# 5-MeO-DMT in the complete resolution of the consequences of chronic, severe sexual abuse in early childhood—a retrospective case study

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# Abstract

5-MeO-DMT is a psychedelic substance with a short duration of action and intensive effects. Its therapeutic efficacy and practicality may significantly surpass those of classical psychedelics such as ayahuasca and LSD.

This retrospective ethnographic inquiry features a woman in her mid-thirties who witnessed her mother's violent suicide and its bloody aftermath at the age of three. Before and after that, her childhood was characterized by domestic violence and sexual abuse perpetrated by several members of her family and extended family. In her twenties and thirties, she dated a member of the local mafia with the intention of asking him to kill her father, who had been the main perpetrator of the sexual abuse and violence. This plan was eventually not carried out, but it reflected her deep bitterness and wrath.

A process initiated in her early thirties involving four 5-MeO-DMT sessions and a few additional sessions with psilocybin and ayahuasca in the course of two years completely resolved her symptoms related to the abuses, to the extent that she could rebuild a functional relationship with her father and feel love and compassion towards him. This outcome, i.e., the complete reversal of her attitude and emotions towards her father, appeared highly unusual. For the last three years, the outcome had remained stable.

The article also presents the perspective of a female facilitator of this treatment process. The article contributes to a better understanding of the use of 5-MeO-DMT in severe traumatization as well as exemplifies the possible positive contributions of actors who are not medical professionals in resolving deep collective traumatization in societies.

*Keywords:* 5-MeO-DMT, bufo, reactivation, ayahuasca, psilocybin, C-PTSD, PTSD, psychedelic therapy, psychedelics, domestic violence, childhood sexual abuse, rape, nonduality

### Introduction

5-MeO-DMT is a less-known psychedelic with a short duration of action and intensive dose-dependent effects. It can be either synthesized or sourced from the venom of a toad belonging to the Bufo genus, the Colorado River toad, also known as the Sonoran Desert toad (Davis and Weil, 1992). Its taxonomic name is *Incilius alvarius*, formerly known as *Bufo alvarius*. Naturally sourced 5-MeO-DMT is therefore often colloquially called *bufo*.

5-MeO-DMT may induce a gradual process of 'somatic opening' that continues long after a session, with the majority of the effects becoming permanent. In the process, chronic, asymmetric muscle tensions may be released, which allows for symmetry and alignment in the body related to a centerline (the spine) (see, e.g., Ball (2017)). The release of chronic tension may be related to the resolution of psychiatric disorders as well as the dissolution of behavioral patterns such as addictions. Healing-oriented altered states appear consistently related to relaxation and may dissolve through contraction (see, e.g., Metzinger (2024)).

Vaporizing 5-MeO-DMT is considered to be a recent practice initiated in the 1970s or early 1980s in the United States. A self-published booklet featured 'the psychedelic toad of the Sonoran Desert', briefly introducing the substance (Most, 1983). In 1997, 5-MeO-DMT was reviewed by Ann and Alexander Schulgin (Shulgin and Shulgin, 1997).

Several books written by people with first-hand experience have been published. Oroc, an extreme sports enthusiast who died in 2020 due to paragliding equipment failure, presented the Oroc Entheogen Scale, a list of common psychoactive substances listed in order of increasing toxicity and decreasing capacity to induce 'experiences of oneness' (Oroc, 2009, 2018). Oroc considered 5-MeO-DMT the most potent and least toxic of the known psychoactive substances. Ball, a professor of religious studies, described his perspective, methods, and experiences, as well as the concept of nonduality (Ball, 2009, 2017, 2022). Palmer also described his views (Palmer, 2014).

Shen et al. reviewed the metabolism, pharmacokinetics, drug interactions, and pharmacological actions of 5-MeO-DMT (Shen et al., 2010). 5-MeO-DMT can be synthesized by various methods, including an Incilius alvarius cell-based synthesis method (Lerer et al., 2023), and a microbial method (Friedberg et al., 2023). The mammalian brain

endogenously synthesizes DMT (Dean et al., 2019), and likely also 5-MeO-DMT (Barker et al., 2012). Sepeda et a. emphasized the importance of administration in a safe and supportive context (Sepeda et al., 2020). A recent narrative review by Ermakova et al. provided a look into the history of the substance, its pharmacology, pharmacokinetics, effects, drug interactions, and toxicology (Ermakova et al., 2021). Ragnhildstveit et al. presented a longitudinal case study of a patient who successfully self-medicated her PTSD with 5-MeO-DMT (Ragnhildstveit et al., 2023).

Lancelotta warned against concomitant use with MAOIs and ayahuasca (Lancelotta, 2022). Community-produced materials have listed known interactions (Tripsit.me, 2023a,b). 5-MeO-DMT use in the US appears to have spread and increased significantly in recent years (F.I.V.E., 2023; Kuczynski, 2022).

The information was acquired through two semi-structured online video interviews. Initially, a one-hour interview with the facilitator was conducted in July 2023. In this interview, she mentioned a case involving her client. Sub-sequently, an interview with that client was conducted in September 2023. The duration of the interview was 1.5 hours. It was complicated by a lack of common language between the author and the interviewee. The facilitator provided a translation, but some details were excluded for brevity. A third of the recording was lost due to an error. AI-based transcription and translation of the rest of the recording failed due to an excessive error rate caused by the use of a dialect. The study was eventually completed within a narrower scope than originally planned.

### The client's background and perspective

A woman in her mid-thirties described that her life history had been 'full of trauma since the beginning'. She was born into a disadvantaged family in the former Soviet Union just before its collapse. Physical, mental, and sexual abuse were prevalent in both her family, extended family, and community. In addition, there was alcohol and drug abuse in the family.

At the age of three, she witnessed her mother cutting her wrists and jumping down from the balcony of a four-story building. She also witnessed the aftermath of the fall. Her mother did not survive, and at the age of 29, her father became an overwhelmed single parent, lacking the necessary skills to raise her and her two brothers. The father 'did not know how to cook, not even how to make tea'. She described the father as 'very aggressive'.

She was haunted by these events, unable to properly understand her history. She 'asked herself every day why it happened'. Her childhood appeared to her as 'terrible': first her father had beaten and abused both her mother and her, then her mother had died, and after that the beating continued. Not only had her father beaten his three children, but they were also beaten by their extended family, including their uncle and aunts. They were 'beaten non-stop by everyone', their father's relatives as well as their mother's relatives.

She 'felt unloved', yet partially blamed herself for the events, especially for not being able to protect her two younger brothers. Life felt like 'agony'. Both of her brothers ended up in psychiatric care for two decades, with one of them diagnosed as schizophrenic. Her younger brother was 'tortured', including sexually abused by many males from outside the family; she said that this had caused the brother to become homosexual.

Around the age of twenty, she felt so much bitterness and hate towards her father that she acquired a partner who belonged to the local mafia. Her intention was to ask the mafia to kill her father. 'It came all the way to this', she commented, 'because he was the reason my life was ruined'. She felt 'tortured, sad, and bad', as well as guilty about what had happened to her brothers. In addition, she felt anger towards her mother for abandoning her and leaving her 'not in good hands'.

Eventually, in her early thirties, she left her country of origin with the intention of changing her life for the better. She was 'holding on to the idea of peace', as she 'knew that some day, forgiveness would come', that she 'had to forgive, and that one day she would, if possible'. Her intention was thus to somehow release herself from these traumatic memories and find forgiveness.

Soon after that, she encountered a female facilitator who worked with 5-MeO-DMT. Her first experience with psychedelics was with 5-MeO-DMT in 2018, five years before the interview. She described that in her first session she 'felt her lungs open, and for the first time in her life, she was able to take a deep breath, and since that moment, everything was different'. In the first session, she felt 'a terrible, ugly, heavy energy' that was related to the collective state of the world, 'the world of lies'. She saw how she had been a part of this oppressive collective energy without means to escape it, as if 'drowning in a pool of negativity from everyone around her'.

In the session, she could see her father's situation at the time of the death of his wife, having been left with three little kids. She acquired an understanding of her father's situation and perspective during her childhood. She could see how her father had been severely traumatized as a child, had not seen it or had not found 'a way out', and had ended up passing it on.

After she opened her eyes, 'the colors felt different and more intense, feelings were different, and she as a whole was different'. The session initiated a long process of 'integration', during which previously dissociated memories began

appearing in her consciousness, 'on the surface'. She described that she 'naturally fell into the process of integration', during which she gradually processed these memories and the related emotions as she 'had to solve them'. She commented that it 'really helped, and after that came the forgiveness'.

The effect felt strong in the first three months after the experience, and particularly strong in the first month. During this time, she kept a journal of 'the very different and various kinds of emotions that were surfacing'. As she was writing, she felt 'electricity all over her body'. The process was 'long and extended perhaps even to the current day'.

The second session, carried out approximately six months later, produced a very different experience. She was taken into a space in which she felt 'light and warm inside'. The experience felt like 'a lullaby of the clouds, an embrace of kind energy and pure love'. She felt like she was 'in a dream' in which 'someone was calling her'.

As a result of this new perspective, she finally acquired an understanding of the entirety of her history of trauma, an understanding of her childhood as a whole, and an understanding of the reasons behind the death of her mother. She could see everything in perspective: what had been the causal relationships resulting in her childhood being as it had.

Also in the second session, memories of sexual abuse surfaced. She recalled having been chronically, for years, abused by the father, her schizophrenic brother, and a much older male outside the family. She described that before the session, the issue had been 'so unpleasant that she had completely blocked it from her mind'. Under the influence of bufo, she realized that 'a voice in her head' had incessantly been denying the issue.

I realized that in my mind, I had always been repeating to myself, 'That did not happen; it was not real; I want to forget it'. And then, suddenly, I remembered.

Through understanding all this, she became 'able to forgive herself and find a bigger meaning'. In her view, psychedelics provided 'a fast lane to understanding complex issues'. They functioned as 'eye-openers but with closed eyes', allowing one to fully understand how everything was connected.

Every person who is traumatized or abandoned by their parents will necessarily traumatize others. Before the treatment, I was traumatized, and I would have traumatized others. I hadn't healed yet. Now it is different. I saw the childhood traumas of my father; they were heavy. Through this, I understood how he passed on all that to us, his children. If I had had a child before bufo, I am sure that I would also have inadvertently passed on my own traumas to my children. But now that I really am free and feel free from all of this, I know I could have a happy motherhood.

There had been two additional sessions with bufo, but the most important ones had been the first two. The latter two had merely deepened the process and produced 'more opening' and feelings of love. In addition, she had stopped consuming milk and alcohol and given up tobacco. Her relationship to money had changed, and her 'ego had disappeared ... it was now only necessary for employment-related issues'.

Bufo connected me with universal energy. Ever since the first session, I have always felt connected to it. Before that, life felt like a heavy struggle. Psychedelic experiences with bufo will definitely bring a change in life. Now I feel good non-stop. I feel connected and relaxed. In the last two sessions, love was flowing into me, making me feel refreshed. I found out that I don't need to push things. If something is not going as planned, then it is not meant for me, and I don't need to push it. That makes me feel very good because I'm always just going with the flow, relaxed.

Of the other psychedelics, she had experienced psilocybin and ayahuasca. Psilocybin mushrooms had 'showed her that she had something to lean on, that she was protected, that she could feel safe, that she had a protector or a guardian'. Ayahuasca had simply 'teached her self-love: how to love herself and also how to care about herself'. With ayahuasca, there had also been processing of traumatic events.

She had also experienced *kambo*, an immune system activator or enhancer originating from Amazonian frogs (den Brave et al., 2014). Kambo 'cleared her of excessive reactivity to stress'. Before that, on encountering stressful events, she had started either crying or euphorically laughing. After kambo, this reactivity disappeared, and she felt 'calm and balanced'.

She commented that she had fully processed her traumatic memories. Had she not, she would not have been able to discuss them in this kind of interview, as she would have 'felt too stuck' and it would have been 'too hard to discuss them'.

### The facilitator's background

The female facilitator in her early 40s had acquired approximately eight years of experience in using bufo in groups and by herself, as well as facilitating bufo sessions for clients. She considered bufo 'the awakening of queens and kings ... an elixir to reawaken our royal consciousness'. It allowed one 'to return to reality, the knowledge of what

it meant to be alive, into the consciousness of how life was like a symphony, working in synchrony'. It also awakened one to 'the abundance of existence itself, to its harmony and fulfillment'. Due to the immediacy of the effect, if one had an intention to recover something from one's subconscious, one could reach it in seconds.

Initially, she had experienced the medicine facilitated by others, but she soon discovered that it was more productive to do it on her own. Bufo excelled as a method of recovering 'subconscious hard stuff', including the imprints of sexual abuse. It was 'simultaneously strong but gentle', holding the space for a person 'in exactly the right way', producing 'amazing results'.

Children, being innocent and needing to believe in the goodness of people, pushed memories of early sexual abuse into their subconscious. Such memories only emerged as incomplete, incomprehensible flashbacks. Yet, the memories had effects on the children's behavior as adults: they felt blocked, and their relationships repeatedly failed, always in the same manner. While many psychedelics could make these memories surface, only bufo could 'really chop them off'.

In addition to the resolution of sexual abuse, bufo worked well for other kinds of subconscious blockage. In a person presenting with such a blockage, large doses caused a 'whiteout': after a session, they did not remember anything, and the subsequent integration process became 'mysterious'. This practice prevented them from 'receiving the gift of bufo in full'. Going through something without awareness of it did not facilitate the achievement of 'grounded clarity'.

Therefore, her way of working with bufo was gradual, step by step, with an appropriate dosage and intention. There needed to be clarity of what was being worked on and what the client wanted to transcend. With smaller doses, the facilitator could observe how clients' reactions to bufo differed. Later, the use of higher doses could be necessary. With experience of the process, clients could relax and 'let go, surrender', gaining benefit from higher doses.

For some, a bufo session once in a lifetime was more than enough. Regardless, each additional session with bufo gifted one with something extremely beautiful. When one really studied bufo and knew how to use it, it was 'an excellent tool and the best medicine to travel with'. It was not addictive and was actually used clinically to treat people addicted to other substances, such as synthetic drugs and cannabis. Yet it was also possible to abuse bufo by taking too much of it or too often. The proper way was to take it once in a few months at most in order to really ground the process.

Grounding a bufo experience meant 'actually building something on this Earth: new style, new habits, education, business, relationships, poetry, painting, whatever'. Something material needed to be born from the previous experience before returning to the nondual experience. Only then could one progress further. Manifestations of grounding could also be internal—something new built inside oneself. It could mean understanding oneself better, exploring previously hidden parts of oneself, understanding more dimensions, furthering one's self-knowledge, or exploring the limits of one's awareness or consciousness. It was 'the inner yoga of consciousness': about being able to work on consciousness itself.

Ways of working with consciousness differed by the individual. The facilitator was happy with her way; others' ways could also be great. Regardless, she had already seen a lot in her years, including ways that were too harsh and lacked sensitivity. Sensitivity, correctly understood, manifested as appreciation of the medicine. Bufo was intensive but precious—something to be truly respected.

Six weeks before the interview, she had experienced her most potent session ever. She attributed this to 'having achieved an increased capability of surrendering to the experience'. After taking a dose on the upper end of the range, she resided in the nondual state for longer than usual. Her typical experience involved 'traveling through all the dimensions of being human: from conscious personality to subconscious and further onto the source of everything, and then back again'. The larger dose caused her to skip these dimensions and travel directly to the source itself. She 'fused with the source, which was emerging from itself but also collapsing into itself, while simultaneously also being static'. There were two polarities: inflow and outflow; regardless, it was also simultaneously unmoving. Everything known and unknown by then dissolved completely; it was a total dissolution of anything and everything, while she was still experiencing it and aware of it all happening. She did not exist, but she still recognized herself in a state of total surrender.

### The facilitator's perspective on the present case

In the facilitator's understanding, the death of the client's mother was caused by her inability to stop the sexual and other abuse of her children. The children remained in that 'really toxic environment' and the abuse continued until their late teens. The events of abuse created 'an imprint' or 'an entity' of the events inside the client. For the facilitator, it was difficult to discuss the issue 'without getting drawn into that space'.

Such a situation caused one to 'lose their innocence and their inner self'. They became a shell—a personality without a core. Such a person was 'really in trouble', filled with 'so much fear that they were even afraid to talk', feeling as if they had lost all their power. With this client, the facilitator had 'really needed to get involved'. Facilitating bufo sessions for less traumatized people was often about managing extreme energy and intensity. In contrast, for people who had lost their core and power, it was the opposite. Holding space for such a client was challenging because it was 'about working with the void'. The facilitator needed to 'intensively stay at the void, at the nothingness', and still do the surgery and the healing process. Each time she worked with the void, she learned more about it. The essential factor was trust: trust in the source itself, trust in 'the soul of the client', trust in the facilitator's capacity to connect with the soul of the client; her ability to say:

Hey sister, I'm here. Do you hear me? I'm here with you, holding your hand and saying, 'You still exist'.

Since one still existed, one had a 'connection to Christ Consciousness, or the womb of the mother goddess'. One was still connected to a source of energy from which one could 'refill' oneself and regain one's wholeness and power. That power would then remove 'the cancer, or whatever it was, that strange entity'.

In the case of this client, the entity was 'also connected to past life memories' (which might be understood as a history of sexual abuse in her ancestors). The pattern of these memories had been replayed in her childhood. At the time of the abuse, the child had 'connected the dots together and created the entity by herself'. For the child, this solution, i.e., the creation of an entity, 'had been easier than not doing it, but not easy'. Subsequently, the child lacked 'any power to say no'.

Initially, the facilitator did not know the exact nature of the client's problems. In the first bufo session, the facilitator was unable to pinpoint the issue. The client appeared unable to experience the source itself; instead, she resided on the level of the subconscious. In the facilitator's words:

The first time, I didn't know what it was. I was like, 'Oh my God, this is something weird that she's digesting in her subconscious'. She definitely couldn't rise up to the source itself. I couldn't really recognize what it was about. I felt like a mother, simply holding space for her so that she could chew the stuff inside of her.

In the second session, the facilitator recognized a behavioral pattern of a regression to a child-like state, complemented by expressions of disgust. Previously, she had recognized the same pattern in women who had been sexually abused. The session was extended; it took an hour for the facilitator 'to find a way to get inside her process and call her soul'. She tried to 'slowly call her up, ask whether she really wanted to remain in this state forever, and call her back to her true essence'. Eventually, the client 'separated from the entity'. However, she 'immediately re-merged with it, dissolved completely in the entity, soaked in it'. For the facilitator, it was the first time she observed such a process; it felt 'quite exhausting' because she could not foresee what was going to happen.

Eventually, she felt that it was time; she 'called her soul and worked there'. Slowly, together, they separated her from the entity, and she became aware that she was not dead. Although the entity was part of her, she was not dead. The entity was like 'an extra organ of her, but it was not her'. The extra organ could also reside outside of her body. In the end, they 'got rid of it; it was amazing'.

In the second session, she was more active and more open with regard to her body. I could definitely see that it was about something sexual that she felt disgusted about. She did not feel comfortable with it. There was no joy. It was as if she wanted to cover up something, hide from something she didn't want to do. It was about some sexual energy she did not want to receive but was incapable of saying no to. It was a really strong ongoing expression, lasting for about seven minutes.

I simply witnessed the process, at times saying something to see if she would react, with the intention of increasing her awareness of what was going on in her process, in case she would be capable of making conscious decisions during the process. At one time she was crying, but at the end she was laughing, yet it was a very neurotic kind of laughter—the kind of laughter that tried to cover up something. Then again, it turned into crying. She remained tense about her situation; she could not relax.

But by then, we had already identified the problem and talked about it afterwards. She initiated a very conscious process of eight months.

The client recounted 'a clear memory of someone, perhaps a priest', who had suggested an experiment in which people first became separated and then learned how to reconnect. Initially, she had been against such an experiment, feeling that its emotional cost would be too high. Regardless, the priest had initiated the experiment, with the process then 'proceeding on its own', leading to 'progressively more problematic situations'. She felt extreme anger for having been unable to stop this experiment on herself.

The facilitator described her impression about sexual violence to her client, who subsequently recognized the issue. The client required eight months to process or 'integrate' the session. She was estranged from her sister and father but eventually initiated a discussion with them about 'the very sick situation' as well as the death of their mother. When she eventually returned, she told me, 'I have to tell you how far it went: the recovery of our relationship with my family'. I was crying when she told me what had happened. It was amazing. I couldn't believe it.

She asked me, 'What is your intention now?' And I replied, 'Now we need to support your femininity, improve your self-esteem, so that you become a healthy woman who can dress yourself as a woman, put on some lipstick if you like, and open up for the male energy and start exploring healthy relationships with men, so that for the first time in your life, you can enter a relationship, discover who you are as a woman, approach a man, attract male energy, and feel free.

And yeah, we did it, continued with bufo sessions, and it was so beautiful. It was really amazing to see how her emotions surfaced. The hard part was not that long. I saw her building the 'power of no' inside her, building up the recognition that enough is enough. In the later sessions, her body movement was different from the first ones. There was less resistance to experiencing life, but also less of the impression that she would be incapable of resisting something unwanted. It was about enforcing her boundaries. I saw her gradually arriving at her own power.

After that, her laughter was different, and she could express joy. I saw it in her eyes. While she was still in the process, she opened her eyes really wide and looked around her, as if thinking, 'Oh, I am here, I am here, ah, ah!' Her breathing turned orgasmic. She was beginning to accept her sexuality and her orgasmic energy, feeling that it was okay. It was so beautiful to witness that. Her crying was no longer painful but releasing, peaceful. I realized that at that point, the imprint of her abuse had largely dissolved.

In the course of two years, the client and the facilitator 'completely cleared her of all traces of the abuse'. The client could digest the issue to such a length that she, her sister, and their father 'became friends'.

Later, she reported to me how her life had changed. She and her sister had reconnected with her father. They recovered their friendship and became a family again. They live in different countries, but they can now have a regular discussion, discuss their past, and also visit each other. For one human being, I think this outcome was like, wow. I mean, people don't usually dissolve trauma imprints of this kind, so it was amazing.

When a person is becoming whole, grounded, satisfied, recovering her self-esteem, capable of creating life and deciding for herself, feeling the power that she can manifest what she intends to manifest with the right steps, without frustration; it is royal.

They also utilized non-pharmaceutical methods for relaxation and stress relief. Once, the client 'experienced group consciousness, connected to Christ Consciousness, and completely merged in love'. In that state, she had possessed 'no problem of being a single energetic body with others, one of the super-connected entities, experiencing a connection between brothers and sisters'.

In summary, the treatment was initiated approximately five years before the interview, and it spanned a period of two years. For the following three years, her situation was stable without further treatment.

### The nature of entities

In the facilitator's understanding, an 'entity' was a personality structure that a person could create in an unacceptable and intolerable situation. The function of the entity was to cover feelings related to that situation. Young, undeveloped individuals were particularly vulnerable to developing them.

If there was a lot of internal monologue about an unsolvable situation, the monologue could 'build up its own identity', and subsequently 'have its own mind'. The core of the entity was emotional tension, i.e., a conflict. The entity was established by the energy of thought constantly focused on the issue. The focused thought consolidated the entity into 'a non-stop presence', and the entity became 'an energetic parasite'.

Such entities were thus self-produced internally. Their purpose was to be 'an answer' or a (suboptimal) 'solution to a hard problem'. The parasitic entities 'wrapped the inner dialogue into themselves'. They were not only emotional but also cognitive constructs. Under the influence of bufo, these entities could surface, and they could be scary.

Parasites could also originate from the outside; such cases could be particularly scary. Humans resided 'in dimensions that were like a jungle full of entities'. Also, humans themselves could be considered entities with internal power to influence their surroundings. The entities continuously interacted with each other; it was 'like chemistry'. All entities had the intention to influence others.

Interactions could be either collaboration or manipulation. When collaboration went too far, it became manipulation. It happened when someone wanted to be a guest in the space of another entity for too long or in an inappropriate way. The motivation for this was to obtain excess benefits. In an appropriate collaboration, both parties benefited from each other. An example of this was mutual love. However, when benefits flowed in one direction only, the situation became exhausting for the other. The one receiving excess benefits became a parasite. Such a situation could involve physical goods, but it could also be about emotional benefits only: a parasitic relationship.

Besides happening on a physical or emotional level, a parasitic relationship could also exist 'in higher dimensions'. The one being exhausted could sense it but could not be consciously aware of it. Such draining happened subconsciously. Others could also sense it; it appeared as an unidentified issue, which implied that the person was not completely free because something was disturbing her presence.

However, 'under strong enough a light', these issues showed up. Bufo produced this light and functioned 'as binoculars or a microscope'. A bufo session equaled to putting oneself under the microscope. One could see all the parasites and perhaps 'freak out'.

Each medicine had 'its own spirit', i.e., its own specific characteristics in which subconscious aspects exactly it revealed and in which manner. Psychedelic therapy was 'sacred surgery', which could heal. Yet, not everyone attending psychedelic ceremonies was interested in healing themselves or supporting the healing process of others. They could merely be interested in exploration and finding things out. This could also be beneficial. However, at times, such people, or their entities, could also want to gain something from the others in the circle.

The facilitator had witnessed a male client being 'possessed by very active and energetic entities involved in creation on the physical level'. Some of them represented 'spirits of nature: strong and beautiful in their own structure, consciousness, and activity'. There were also 'very active entities related to fire and involved in processes of destruction'.

The facilitator conducted a 'meta-level observation using a circular container', enabling her to 'hold the space' without falling into the trap of fear. A higher dose of bufo caused the man to express the presence of these entities in him. She was aware that the entities could also 'come out' and was prepared for that.

The client's expression of the entities was intense, also in the physical sphere. He was not lying down on the floor but standing on his feet, being 'super active, like some kind of supernatural machine, with strong movements'. As different entities took turns taking over him, the nature of his movements changed each time. Also, the man's voice varied according to the 'shapeshifting'.

To her, the man's presence appeared as though there would have been 'a huge fire in front of me, wanting me to serve its needs'. She was astonished but also unmoved, 'like a statue or an archangel', just witnessing the process. The man's energy was trying to reach her through his eyes; she rejected eye contact. Her role was to remain nonreactive and to hold space for the man to decide what he wanted to do with these entities and to deal with them in any manner he felt appropriate.

In a discussion after the session, the man recognized these forces or entities in him. She mentioned that he needed to find the right relationship with these entities so that he could be beneficial to the world instead of being parasitic. Everyone 'needed to be useful to the Creation, together'. She left it up to the man to decide how to proceed. The man lived in another country and did not visit her again.

### Christ Consciousness

In the facilitator's view, the future of humanity was characterized by a strong polarity. A part of humanity was 'approaching Christ Consciousness' (Barnard, 2022; Yogapedia, 2020); this was also what she personally craved. Nature was 'going its own way into the higher frequencies'. For those capable of joining this process, it was amazing, like 'telepathy on Christ Consciousness'. That consciousness did not refer to the stories of Christianity, which she considered 'beautiful romantic drama'. Instead, Christ Consciousness referred to 'the womb of the soul, where we nest in our purity and innocence', a state of being 'God-like in the shape of little entities'. Christ Consciousness loved itself through diversity. On the level of that consciousness, people had no problems relating to each other; it was the level of pure love.

Humans possessed the innate capability of being in this state. Such a state 'had been achieved planet-wide multiple times', and many people had experienced it in smaller contexts. The state was 'like a radio station: you just catch the frequency and you are in it'. With effort, one could reach this level easier and more often. Entheogens, i.e., psychedelics, were one way of approaching it. With intentional, shared effort, the world as a whole could accelerate the process of approaching it.

Another part of humanity, however, was becoming increasingly disconnected from that wisdom or consciousness, involved in 'strange affairs; attempts to produce perfection with weird methods fully disconnected from the wisdom of the soul and nature'. They resided in deep unconsciousness. It appeared as if there was perhaps some allencompassing entity 'with an appetite for life itself' that just wanted to embody it, merge with it, but 'without letting life be what it is'.

People under its influence appeared to lack the capability for self-reflection. They could not see themselves or their actions from an outsider's perspective. They were infiltrated with entities that were both destructive as well as

self-destructive, but that still 'craved after holiness'. Regardless, they were 'so dark that they no longer believed in their ability to reach the light'. To counteract these entities, there was a need to set clear limits and strong boundaries, a need to say, 'No, you are not crossing this line'.

## Discussion

In an ethnographic interview, whether conducted in person or through video, seeing the actual outcome, i.e., the person's behavior and 'energy', constitutes a convincing proof of the validity of the outcome. Unfortunately, the experience often translates poorly into textual form, with the readers only seeing a shadow of the person and the outcome. Hopefully, this case was obvious enough for its essence to be communicated clearly.

Medicalization has led to the general assumption that psychotherapy and related pursuits should belong to the spheres of academic biomedicine/psychiatry and academic psychology. This may be a mistake; medicalization itself may belong to the class of all-encompassing entities that refuse to let life be what it is. The medical community often appears highly distrusting and biased against therapists without conventional medical education. This study featured a case in which conventional methods would likely have produced no effect whatsoever. Clinical practice may be at least a decade behind this facilitator in innovation and experience related to the treatment of severe early trauma propagated by transgenerational trauma prevalent in most societies. Such facilitators thus have an important role in society.

The essential factors in producing these outcomes include integrity, intuitive understanding, deep personal experience of the utilized substances, and mutual trust. Another central factor is the client's intention; in this case, it was to forgive. 5-MeO-DMT might be unique in its capacity to completely erase trauma triggers associated with memories of traumatic events. Regardless, the role of the facilitator may be essential. Two different scenarios were mentioned: the need for in-session intervention when working with 'the void', and the need to avoid intervention when working with expansive energy. While the presence of a facilitator might not be necessary for favorable outcomes to be reached with 5-MeO-DMT, it is certain that an incompetent facilitator can easily and routinely prevent favorable outcomes or induce adverse outcomes; numerous examples of this exist in the context of 5-MeO-DMT facilitation.

The concept of nonduality refers to an experience of radical unity with everything, so that the distinction between the self and objects dissolves; in other words, to an experience lacking the subject-object structure:

A genuine understanding of nondualism proceeds from experience, not rationality. Thinking itself is largely a dualistic enterprise. Dividing experience into categories, objects, systems, etc., is thoroughly dualistic. There is always an apparent divide between the subject who is thinking and that which the subject is thinking about. Every object of the mind is precisely that: an object that stands in contradistinction to the subject. Nondual experience, then, is not about thought. This also implies that nondual experience is not the result of any form of sustained study. You cannot learn nondualism. It is not a matter of sorting out your thoughts or beliefs. It is not about studying enough esoteric systems, learning new meditation techniques, or engaging in clarifying philosophical debates. Nondual realization is something that happens to you; it is not an accumulation of beliefs, thoughts, or ideas. In fact, it is the stripping away and relinquishing of all thoughts, beliefs, and ideas. In many respects, it is the complete opposite of sustained intellectual endeavor. Nondualism is the genuine discovery of how things actually are. It is a discovery that can only be made by individuals, for themselves, and by themselves. It cannot be learned. It cannot be taught. It cannot be transmitted from one person to the next in the way that concepts, ideas, and beliefs can. It can only be directly experienced. (Ball, 2012)

Nonconceptual experience could be considered to be outside the scope of conventional science. Currently, science is the dominant paradigm for understanding the world. Huge resources are spent refining concepts. Nondual experience may question this paradigm. If problems can be solved nonconceptually, concepts and science become redundant. The assumption that everything is explainable on a conceptual level may be invalid. This also implies that the pursuit of explicating 'the mechanism of action' of 5-MeO-DMT may be futile. The utility of explanations based on conceptual abstractions, such as receptors or bioelectromagnetic phenomena, may be questionable.

The features of 5-MeO-DMT imply a 'minimalistic' perspective that differs from, for example, the culture around ayahuasca. A typical 5-MeO-DMT process with a sufficient dose consists of a near-immediate 'nondual' (nonconceptual) phase, followed by a gradual decline in intensity, during which 'dual' (conceptual) biographical-chronological processing may occur. With an overdose, a therapeutically counterproductive 'whiteout' may occur. With too low a dose, the nondual experience of 'connecting with the source' is not reached. Also, as described, somatic tension may prevent the effect, while somatic release, relaxation, or 'surrendering' may allow for the effect.

The client described biographical aspects typical of a 'dual' psychedelic experience. Similar biographical insights can be achieved in psychotherapy without the resolution of the related trauma triggers. Patients often gain a detailed understanding of all relevant causal relations, with practically no effect on their behavior or symptoms. Instead, such repeated, scheduled rumination often exacerbates their symptoms. The most consequential changes in the 5-MeO-DMT sessions were thus likely actuated on a purely somatic level during the nondual phase. Oschman has presented interesting hypotheses regarding possible mechanisms (Oschman, 2006, 2012, 2016).

The 'dual' psychedelic experience typically consists of visions that give rise to thoughts. The validity of such visions is often difficult to determine, and it is easy to get lost in interpretations. The typical experience of 'oneness', as in 'being one with the ocean', also involves objects (the ocean). Nondual experience may transcend this, with a lack of concepts and visions in need of interpretation.

If the brain were, in a rough and simplistic manner, divided into three layers: the neocortical conscious-cognitive layer, the limbic subconscious-emotional layer, and the unconscious-instinctual layer, 'dual' experience involves mostly the first two, whereas 'nondual' might mostly involve the third layer, the 'lowest' or 'reptilian' one. On this layer, there might not be linear time, causality, or autobiographical memory. Instead, this layer might concern survival reflexes that do not subjectively form a continuum due to the lack of autobiographical memory. Subsequently, experiences on this level might appear random and 'flashback-like'. They might be triggered by external events and interrupt the processing on the upper layers. From the perspective of the upper layers, these reenactions might appear unexplainable or incomprehensible, as well as uncontrollable.

In this model, severe trauma involving life-threatening situations would concern the lowest layer responsible for maintaining low-level somatic homeostasis and fight-flight-freeze reactions and possibly also involved in the 'fawn' reaction (attempting to please the aggressor; see Walker (2013)). Regardless, instinctual reflexes also involve objects to a degree. The effect of 5-MeO-DMT might be related to anesthesia: a transient shutdown of all layers in order to reset the lowest layer, which may encompass not only the brain but the whole body through the fascia network or be spread throughout the body in individual cells (Burrill and Silver, 2010; Oschman, 2006; Yehuda and Lehrner, 2018). Concerning this aspect, 5-MeO-DMT may have similarities to ketamine and general anesthesia; in one study, either ketamine or general anesthesia alone approximately halved MÅDRS depression scores (Lii et al., 2023). Another study suggested that the psychoactive effects of 5-MeO-DMT were associated with the integration of waking behaviors with sleep-like spectral patterns in the local field potentials of the brain (Souza et al., 2023).

5-MeO-DMT may induce 'reactivations', a perhaps unique property of 5-MeO-DMT. Ortiz Bernal et al. discussed the phenomenon, noting that it may most often represent a neutral or positive byproduct of the acute 5-MeO-DMT experience (Ortiz Bernal et al., 2022). The authors noted that reactivations may be a contributing factor to long-term therapeutic benefits.

According to the interpretation adopted in the current study, in a reactivation, the treatment process continues after the pharmacological effect has already subsided. A reactivation can be triggered by classical psychedelics but may rarely or briefly occur spontaneously. Regardless, the reactivation phenomenon can be utilized to extend and intensify treatment, so that a session with classical psychedelics can 'replay' features of the more effective 5-MeO-DMT session, but with lower intensity and for a longer duration.

When the treatment is extended in this manner, reactivations typically cease to occur. For example, a psycholytic dose of LSD (e.g., 50 µg) a few days after a 5-MeO-DMT session might produce an optimal combination treatment in which the 'replay' session functions as a 'psychedelic integration' session. Reactivations might thus be best understood as a delayed release of trauma accumulated on the instinctual layer (for comparison, see, e.g., Dourron et al. (2023)).

In this case, in addition to 5-MeO-DMT, ayahuasca and psilocybin sessions were used (for an overview of these substances, see, e.g., Turkia (2022a,b,c, 2023a,b)). Reactivations or adverse events were not mentioned in the interviews. The case also illustrated how experienced facilitators diagnose clients' issues through behavioral pattern matching that is often instantaneous but occasionally requires prolonged observation, like in this case.

The Multidisciplinary Association for Psychedelic Studies (MAPS) founder, Rick Doblin, noted that his 5-MeO-DMT experience in 1985 made him realize that everyday life was largely about habitual patterns that narrowed our vision and were taken as fixed, but they were actually not fixed (Rogan, 2023). 5-MeO-DMT took him 'back to the moment of creation' and helped him 'realize that the new can enter at any moment'. He felt that this particular experience had played a large role in the current success of MAPS in furthering, among other projects, MDMA therapy, because the experience had helped him realize that whenever he felt blocked or stuck, he could try to find something new to enter the picture and that there was a perpetual ability to connect with creation.

Research on 5-MeO-DMT has recently accelerated, with the current focus being especially on treatment-resistant depression. In 2023, Reckweg et al. presented the results of a phase 1/2 trial to assess the safety and efficacy of a vaporized 5-MeO-DMT formulation in patients with TRD, with the efficacy measured as the proportion of patients in remission (MÅDRS  $\leq 10$ ) (NCT04698603) (Reckweg et al., 2023; Terwey, 2020). In the phase 1 part with eight patients investigating the safety of a single dose of either 12 mg or 18 mg, two out of four (50%) of patients administered 12 mg, and one out of four (25%) administered 18 mg were in remission at day 7. The mean MÅDRS change from baseline to day 7 was -21.0 (-65%) and -12.5 (-40%) for the 12 and 18 mg groups, respectively.

In the phase 2 part, eight different patients were administered up to three increasing doses of 6 mg, 12 mg, or 18 mg within a single day, using an individualized dosing regimen. Seven out of eight patients (87.5%) achieved re-

mission at day 7 (p < 0.0001). All remissions were observed from day 1, with 60% of remissions observed from 2 h. The mean MÅDRS change from baseline to day 7 was -24.4 (-76%). Reckweg et al. concluded that the treatment was well tolerated and provided potent and ultra-rapid antidepressant effects. Individualized dosing with up to three doses on a single day was superior to single dose administration. Additional trials were ongoing (GH Research, 2024a,b).

In the beginning of 2024, the Usona Institute was analyzing the data from their recently completed phase 1, firstin-human, randomized, double-blind, placebo-controlled, single and multiple ascending dose study to evaluate the safety, tolerability, and pharmacokinetics of intramuscular injection of 5-MeO-DMT in healthy volunteers (NCT-05698095) (Usona Institute, 2023).

At the end of March 2024, Beckley Psytech announced positive initial data from Phase IIa study of BPL-003, a novel, synthetic 5-MeO-DMT benzoate salt candidate, for treatment-resistant depression (NCT05660642) (Beckley Psytech, 2024). The results indicated a 45% remission rate 12 weeks after a single, intranasally administered 10 mg dose of BPL-003. It thus appeared to align with the above data (Reckweg et al., 2023), suggesting both good initial efficacy and the need for an individualized multi-dose regimen.

### Conclusions

Uncommon outcomes may be achieved with uncommon methods. In the hands of experienced facilitators, 5-MeO-DMT may represent the ultimate efficacy in the treatment of extreme trauma (PTSD and C-PTSD). Facilitation of 5-MeO-DMT sessions requires high sensitivity and excellent judgment, which may only be achieved through years of personal experience. In many ways, such facilitation might be considered a form of art. Further experimentation and research are warranted.

The described method may allow for positive changes in societies that currently appear barely imaginable. Harmful patterns propagating from generation to generation that have been considered unchangeable—'set in stone'—may become plastic. Similar to how psychedelics induce neuroplasticity on the level of an individual, a widespread application of 5-MeO-DMT therapy may allow for 'socioplasticity', a societal reorganization that allows for unforeseen levels of well-being.

Abbreviations:	The following abbreviations were used in this manuscript:
5-MeO-DMT	5-methoxy-N,N-dimethyltryptamine
C-PTSD	complex post-traumatic stress disorder
DMT	N,N-dimethyltryptamine
LSD	lysergic acid diethylamide
MDMA	3,4-methylenedioxymethamphetamine
MÅDRS	Montgomery–Åsberg Depression Rating Scale
PTSD	post-traumatic stress disorder

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#### References

- Ball, M.W., 2009. Being Human: An Entheological Guide to God, Evolution and the Fractal Energetic Nature of Reality. Kyandara Pub., Ashland, Ore.
- Ball, M.W., 2012. All is One Understanding Entheogens and Nonduality. Kyandara Publishing, Ashland, Oregon.
- Ball, M.W., 2017. Entheogenic Liberation: Unraveling the Enigma of Nonduality With 5-MEO-DMT Energetic Therapy. Kyandara Publishing, Ashland, Oregon.
- Ball, M.W., 2022. Facilitating 5-MeO-DMT: An Anthology of Approaches to Serving The God Molecule. Kyandara Publishing, Ashland, Oregon.
- Barker, S.A., McIlhenny, E.H., Strassman, R., 2012. A critical review of reports of endogenous psychedelic N,N-dimethyltryptamines in humans: 1955-2010. Drug Testing and Analysis 4, 617–635. https://doi.org/10.1002/dta.422, doi:10.1002/dta.422.
- Barnard, G.W., 2022. Liquid Light: Ayahuasca Spirituality and the Santo Daime Tradition. Columbia University Press. https://doi.org/10.7312/barn18660, doi:10.7312/barn18660.
- Beckley Psytech, 2024. Beckley Psytech announces positive initial data from Phase IIa study of novel 5-MeO-DMT formulation BPL-003 for Treatment Resistant Depression. https: //web.archive.org/web/20240408142112/https://www.beckleypsytech.com/posts/ beckley-psytech-announces-positive-initial-data-from-phase-iia-study-of-bpl-003-for-treatment-resistant
- den Brave, P.S., Bruins, E., Bronkhorst, M.W.G.A., 2014. Phyllomedusa bicolor skin secretion and the Kambô ritual. Journal of Venomous Animals and Toxins including Tropical Diseases 20, 40. https://doi.org/10.1186/1678-9199-20-40, doi:10.1186/1678-9199-20-40.
- Burrill, D.R., Silver, P.A., 2010. Making cellular memories. Cell 140, 13-18. https://doi.org/10.1016/j.cell. 2009.12.034, doi:10.1016/j.cell.2009.12.034.
- Davis, W., Weil, A.T., 1992. Identity of a New World psychoactive toad. Ancient Mesoamerica 3, 51–59. https://doi.org/10.1017/s0956536100002297, doi:10.1017/s0956536100002297.
- Dean, J.G., Liu, T., Huff, S., Sheler, B., Barker, S.A., Strassman, R.J., Wang, M.M., Borjigin, J., 2019. Biosynthesis and extracellular concentrations of N,N-dimethyltryptamine (DMT) in mammalian brain. Scientific Reports 9. https://doi.org/10.1038/s41598-019-45812-w, doi:10.1038/s41598-019-45812-w.
- Dourron, H.M., Nichols, C.D., Simonsson, O., Bradley, M., Carhart-Harris, R., Hendricks, P.S., 2023. 5-MeO-DMT: an atypical psychedelic with unique pharmacology, phenomenology & risk? Psychopharmacology https://doi.org/10.1007/s00213-023-06517-1, doi:10.1007/s00213-023-06517-1.
- Ermakova, A.O., Dunbar, F., Rucker, J., Johnson, M.W., 2021. A narrative synthesis of research with 5-MeO-DMT. Journal of Psychopharmacology 36, 273–294. https://doi.org/10.1177/02698811211050543, doi:10.1177/02698811211050543.
- F.I.V.E., 2023. 5-MeO-DMT information and vital education. https://web.archive.org/web/20230623042543/ https://five-meo.education/.
- Friedberg, L.M., Sen, A.K., Nguyen, Q., Tonucci, G.P., Hellwarth, E.B., Gibbons, W.J., Jones, J.A., 2023. In vivo biosynthesis of N,N-dimethyltryptamine, 5-MeO-N,N-dimethyltryptamine, and bufotenine in E. coli. Metabolic Engineering 78, 61-71. https://doi.org/10.1016/j.ymben.2023.05.006, doi:10.1016/j.ymben.2023.05.006.
- GH Research, 2024a. Clinical Trials. https://web.archive.org/web/20240408163942/https://www.ghres.com/ our-work/clinical-trials.
- GH Research, 2024b. Our pipeline. https://web.archive.org/web/20240408163522/https://www.ghres.com/ our-work/pipeline.
- Kuczynski, A., 2022. Why is everyone smoking toad venom? https://web.archive.org/web/ 20220120150807/https://www.townandcountrymag.com/leisure/arts-and-culture/a38687510/ toad-venom-bufo-illegal-psychedelic-drug/.
- Lancelotta, R., 2022. 5-MeO-DMT has not been found in traditional ayahuasca preparations and the combination of 5-MeO-DMT with MAOIs is dangerous. Human Psychopharmacology: Clinical and Experimental 37. https://doi.org/10.1002/hup.2839, doi:10.1002/hup.2839.
- Lerer, L., Reynolds, E., Varia, J., Blakolmer, K., Lerer, B., 2023. Incilius alvarius cell-based synthesis of 5-Methoxy-N,N-Dimethyltryptamine. Psychedelic Medicine 1, 38-42. https://doi.org/10.1089/psymed.2022. 0001, doi:10.1089/psymed.2022.0001.

- Lii, T.R., Smith, A.E., Flohr, J.R., Okada, R.L., Nyongesa, C.A., Cianfichi, L.J., Hack, L.M., Schatzberg, A.F., Heifets, B.D., 2023. Randomized trial of ketamine masked by surgical anesthesia in depressed patients. medRxiv https://doi.org/10.1101/2023.04.28.23289210, doi:10.1101/2023.04.28.23289210.
- Metzinger, T., 2024. The Elephant and the Blind: The Experience of Pure Consciousness: Philosophy, Science, and 500+ Experiential Reports. The MIT Press, Cambridge, Massachusetts. https://direct.mit.edu/books/book-pdf/2328586/book\_9780262377287.pdf, doi:10.7551/mitpress/15196.001.0001.
- Most, A., 1983. Bufo Alvarius: the Psychedelic Toad of the Sonoran Desert. Venom Press. https://ia903205.us. archive.org/30/items/bufoalvariusbooklet\_202006/bufo.pdf.
- Oroc, J., 2009. Tryptamine palace: 5-MeO-DMT and the Sonoran Desert Toad. Park Street Press, Rochester, Vermont. https://www.innertraditions.com/books/tryptamine-palace.
- Oroc, J., 2018. The New Psychedelic Revolution: the Genesis of the Visionary Age. Park Street Press, Rochester, Vermont. https://www.innertraditions.com/books/the-new-psychedelic-revolution.
- Ortiz Bernal, A.M., Raison, C.L., Lancelotta, R.L., Davis, A.K., 2022. Reactivations after 5-methoxy-N,Ndimethyltryptamine use in naturalistic settings: an initial exploratory analysis of the phenomenon's predictors and its emotional valence. Frontiers in Psychiatry 13. https://doi.org/10.3389/fpsyt.2022.1049643, doi:10.3389/fpsyt.2022.1049643.
- Oschman, J.L., 2006. Trauma energetics. Journal of Bodywork and Movement Therapies 10, 21-34. https://doi.org/10.1016/j.jbmt.2005.10.001, doi:10.1016/j.jbmt.2005.10.001.
- Oschman, J.L., 2012. Fascia as a body-wide communication system. Elsevier. chapter 2.5. pp. 103-110. https://doi.org/10.1016/B978-0-7020-3425-1.00049-0, doi:10.1016/b978-0-7020-3425-1.00049-0.
- Oschman, J.L., 2016. Energy Medicine: The Scientific Basis. Second edition. ed., Elsevier, [Philadelphia].
- Palmer, J., 2014. Articulations: On The Utilisation and Meaning of Psychedelics. Smashwords Edition, Los Gatos.
- Ragnhildstveit, A., Khan, R., Seli, P., Bass, L.C., August, R.J., Kaiyo, M., Barr, N., Jackson, L.K., Gaffrey, M.S., Barsuglia, J.P., Averill, L.A., 2023. 5-MeO-DMT for post-traumatic stress disorder: a real-world longitudinal case study. Frontiers in Psychiatry 14. https://doi.org/10.3389/fpsyt.2023.1271152, doi:10.3389/fpsyt. 2023.1271152.
- Reckweg, J.T., van Leeuwen, C.J., Henquet, C., van Amelsvoort, T., Theunissen, E.L., Mason, N.L., Paci, R., Terwey, T.H., Ramaekers, J.G., 2023. A phase 1/2 trial to assess safety and efficacy of a vaporized 5-methoxy-N,Ndimethyltryptamine formulation (GH001) in patients with treatment-resistant depression. Frontiers in Psychiatry 14. https://doi.org/10.3389/fpsyt.2023.1133414, doi:10.3389/fpsyt.2023.1133414.
- Rogan, J., 2023. #1964 Rick Doblin. https://open.spotify.com/episode/1EMSI2KxCHhbyEwCBnIfsw.
- Sepeda, N.D., Clifton, J.M., Doyle, L.Y., Lancelotta, R., Griffiths, R.R., Davis, A.K., 2020. Inhaled 5-methoxy-N,N-dimethyltryptamine: supportive context associated with positive acute and enduring effects. Journal of Psychedelic Studies 4, 114–122. https://doi.org/10.1556/2054.2019.033, doi:10.1556/2054.2019.033.
- Shen, H.W., Jiang, X.L., C. Winter, J., Yu, A.M., 2010. Psychedelic 5-methoxy-N,N-dimethyltryptamine: metabolism, pharmacokinetics, drug interactions, and pharmacological actions. Current Drug Metabolism 11, 659–666. https://doi.org/10.2174/138920010794233495, doi:10.2174/138920010794233495.
- Shulgin, A.T., Shulgin, A., 1997. Tihkal: The Continuation. Transform, Berkeley. https://www.erowid.org/ library/books\_online/tihkal/tihkal38.shtml.
- Souza, A.C., Souza, B.C., França, A.S.C., Moradi, M., Souza, N., Leão, K.E., Tort, A.B.L., Leão, R.N., dos Santos, V.L., Ribeiro, S., 2023. 5-meo-dmt induces sleep-like lfp spectral signatures in the hippocampus and prefrontal cortex of awake rats. bioRxiv doi:10.1101/2023.06.01.543303.
- Terwey, T., 2020. Patent WO2020169850A1 WIPO (PCT): 5-methoxy-N,N-dimethyltryptamine (5-MeO-DMT) for treating depression. https://web.archive.org/web/20240408170530/https://patentimages.storage.googleapis.com/bd/ce/00/2e7f509b44f9f7/W02020169850A1.pdf.
- Tripsit.me, 2023a. 5-MeO-DMT interactions. https://web.archive.org/web/20230312171928/https://drugs. tripsit.me/5-meo-dmt.
- Tripsit.me, 2023b. Guide to drug combinations. https://web.archive.org/web/20230610082853/https://wiki. tripsit.me/images/3/3a/Combo\_2.png.
- Turkia, M., 2022a. Healing early neonatal death related family trauma with psilocybin—a retrospective case study. ResearchGate https://doi.org/10.13140/RG.2.2.17919.69284, doi:10.13140/RG.2.2.17919.69284.

- Turkia, M., 2022b. Self-treatment of depression and complex post-traumatic stress disorder (C-PTSD) with psilocybin – a retrospective case study. PsyArXiv https://doi.org/10.31234/osf.io/wupvy, doi:10.31234/osf.io/ wupvy.
- Turkia, M., 2022c. Underground small-group therapy of treatment-resistant depression and complex post-traumatic stress disorder (C-PTSD) with psilocybin a retrospective case study. PsyArXiv https://doi.org/10.31234/osf.io/t6k9b, doi:10.31234/osf.io/t6k9b.
- Turkia, M., 2023a. Ayahuasca in the treatment of bipolar disorder with psychotic features-a retrospective case study. PsyArXiv https://psyarxiv.com/65se9, doi:10.31234/osf.io/65se9.
- Turkia, M., 2023b. Self-treatment of parental neglect-induced mixed anxiety and depressive disorder with psilocybin – a retrospective case study. PsyArXiv https://doi.org/10.31234/osf.io/qyce5, doi:10.31234/osf.io/ qyce5.
- Usona Institute, 2023. Current 5-MeO-DMT clinical trials: MEO101. https://web.archive.org/web/20240305163624/https://www.usonainstitute.org/5-meo-dmt/.
- Walker, P., 2013. Complex PTSD: from Surviving to Thriving. A Guide and Map for Recovering from Childhood Trauma. Azure Coyote, Lafayette, CA.
- Yehuda, R., Lehrner, A., 2018. Intergenerational transmission of trauma effects: putative role of epigenetic mechanisms. World Psychiatry 17, 243–257. https://doi.org/10.1002/wps.20568, doi:10.1002/wps.20568.
- Yogapedia, 2020. Christ Consciousness. https://web.archive.org/web/20230603123747/https://www. yogapedia.com/definition/5806/christ-consciousness.