

Psychedelics Deliver Fractal, Archetypal, and Mythical Awareness – A Review of Public Literature on Marijuana, Psilocybin, LSD, and DMT

Abstract

This review paper tests the hypothesis that psychedelics, including marijuana (cannabis), psilocybin, LSD, and DMT, induce fractal, archetypal, and mythical awareness by analyzing publicly available scientific literature and survey data without requiring downloads. Through a synthesis of open-access studies from sources like PubMed, Nature, and PMC, we investigate neural pathways and phenomenological reports. Key findings support the hypothesis: LSD and psilocybin increase the fractal dimension of brain activity, correlating with complex visual patterns; DMT elicits entity encounters often described as archetypal or mythical (e.g., machine elves, deities); marijuana shows milder fractal-like visuals and altered perception; and all substances modulate serotonergic pathways (5-HT_{2A} receptors), relaxing high-level priors (REBUS model) to enhance entropy, bottom-up signaling, and access to unconscious/archetypal content. Mystical experiences, validated by scales like MEQ30, mediate long-term well-being changes. While evidence is strongest for classic psychedelics, marijuana's effects are subtler. Limitations include reliance on self-reports; future empirical studies are recommended. Overall, the hypothesis is substantiated, highlighting psychedelics' role in expanding awareness.

Introduction

The hypothesis posits that psychedelics—marijuana (cannabis), psilocybin (from magic mushrooms), LSD (lysergic acid diethylamide), and DMT (N,N-Dimethyltryptamine)—facilitate fractal (self-similar geometric patterns), archetypal (universal symbolic motifs from the collective unconscious, per Jungian theory), and mythical (narrative-like encounters with entities or realms) awareness. This altered state may arise from neural disruptions enabling access to deeper cognitive layers.

To test this without new data collection, we conduct a literature review using public, free resources accessible via web links. This "experiment" involves synthesizing evidence from open-access papers, surveys, and datasets to validate pathways and phenomenological outcomes.

Evaluation of Known and Novel Aspects

This section evaluates the established body of knowledge surrounding the hypothesis and identifies novel contributions or gaps addressed in this review.

What is Already Known

The connection between psychedelics and fractal patterns in perception and brain activity is well-documented in established research. For instance, serotonergic psychedelics like LSD and psilocybin have been shown to increase the fractal dimension of functional connectivity networks and BOLD signals in the brain, leading to complex, self-similar visual hallucinations. This aligns with mathematical models explaining why psychedelics induce geometric visuals, such as those derived from Turing patterns in cortical activity. Archetypal experiences, drawing from Jungian psychology, are also recognized in psychedelic literature, where substances facilitate access to universal symbols like mandalas, demons, or deities, often integrated into therapeutic contexts. Mythical awareness, including entity encounters and otherworldly visions, is particularly established for DMT, with reports of "machine elves" or interdimensional beings, and for psilocybin and LSD through mystical-type experiences measured by validated scales. Neural pathways, such as the REBUS (Relaxed Beliefs Under Psychedelics) model and entropic brain hypothesis, explain these phenomena by describing how psychedelics increase brain entropy, disrupt hierarchical processing, and enhance bottom-up signaling via 5-HT_{2A} receptor agonism. Broader reviews confirm psychedelics' role in inducing altered states akin to mystical or near-death experiences, with applications in mental health. Marijuana's milder hallucinogenic effects, including subtle perceptual changes, are noted but less emphasized in classic psychedelic research.

What is Novel

While individual components (e.g., fractals in LSD visuals, archetypes in psilocybin therapy) are established, the hypothesis's integrated framework—positing that these psychedelics collectively deliver a triad of fractal, archetypal, and mythical awareness across specific pathways—is relatively novel. Few reviews synthesize all three awareness types explicitly, and including marijuana alongside potent psychedelics like DMT highlights subtler, dose-dependent effects that bridge recreational and therapeutic use, addressing gaps in comparative studies. Emerging ideas, such as psychedelics as catalysts for "fractal intelligence" or links to multiverse metaphors and quantum consciousness, extend beyond traditional models, suggesting novel applications in cognitive enhancement and metaphysical idealism. This review's novelty lies in its exclusive use of public, non-downloadable data to validate pathways, revealing underexplored intersections (e.g., DMT's mythical entities as archetypal manifestations) and proposing that such awareness could inform new hypotheses on human evolution and sociality. Overall, while building on known mechanisms, the hypothesis introduces a holistic lens that could guide future interdisciplinary research.

Methods

We reviewed publicly available data from scientific databases and repositories, focusing on studies accessible without downloads. Sources include:

- PubMed abstracts and open-access articles (e.g., <https://pubmed.ncbi.nlm.nih.gov/32619708/> for fractal dimension study).
- Nature open-access papers (e.g., <https://www.nature.com/articles/s41598-019-51974-4> for DMT neural correlates).
- PMC full-text articles (e.g., <https://pmc.ncbi.nlm.nih.gov/articles/PMC6707356/> for mystical experiences; <https://pmc.ncbi.nlm.nih.gov/articles/PMC6588209/> for REBUS model).
- ResearchGate publications (e.g., https://www.researchgate.net/publication/340140863_Psychedelic_Drugs_and_Jungian_Therapy for Jungian archetypes).
- Frontiers articles (e.g., <https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2021.720579/full> for spiritual awakenings).
- Nature for DMT phenomenology.
- Wikipedia for overviews.
- Mendeley datasets (<https://data.mendeley.com/datasets/bhkb7zmb9v> for mystical experiences survey).
- Figshare datasets (https://figshare.com/articles/dataset/An_Exploration_of_Naturalistic_Psychedelic_use/21708044 for naturalistic use).

Inclusion criteria: Studies/reports on neural pathways, visual fractals, mystical/archetypal experiences for the specified psychedelics. We synthesized qualitative and quantitative data, focusing on serotonergic mechanisms and self-reported phenomena.

Results

Marijuana (Cannabis)

- **Fractal Awareness:** Milder effects; associated with geometric hallucinations and enhanced perception, potentially fractal-like at high doses (e.g., visual distortions). No direct fractal dimension increases noted, but aligns with general hallucinogen visuals.
- **Archetypal/Mythical Awareness:** Reports of altered reality perception, sometimes mystical, but less intense than classics. Surveys show positive mood changes and connectedness.
- **Pathways:** Acts via CB1 receptors, modulating serotonin indirectly; increases entropy, potentially relaxing priors for subtle archetypal access. Public data: https://en.wikipedia.org/wiki/Psychedelic_experience (visual effects section).

Psilocybin

- **Fractal Awareness:** Increases fractal dimension of functional connectivity and BOLD signals, localized to dorsal-attention network, indicating complex patterns.
- **Archetypal/Mythical Awareness:** Occasions complete mystical experiences (61% at 30 mg/70 kg dose), including unity, sacredness, and transcendence; akin to spiritual awakenings with mythical elements.
- **Pathways:** 5-HT2A agonism relaxes high-level priors (REBUS), enhancing bottom-up limbic signaling; DMN modulation leads to ego dissolution and archetypal emergence. Public data: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6707356/> (mystical sections); <https://data.mendeley.com/datasets/bhkb7zmb9v> (MEQ30 scores).

LSD

- **Fractal Awareness:** Significantly increases fractal dimension of connectivity networks and BOLD signals, evolving toward criticality for dynamic patterns.
- **Archetypal/Mythical Awareness:** Induces mystical states with unity and ineffability; Jungian therapy links to archetypal symbols (e.g., mandalas, demons).
- **Pathways:** 5-HT2A activation flattens hierarchy, reduces alpha/beta power, increases entropy; REBUS facilitates unconscious access. Public data: <https://pubmed.ncbi.nlm.nih.gov/32619708/> (fractal study).

DMT

- **Fractal Awareness:** Reduces fractal power in EEG, but visualizations include fractals/geometrics (32.6% of reports); correlates with intensity.
- **Archetypal/Mythical Awareness:** 45.5% report entity encounters (e.g., feminine archetypes, deities, aliens); mystical (71.4%), with mythical realms/dimensions.
- **Pathways:** 5-HT2A agonism decreases alpha/beta, increases delta/theta and diversity; REBUS liberates limbic info for mythical content. Public data: <https://www.nature.com/articles/s41598-022-11999-8> (phenomenology); <https://www.nature.com/articles/s41598-019-51974-4> (EEG).

Discussion

The reviewed data validates the hypothesis across substances, with strongest evidence for classic psychedelics via serotonergic pathways and REBUS-induced entropy increases, enabling fractal visuals and archetypal/mythical encounters. Marijuana's subtler effects suggest dosage/context dependency. Surveys (e.g., Mendeley dataset) confirm long-term well-being from mystical awareness. Limitations: Self-reports bias; no causal experiments here. Future work: Longitudinal public datasets.

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