy must undergo the required inclusion ritual: the clinical trial.

[4]: Noorani 2019 DOI

The trial is a function that takes inputs, performs operations on them, and produces outputs. Inputs may include: participants (a selected subset of a population); interventions (e.g., a certain dosage of a substance); control conditions (e.g., placebo or standard of care); time (duration of the trial); and study parameters (endpoints and outcome measures). The process may consist of randomization, intervention, monitoring, and analysis. The outputs may include: efficacy of the intervention (how well it works in ideal conditions); effectiveness (how well it works in real-world conditions); safety (assessment of adverse events or risks); and cost-effectiveness (the economic evaluation of the intervention's value).

The trial creates its own universe. It determines what is possible and allowed. Similar to how the chosen technology of a computer monitor limits the color space it can present, the trial limits both the space of methods as well as the space of instrumental and symbolic outcomes. The trial becomes an entity that colonizes the mind.

The trial creates its own set of threats to its validity. By defining exceedingly complex procedures that remain partially undefined and include unrecorded or unconscious procedures [5], it allows for uncertainties and biases. The procedures cannot guarantee their own validity [6–8]. In an attempt to reduce the sphere of uncertainty, the trial adds rigidity that reduces its sphere of possible outcomes.

[5]: Noorani et al. 2023 DOI
[6]: Karvanen et al. 2020 DOI
[7]: Penston 2011 DOI
[8]: Saint-Mont 2015 DOI

The validity of the result is based on a consensus decision on what is evidence, what is robust, and what is sufficient. Eventually, the consensus is an affect: robust is what feels robust. When the feeling of safety is lacking, the trial fails its symbolic function. The solution is expansion: more trials

and larger trials that aim at providing enough robust evidence to draw firm conclusions. Fundamentally, firm conclusions are conclusions that feel safe.

Threats to validity may be seen as easy, moderate, or hard [9]. The easy ones may include invalid statistical inferences and questionable research practices, conflicts of interest with sponsored studies, and safety and adverse events. Moderate threats may include a lack of control groups, small sample sizes, selection bias, and a lack of long-term follow-up. Hard threats may include the difficulty of blinding, placebo effects, and the mechanism of action remaining unclear.

[9]: Elk et al. 2023 DOI

The trial may be internally inconsistent; it may misunderstand and misinterpret what is being studied. The trial may note that psychedelics increase suggestibility and potentially function as a super placebo. It may also note that the mechanism of action of the intervention is undetermined. The trial may fail to see that the suggestibility and the super placebo may not be sources of bias but one of the mechanisms of action of the intervention.

The trial may find that participants undergo mystical experiences [10]. It may decide that these experiences constitute a surrogate endpoint, a valid substitute for a clinically meaningful outcome. It may then decide that these experiences are measurable on a linear decimal scale. It may then begin measuring values on this scale using a questionnaire. It may decide that the symbolic outcome of the ritual, the robust evidence, is reached when the observed difference between the intervention and control groups is statistically significant at an arbitrary predetermined level, such as a p-value less than one hundredth.

[10]: Mosurinjohn et al. 2023 DOI

The trial has endless possibilities to shape reality; it is a superpower. It may decide that, instead of a set of decimal numbers representing subjective mystical experiences, a set of magnetic resonance imaging results constitutes robust evidence. The magnetic resonance images symbolize hidden knowledge—the unseen that only science can reveal. The images may show that the brain acts differently under psychedelics; the trial may then claim that the mechanism of action is that change.

The essence of the trial may not be its instrumental value. The essence may be that the trial is performed—the ritual production of symbolic meaning. For the clinical trial ritual, it is irrelevant that tens of millions of people have safely used psychedelics for decades, with largely positive outcomes [11]. It does not matter that the financial and human cost of the trial is measured in decades of suffering.

[11]: Sessa 2012

Similar to dogmatic religion, the importance of the ritual overrides other concerns: the excessive cost of the ritual, the decades needed to perform it, and the internal inconsistency of the ethics of the ritual. The ritual claims to protect patients, yet it condemns them to a lifetime of suffering while waiting for the ritual to be completed. The ritual may be limited and outdated, yet it wants to reproduce and stay alive.

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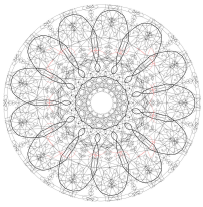

'Even when we do small work for twenty people,
we have the potential to impact millions of people.'

'One day you finally knew
what you had to do, and began'