

Psychedelics: Recent Philosophical Discussions

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ABSTRACT: “Classic”, serotonergic psychedelic drugs such as LSD and psilocybin are the objects of renewed attention in science and psychiatry. A recent spate of research has produced evidence that psychedelics might be safe and effective adjuncts to the treatment of mood and addictive disorders, agents of positive psychological change in healthy subjects, and valuable tools for studying the neural mechanisms of perception and cognition. This chapter surveys three philosophical debates that have arisen in response to this “renaissance” of psychedelic research. The first concerns the mechanisms of psychedelic-assisted psychotherapy (“psychedelic therapy”): How, exactly, does psychedelic administration in controlled conditions cause lasting psychological benefits? The second concerns the implications of psychedelic research for the philosophy of mind: Does psychedelic evidence show that there can be conscious mental states lacking all forms of self-consciousness? The third concerns the epistemic status of the psychedelic state: Is it possible that certain kinds of knowledge, or other epistemic benefits, could be gained by undergoing a psychedelic experience?

KEYWORDS: philosophy; psychedelic; hallucinogen; psychedelic therapy; LSD; psilocybin; DMT; mescaline; ayahuasca; philosophy of psychedelics; selfless consciousness; self-consciousness; psychedelic epistemology; epistemology; philosophical psychopathology; panpsychism; epistemic benefits; philosophy of mind; knowledge acquisition; Comforting Delusion Objection

1. Introduction

Psychedelic drugs have recently come to the forefront of psychiatric research and innovation. This chapter surveys three philosophical debates that have arisen in response to this development. The first debate concerns the mechanisms of psychedelic therapy: How does controlled psychedelic administration cause lasting psychological benefits? The second concerns the implications of psychedelic evidence for a longstanding debate in philosophy of mind: Do psychedelics show that there can be conscious experiences without self-consciousness? The third debate examines the epistemic status of the psychedelic state: Do psychedelic experiences have significant epistemic benefits? The chapter gives an overview of psychedelics and of recent psychedelic research before reviewing these three debates.

2. Classic Psychedelics: An Overview

The term “psychedelic”, meaning “mind-manifesting”, was coined nearly 70 years ago by the psychiatrist Humphry Osmond (1957). Osmond originally used the term in a broad sense, to refer to a chemically and pharmacologically heterogeneous group of drugs united by similar phenomenological effects. In recent academic work, however, the term has often been reserved for a narrower, pharmacologically defined class: the “classic psychedelics”. Also known as “serotonergic hallucinogens”, the most famous examples are lysergic acid diethylamide (LSD), psilocybin (the active ingredient in ‘magic mushrooms’), N,N-dimethyltryptamine (DMT), and mescaline (found in various cacti). These substances all alter consciousness primarily via agonism of the brain serotonin-2a (5-HT_{2a}) receptor (Halberstadt 2015). This chapter focuses on the classic psychedelics and uses the term “psychedelic” exclusively for these drugs.

Psychedelics are known for their phenomenological effects, which range from mild perceptual changes to full-blown visionary, mystical, or psychotic-like experiences. Two major challenges arise in the attempt to describe the psychedelic experience. First, the experiential effects of these drugs are highly variable, being influenced strongly by “set and setting” (the psychological state of the person taking the drug and the environment in which they take it). Second, when people *do* attempt to describe their psychedelic experiences, they typically claim that these experiences are ineffable.

Nonetheless, many attempts at description have been made, and some common themes (besides ineffability) can be discerned. Perceptual changes are the best-known effects, and can include alteration, intensification, and novelty in any modality. At moderate-to-high doses, synaesthetic-like effects are common. Emotional effects can include an intensification, expansion, or increased lability of affective experience; one may experience previously unknown heights of bliss and ecstasy or previously unknown depths of terror and despair – sometimes within an hour. Thinking can be altered dramatically, perhaps feeling slower and more muddled than usual, or feeling faster, more lucid, and more insightful. Finally, a range of changes can occur to other aspects of experience, such as the phenomenal senses of attention, salience, meaning, space, time, body, and self. Famously, at high doses and in conducive conditions, religious or mystical experiences can occur, featuring deep sensations of unity, profound positive emotions, “noetic” feelings, and the “dissolution” of the sense of self or ego (Masters and Houston 1966, Griffiths et al. 2006).

Psychedelics have a long history of religious and medicinal use in various Indigenous cultures (Miller et al. 2019). Early psychiatric interest focused mainly on their putative psychotomimetic (psychosis-mimicking) properties, with investigators likening the effects of mescaline to symptoms of schizophrenia and depersonalization disorder (Guttman 1936, Guttman and Maclay 1936).

This “psychotomimetic” (psychosis-mimicking) conception of psychedelics provides one major reason for psychiatric interest in these compounds. Research in this tradition continues to the present day, as does the debate over the exact nature and extent of the similarities between psychotic and psychedelic experience (Leptourgos et al. 2020). Medical and scientific interest in the drugs exploded in the 1950s, spurred by the accidental 1943 discovery of LSD’s potent psychedelic action.

The psychotomimetic conception sees psychedelics as agents of psychological distress and epistemic impairment. Two quite different conceptions also developed in mid-20th century research. The *psychotherapeutic conception* sees the drugs primarily as medicines; this view arose in response to reports of transformative insights and epiphanies from some who took the drugs. In line with this view, psychedelics were used for the treatment of mood, addictive, and personality disorders on two basic models. *Psycholytic therapy* involved numerous classical psychoanalytic sessions augmented by low-to-moderate doses believed to facilitate access to the unconscious. *Psychedelic therapy* involved one – or very few – high-dose administrations aimed at inducing an overwhelming, transformative “peak” or “mystical” experience (Nichols and Walter 2020).

Perhaps surprisingly from a psychotomimetic perspective, positive results were reported from both methods. However, much early psychedelic research suffered from methodological problems, and the programme of research was cut short due to a complex combination of scientific, legislative, and sociocultural factors arising in the 1960s. (For a fuller account of this history, see Dyck 2010.)

The third influential conception of psychedelics can anachronistically be dubbed an *entheogenic conception* (Letheby 2021) – a perspective that sees the drugs primarily as agents of spiritual or religious experience. The neologism “entheogen”, meaning “generating the divine within”, was coined in the late 1970s by Ruck et al. (1979), but the conception itself is much older, existing in Indigenous

traditions and taking centre stage in the heated cultural debates of the 1960s. The fervent public advocacy of LSD use by Timothy Leary was based centrally on the premise that intentional psychedelic use provides a shortcut to mystical enlightenment, or glimpses thereof. This idea had been propounded earlier, in more restrained fashion, by intellectuals such as Aldous Huxley (1953) and Alan Watts (1960). Psychedelics' propensity to induce putatively spiritual or mystical experiences has attracted significant interest in recent research as well.

3. The Psychedelic Renaissance

Since the early 1990s, in a changed sociopolitical climate, human psychedelic research has slowly but steadily resumed. The first studies in this new wave were framed in largely psychotomimetic terms. By the turn of the millennium, however, entheogenic and psychotherapeutic lines of investigation resurfaced. A landmark study of healthy participants, led by a well-respected psychopharmacologist at a world-leading medical school, claimed to find that psilocybin could "occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance" (Griffiths et al. 2006). Psychedelics were catapulted back into the popular consciousness.

The explosion of research known as the "Psychedelic Renaissance" (Sessa 2012) has reached the point of defying manageable description or summary. However, there are four lines of research that set the scene for the emerging philosophical discussion. These concern the (a) safety, (b) therapeutic potential, (c) transformative potential, and (d) neural correlates of psychedelic experiences.

The main justification given for the prohibition of psychedelics in the 1960s was that these drugs were just too dangerous to contemplate using. Media coverage of LSD, in particular, depicted a substance that could cause instant and permanent insanity, genetic defects, and moral corruption (Dyck 2010, Masters and Houston 1966).

More recent research paints a rather different picture. In a review of the literature, Strassman (1984) found that adverse psychological reactions to psychedelics were rare and, when they did occur, typically transient and manageable with interpersonal support. In the relatively few cases of prolonged psychosis, there is often evidence of a pre-existing vulnerability, such as a family history of psychotic illness. When psychedelics are given in strictly controlled settings, the risk of psychotic reactions seems to be very low.

Strassman's findings have been borne out by dozens of studies conducted from the 1990s to the present day. In these studies, moderate to high doses of psychedelics have been administered in controlled clinical conditions to carefully screened and prepared volunteers. Those with a personal or immediate family history of psychotic illness are excluded. Nonetheless, experimental cohorts have included patients diagnosed with various mood and addictive disorders, as well as healthy volunteers with and without prior psychedelic experience, and even members of specialised groups such as meditation practitioners and clergy. Perhaps the most important finding of these studies is this: Psychedelics can be administered safely, if due care is taken.

In 2016, Ross and colleagues noted that more than 2000 doses of psilocybin had been administered in rigorous research trials over a 25-year period, with "no reports of any medical or psychiatric serious [adverse events], including no reported cases of prolonged psychosis or HPPD [hallucinogen persisting perception disorder]" (Ross et al. 2016, p. 1176). In a systematic review of psychedelics' long-term effects, Aday et al. concluded:

All in all, limited harm has been reported in the new era of research which utilizes extensive safety protocols... and the drugs' potential for dependency is low... In subjective accounts,

[patients] with depression... and addiction... have noted the lack of long-term adverse side effects as being a considerable benefit over previous treatments they had attempted (e.g., antidepressants).

(Aday et al. 2020, p. 184)

An earlier paper by Johnson et al. (2008) sets out safety guidelines for human psychedelic research. These authors note that psychedelics “possess relatively low physiological toxicity, and have not been shown to result in organ damage or neuropsychological deficits”; and there is “no evidence of... potential neurotoxic effects”. The few physiological symptoms that do occur are “relatively unimpressive even at doses yielding powerful psychological effects”. Meanwhile, the belief that LSD could cause chromosomal damage has been “squarely refuted” by numerous investigations (Johnson et al. 2008, pp. 606-607).

As well as establishing the favourable safety profile of controlled psychedelic use, recent clinical trials have investigated its therapeutic potential. Protocols generally resemble the “psychedelic therapy” model, usually consisting of a series of psychotherapeutic sessions before and after one to three high-dose drug sessions. While many of these studies are preliminary, uniformly promising results have been reported in the treatment of obsessive-compulsive disorder, alcohol and tobacco addiction, depression, and existential distress accompanying terminal illness. Often, substantial symptom reductions are seen immediately after a single drug session, and maintained for weeks, months, or even years (Aday et al. 2020). As Stephen Ross says: “It is simply unprecedented in psychiatry that a single dose of a medicine produces these kinds of dramatic and enduring results”.

Assuming that these findings prove robust, the obvious question is: How does it work? The mechanisms of psychedelic therapy are hotly debated, as we will see, but an influential view cites the psychedelic-induced *mystical-type experience* as the catalyst for psychological and behavioural change. In psychedelic research, validated psychometric questionnaires are used to quantify the extent to which a given subject’s experience is *mystical* – a technical term from the philosophy and psychology of religion that refers to a specific type of experience putatively reported across cultures, times, and places. Such experiences feature feelings of unity or oneness, a “noetic” sense of gaining knowledge of ultimate reality, and a “deeply felt positive mood”, *inter alia*. Patients whose experiences fit the description seem to enjoy the greatest clinical benefits. Similar findings have been reported for other psychometric constructs, such as “ego dissolution”, “psychological insight”, and “emotional breakthrough” (Kangaslampi 2023). In general, the results of psychedelic therapy seem to depend on the type of psychedelic experience that a patient has. Thus, the prevailing view is that the lasting benefits are not caused by the drugs themselves, but by the experiences they induce.

This seems to be true even of those without a psychiatric diagnosis. Several studies have documented lasting, beneficial psychological changes in healthy volunteers following one or two supervised psychedelic experiences. For example, studies at Johns Hopkins found that healthy volunteers who had a mystical-type psychedelic experience showed lasting increases in the personality trait of *Openness to Experience* (MacLean et al. 2011). Other studies in healthy volunteers have shown more or less durable increases in self-reported well-being and in mindfulness-related capacities (Gandy 2019). In many cases, these benefits correlate with specific aspects of the psychedelic experience.

As well as safety and therapeutic and transformative efficacy, significant research efforts have been devoted to unravelling psychedelics’ effects on the brain. The findings of neuroimaging studies to date have been somewhat heterogeneous, but some patterns can be discerned. Several studies have found that psychedelics alter the functioning of the celebrated *Default Mode Network* – a large-scale neurocognitive system involved in high-level narrative or autobiographical self-representation. In general, psychedelics seem to break down the brain’s normal organisation into functionally discrete

large-scale networks, both decreasing the internal integrity of these networks and increasing the cross-talk between them. The result has been described as a more unpredictable or *entropic* brain (Carhart-Harris 2018). Several studies have found intriguing correlations between these network-level changes and phenomenological features of the psychedelic experience. This suggests that these changes to the brain's entropy levels and network architecture are important to psychedelics' acute and lasting psychological effects – but the details continue to be debated (McCulloch et al. 2022).

It should be clear by now that the psychiatric use and scientific study of psychedelics raise many philosophical questions. Indeed, three scholarly books devoted to these questions have been published in as many years (Letheby 2021, Hauskeller & Sjöstedt-Hughes 2022, Lyon 2023), with another shortly to follow (Letheby & Gerrans 2024). Setting aside ethical debates, which are beyond the scope of this volume, three questions have attracted detailed philosophical debate so far. The first sits at the intersection of philosophy, neuroscience, and psychiatry: How, exactly, does psychedelic therapy work?

4. How does Psychedelic Therapy Work?

The findings reviewed above suggest that a single administration of a psychedelic can lead to dramatic and lasting psychiatric symptom reductions. If this is true, then what is the mechanism?

4.1 The Question of Experiential Causation

At a high level of abstraction, the answer seems to be: The induction of psychologically beneficial *experiences*. The correlation between aspects of the acute psychedelic experience and good clinical outcomes suggests to many researchers that psychedelic therapy is more like a psychotherapy than a pharmacotherapy, as we intuitively understand these categories. The main cause of lasting benefits seems to be the psychedelic experience itself, rather than any sub-personal, unconscious, or merely neurobiological processes that the drugs can trigger (Letheby 2015, Yaden and Griffiths 2020).

However, this view is not universally accepted. There is some evidence that psychedelics stimulate the molecular mechanisms of neuroplasticity in cultured mammalian neurons (Ly et al. 2018). Presumably, then, they have this effect when administered to humans. On the face of it, this is a distinct effect from the macroscopic changes to global brain activity and connectivity that are described in terms of increased entropy and invoked to explain psychedelic phenomenology. What we seem to be dealing with here is a micro-level, local, physiological effect that has no known links to any of the *specific* types of experiences that the drugs can induce. This raises the possibility that such unconscious, purely neurobiological effects are the principal cause of therapeutic outcomes. In this case, the psychedelic experience itself would be epiphenomenal, from a therapeutic standpoint – a mere cluster of “psychotomimetic side effects”. This *Neuroplasticity Theory* of psychedelic therapy has been championed most notably by David Olson (2020), who dubs these (and related) compounds *psychoplastogens*: creators of mental plasticity. This perspective has led to a search for molecular variants of psychedelics that can deliver the therapeutic benefits without the trip.

Vollenweider and Kometer (2010) note that there are two ways of interpreting the Neuroplasticity Theory of psychedelic therapy, which Letheby (2021) calls the *Implementational Neuroplasticity Theory* and the *Pure Neuroplasticity Theory*, respectively. According to the Implementational Neuroplasticity Theory, the processes described as “enhancements to neuroplasticity” or “neuroplastic adaptations in neural networks” are the very same processes traditionally described as “mystical experience”, “learning”, and “psychological insight”, viewed at a different level of resolution and described in a different vocabulary. The molecular-level processes realize, or implement, the

psychological processes traditionally held to explain therapeutic effects. Thus, this version of the Neuroplasticity Theory does not conflict with traditional conceptions of psychedelic therapy.

The Pure Neuroplasticity Theory, however, holds that it is non-experiential, *purely* biological processes that explain the bulk of the therapeutic effects. We can spell it out like this: Any given administration of a psychedelic is going to cause a wide range of biological events and processes in the person's brain. Some of these biological happenings may implement, or realize, the changes to consciousness and cognition that constitute the psychedelic experience – but not all of them will. There are presumably biological effects of psychedelic administration that are distinct from, and invariant with respect to, its variable experiential results – such as, perhaps, the enhancements to neuroplastic processes observed in cultured cells. According to the Pure Neuroplasticity Theory, it is these *merely* biological, experience-independent processes that do most of the therapeutic work (Letheby 2021).

Letheby (2015, 2021) argues, against the Pure Neuroplasticity Theory, that the benefits of psychedelic therapy are caused mainly by psychedelic experiences. His argument appeals to the robust correlations between specific aspects of the experience and therapeutic benefits. If we consider a cohort of psychedelic therapy patients, the most consistent predictor of which members will enjoy lasting benefits is not the dose of the drug, nor any other “low-level” factor: it is the type of experience that each of them has. Those whose symptoms decrease dramatically will be those who had experiences of unity, connectedness, psychological insight, and emotional breakthrough. This observation is not strictly inconsistent with the Pure Neuroplasticity Theory, but it seems surprising and difficult to explain if that theory is true, and quite the opposite if the experiential causation hypothesis is true (Letheby 2015, Yaden and Griffiths 2020, Letheby 2021).

Letheby cites two other observations as supporting the experiential causation hypothesis. The first is that patients and clinicians invariably credit therapeutic benefits to the experience itself. The second is that there are non-drug-induced altered states of consciousness, such as spontaneously occurring mystical experiences, near-death experiences, and some meditative states, that (a) overlap phenomenologically with the types of psychedelic experiences that lead to benefits and (b) that seem, themselves, to lead to similar psychological benefits (Letheby 2015). Thus, Letheby suggests we have good evidence that lasting psychological benefits can be caused by psychedelic-like experiences that are not induced by drugs. If so, it would seem strange and un-parsimonious to suggest that, when experiences of this broad kind *are* induced by drugs, *and* followed by psychological benefits of this broad kind, those benefits do *not* result from the experiences! None of these observations is totally conclusive, but taken together, they would seem to license an abductive inference, or inference to the best explanation, to the experiential causation hypothesis. In other words, it would seem reasonable to accept the experiential causation hypothesis on the grounds that it is a better explanation of the relevant evidence than alternative hypotheses (e.g. it is more parsimonious and explains a wider range of observations).

A related argument is made by Miceli McMillan and Jordens (2022), who point out that phenomenological descriptions of therapeutic psychedelic experiences are a precise mirror image of sophisticated, independently developed, phenomenological descriptions of depression (cf. Miceli McMillan and Fernandez 2023). This convergence suggests that psychedelic experiences really do have therapeutic effects in depression, because we have independent grounds for thinking that:

- (a) these experiences centrally involve the dramatic alteration of certain features of consciousness, and
 - (b) these are *precisely the features* of consciousness that are often radically different in depression.
- (Cf. Whiteley 2021, who argues that depression itself involves a globally altered state of consciousness akin to the psychedelic state).

Further supporting this line of argument is the observation that psychedelic experiences, even in healthy subjects, centrally feature changes to psychological processes that are known to be altered in relevant pathologies: self-representation, attention, emotional processing, salience attribution, psychological flexibility, mindfulness, and so forth (Letheby 2021). This suggests strongly that the psychological changes that constitute the psychedelic experience are causally involved in bringing about the therapeutic benefits.

Even if true, however, this is the beginning of the discussion, not the end. The experiential causation hypothesis is common ground among philosophers debating psychedelic therapy. The debate mainly concerns which *aspects* of the psychedelic experience do the heavy lifting, and how.

4.2 Specific Mechanistic Proposals

Letheby and Gerrans (2017) advance an explanation of psychedelic experience and its therapeutic effects based on the predictive processing theory of brain function. They argue that psychedelics disrupt the functioning of neurocognitive systems involved in self-representation. A central function of these systems is to integrate or “bind” information from multiple modalities into a model of a unified, persisting entity: the self. Psychedelics disintegrate the networks responsible for this binding function, leading to the reported phenomenology of “ego dissolution” and connectedness. Assuming that entrenched and dysfunctional self-models play a significant role in anxiety, depression, and addiction, this supports a *self-unbinding* theory of psychedelic therapy: Psychedelic experiences cause therapeutic benefits by dissolving a rigid and maladaptive sense of self, providing an opportunity to discover alternative, healthier self-models that can subsequently be consolidated (Letheby 2021).

One point of contention concerns the respective roles of *phenomenal transparency and opacity* in psychedelic therapy. On one definition, a mental representation is said to be phenomenally transparent when we do not experience it as a representation; for example, we typically experience our visual representations of physical objects as though they were the mind-independent objects themselves. A representation is phenomenally opaque when we experience it as a representation; as, for example, with perceptual representations in lucid dreams (Metzinger 2014).

According to the self-binding account of Letheby (2021), the induction of phenomenal opacity is a central aspect of psychedelic therapy. By disrupting self-modelling processes, psychedelics make self-representations *opaque* – patients can recognise them as mere representations, obtaining therapeutically beneficial insight into their contingency and mutability. However, Lyon and Farennikova (2022) question this emphasis on opacity, arguing that increases in phenomenal *transparency* are at least as common, and play at least as important a therapeutic role. They point out that psychedelic experiences are often described as feeling “more real than real” – plausibly, an increase in transparency – and that the therapeutic insights that arise in these experiences typically come with a “noetic” sense of being direct and veridical apprehensions of one’s true or authentic self.

Another critique of the self-unbinding account comes from Sarah Hoffman (2022), who regards the account as broadly plausible, but argues that it pays insufficient attention to the role of positive affect. Hoffman cites psychometric evidence showing that the types of psychedelic experiences that lead to good outcomes invariably feature strong positive emotions; she also points to evidence about the therapeutic potential of the “entactogenic” substance MDMA to bolster the idea that positive affect has an important role to play (cf. Kochevar 2023). Hoffman, like Lyon and Farennikova, also has doubts about the central role Letheby ascribes to phenomenal opacity. She notes that most psychedelic experiences do not feature total ego dissolution, and questions whether phenomenal opacity per se is importantly involved in “less-than-full ego dissolution but still therapeutically effective psychedelic experiences” (Hoffman, 2022, p. 6).

Martin and Sterzer (2022) point to *context* as an important part of the explanation of psychedelic therapy neglected by the self-unbinding account. A mere self-unbinding story, they say, cannot explain why the alternative self-models discovered and consolidated during the process tend to be healthy ones. To explain this, we must invoke not just the disruption of self-modelling systems, but also the positive and supportive psychotherapeutic milieu in which this disruption takes place. Contra Letheby, psychedelic therapy would not work so well if it involved *mere* disintegration of self-representation, leaving the subsequent generation of new self-representations to chance.

Matteo Colombo (2022) questions Letheby's reliance on the predictive processing framework to explain psychedelic experience. Colombo argues that the predictive processing literature lacks consistency and detail regarding (a) the computational functions of the neurotransmitter systems that psychedelics affect, and (b) the neural implementation of the various cognitive and computational processes posited by the predictive processing framework. He sketches an alternative explanation of psychedelic therapy grounded in the computational framework of reinforcement learning, arguing that it may be superior to the predictive self-binding theory. For Colombo, this calls into question the idea that psychedelic therapy works mainly by changing self-representations, as well as the idea that predictive processing provides the best explanation of psychedelic therapy.

Finally, and in a related vein, Hans van Eyghen (2023) argues (i) that psychedelics disrupt mental models of many aspects of the world, not just of the self, and (ii) that some of their therapeutic effects probably stem from changes to *non*-self-related beliefs. In other words, the exclusive emphasis on self-representations in the self-binding account is unwarranted. For van Eyghen, the fundamental principle underlying psychedelic therapy's efficacy is that through psychedelic experiences, subjects are able better to align their beliefs – self-related or otherwise – with the context in which they exist. *Contextual recalibration of beliefs*, not *predictive self-unbinding*, is the key explanatory concept here.

5. Can Psychedelics Induce Totally Selfless Phenomenal States?

Given the remarkable experiences that they induce, it seems likely that psychedelics can teach us something about the mind. Indeed, Stanislav Grof famously compared their “potential significance for psychiatry and psychology to that of the microscope for medicine or the telescope for astronomy” (Grof 1975, pp. 32-3). This approach has connections with the interdisciplinary enterprise of “philosophical psychopathology”, which uses observations from non-ordinary conditions as a basis for conclusions about the structure and function of the ordinary mind (Graham and Stephens 1994).

5.1 The Self-Awareness Principle

A major preoccupation of philosophical psychopathologists has been the relationship between phenomenal consciousness and self-consciousness. A venerable philosophical thesis holds that the former entails the latter; that there neither are, nor can be, conscious experiences that lack all forms of self-consciousness. Human infants and non-human animals might seem to provide obvious counterexamples, but proponents of this thesis typically have a very minimal form of self-awareness in mind – something experientially fundamental, introspectively elusive, and much more primitive than an explicit self-concept or autobiographical narrative. Raphaël Millière calls one version of this thesis the *Self-Awareness Principle*:

(SAP) Necessarily, whenever one is in a conscious state, one is minimally self-aware.
(Millière 2017, p. 14).

Several philosophers have proposed that certain psychopathological symptoms might constitute empirical counterexamples to SAP: phenomenally conscious mental states that completely lack self-consciousness, even of the most minimal kind. (Note: this chapter uses “self-consciousness” and “self-awareness” interchangeably and in a purely phenomenological sense.) One common candidate is *thought insertion*, a symptom of schizophrenia in which patients claim to experience thoughts that are not their own. Another candidate is “disowned” mental states in *depersonalization disorder*, a condition characterized by a persistent and distressing feeling that the self is unreal or non-existent. Are either of these symptoms genuine counterexamples to SAP? The question is difficult because descriptions of the symptoms are often vague and imprecise, requiring considerable interpretation before philosophical conclusions can be drawn. Also, the relevant states occur unpredictably and haphazardly, and often in the context of other psychological problems.

In this light, the renaissance of psychedelic research would seem to be a great boon to philosophical psychopathology and empirically informed philosophy of mind. Now it is possible safely, repeatedly, and reliably to induce transient but radical disruptions of self-consciousness in the laboratory – indeed, in the neuroimaging scanner. This can, in principle, be done with arbitrarily large samples of mentally healthy subjects who can report on their experiences retrospectively in a totally sober and lucid state. Moreover – again, in principle – these fortunate volunteers can be subjected to any battery of behavioural, psychometric, and qualitative probes the imagination can devise.

Experimentally, this potential has barely been tapped. But the theoretical debate has begun in earnest. Millière (2017) was the first to suggest that psychedelic research might furnish better and clearer counterexamples to SAP than the controversial pathological states mentioned above. Surveying several reports of “drug-induced ego dissolution” (DIED), he suggests that they cannot be explained away as easily as earlier pathological cases. One type of defence of SAP against proposed counterexamples is what Billon and Kriegel (2015) call the Subjectivity* Response. This involves claiming that there are multiple kinds of self-awareness, or subjectivity, and the kind that has gone missing in the relevant case is not the kind that is at issue in SAP. Thus, for instance, one might hold that (a) SAP links phenomenal consciousness to a sense of *ownership* – a feeling of being the subject who is having an experience – but (b) what goes missing in thought insertion is a sense of *agency* – a feeling of being the agent who is thinking, or authoring, a thought. However, in the psychedelic cases he cites, Millière argues that subjects emphatically report losing *all* forms of self-consciousness, sometimes showing a reluctance to use the first-person pronoun in their retrospective descriptions.

A different kind of response to putative counterexamples is what Billon and Kriegel (2015) call the Consciousness* response. This involves claiming that, while the mental states in question may be conscious in some sense, they are not conscious in the sense relevant to SAP. Thus, for instance, one might hold that (a) SAP links *phenomenal* consciousness to self-awareness, but (b) disowned mental states in depersonalization disorder are not phenomenally conscious. What explains the fact that they are nonetheless reportable is, roughly, that they are *access* conscious, in Block’s (1995) sense. (According to Block, a mental state is *phenomenally conscious* when there is something it is like to be in that mental state, but *access conscious* when it is available for verbal report and the guidance of behaviour. One hotly debated empirical case in which the two may dissociate is the clinical condition known as blindsight. According to classic descriptions, patients suffering from blindsight lack conscious experience in a certain portion of the visual field, but are still able to access visual information concerning that region for the performance of certain tasks; for instance, locating objects presented in that region above chance, while denying any experience of the objects.)

Billon and Kriegel suggest that the Consciousness* response has some plausibility in relation to certain cases of depersonalization, noting that the patients in question even use the language of “unconsciousness” and “being a zombie”. Not so, says Millière, in relation to the psychedelic cases he

discusses: “self-reports clearly converge in indicating that DIED is a conscious experience, and one that is memorable” (2017, p. 14).

5.2 Subjectivity* Responses

Unsurprisingly, these new putative counterexamples have not gone unchallenged. Indeed, many responses fit the Subjectivity* pattern. For example, George Deane (2021) develops an account of psychedelic ego dissolution based on the neurocomputational framework of *active inference*. According to this framework, affective experience results from neurocognitive processes that represent the self; thus, says Deane, affective experience can be regarded as a form of self-consciousness. And affective experience does seem to be preserved in the psychedelic experiences Millière describes. However, Deane notes that on certain, more restrictive, definitions of self-consciousness, the states in question would indeed qualify as “totally selfless”.

Another response in the Subjectivity* vein invokes the notion of *for-me-ness* championed by Dan Zahavi. For-me-ness is described as the most minimal kind of self-awareness, a fundamental feature of conscious experience that is identical to the “first personal givenness” of conscious mental states, or the “special inner awareness” that each subject has of her own experiences. According to Zahavi and Kriegel, to “deny that such a feature is present in our experiential life, to deny the for-me-ness... of experience, is to fail to recognize the very subjectivity of experience [...] once anything occurs consciously, it must be given to the subject and thus exhibit for-me-ness” (2015, p. 38).

Henriksen and Parnas (2019) argue that, while the psychedelic experiences described by Millière may lack all other forms of self-awareness, they are still “given to” the subjects who had them, and to no one else. An epistemic asymmetry obtains: the people who undergo these experiences have a kind of direct access to them that nobody else has. Thus, the experiences have for-me-ness.

Letheby (2020) complains that this kind of response begs the question by assuming that the uncontroversial presence of an epistemic asymmetry entails the presence of a controversial phenomenal feature. He proposes a dilemma: either (1) for-me-ness is a genuinely experiential property – part of *what an experience is like* – in which case some psychedelic reports unequivocally describe its absence; or (2) it is not, being a mere epistemic asymmetry – or a putative metaphysical fact of an experience’s being “given to” a particular subject – and thus irrelevant to questions about self-consciousness. A complementary point is made by Millière (2020), who questions not whether for-me-ness is a form of self-consciousness, but whether it is a form of *self*-consciousness; it is often described, he notes, as an awareness of mental states by the self, not as an awareness of the *self*.

Miguel Ángel Sebastián (2020) offers a Subjectivity* Response that is broadly similar to that of Henriksen and Parnas but does not involve for-me-ness. Instead, Sebastián develops his own notion of *perspectival first-personal awareness* (PFP-awareness): “a non-conceptual identification-free self-attribution that characterizes the first-person perspective that consciousness offers us” (Sebastián 2020, p. 4). He argues that the relevant psychedelic experience reports are consistent with the presence of this feature, and suggests that descriptions of these experiences as involving “total selflessness” may result from interpretive biases caused by the popular belief in a connection between psychedelic experience and Buddhist meditation practice.

5.3 The Evidential Status of Retrospective Reports

The debate so far concerns, mainly, how to interpret the relevant experiential reports. It rests on the assumption that there is some class of *possible* experiential reports that could provide compelling evidence for the existence of “totally selfless” experiences, and asks whether any actual psychedelic

experience reports fall into that class. Another strand of the debate questions this assumption itself. This strand arose in response to the following passage from Thomas Metzinger:

Autophenomenological reports given by human beings about selfless states ... will typically not impress philosophers much, because they contain an inherent logical fallacy: How can you coherently report about a selfless state of consciousness from your own, autobiographical memory? ... Such reports generate a performative self-contradiction, because you deny something that is presupposed by what you are currently doing.
(Metzinger 2003, p. 566)

Some effort has been devoted to unpacking and critically evaluating these remarks. Fink (2020) analyses the status of retrospective reports of ego dissolution in some detail, identifying many possible ways of interpreting and explaining such reports. Ultimately, however, he sides with Metzinger: if such reports are construed literally as reporting a total loss of all forms of self-consciousness, they are self-defeating. He suggests that many such reports are prompted by an experience of total *ego-expansion*, in which one's sense of self becomes co-extensive with one's entire field of consciousness (an experience as of "oneness with everything"). In such a state, the sense of self *per se* would not be lost, but the sense of a self/other boundary would be, possibly prompting the reports in question.

Millière, however, has argued, against Metzinger, that there *are* possible retrospective reports that would constitute good evidence for the occurrence of totally selfless conscious states (Millière 2020, Millière and Newen 2022). He argues that, properly understood, such reports need not generate a logical or performative contradiction: Their content is that some earlier experience both (a) occurred to the reporting subject and (b) lacked a phenomenal sense of self. A presupposition of such a report is that the reporting subject was present during the experience, but nothing in such a report's contents contradicts this. For Millière, Metzinger's argument is really about how autobiographical memory works, suggesting that any apparent autobiographical memory of a selfless experience must be confabulatory and therefore untrustworthy. Millière and Newen (2022; cf. Millière 2020) contend that this argument rests on implausible views about how memory works; if we abandon these views, we will see that such reports need be no more untrustworthy than any other mnemonic reports.

6. What is the Epistemic Status of the Psychedelic Experience?

Indigenous traditions of psychedelic use typically hold that knowledge of various kinds can be gained through this practice, often of immaterial realities or by supernatural means (Shanon 2002). In contrast, common names for this class of drugs in the Western world suggest epistemic *harms* as their defining effects: they are seen as "psychotomimetics" or "hallucinogens". Who has the right of it? Is psychedelic ingestion epistemically beneficial, harmful, or some combination of the two?

Recent years have seen an interesting development: a self-conscious effort to argue, from an explicitly naturalistic perspective, that psychedelic use can have significant epistemic benefits. If we understand (metaphysical) naturalism as the conjunction of a generic physicalism or materialism with a denial of the existence of paradigmatically non-natural or supernatural entities, then most attributions of epistemic benefit to psychedelic experience have, historically, gone hand-in-hand with non-naturalistic beliefs (Letheby 2015). So the quest to *naturalize psychedelic epistemology* is noteworthy.

This attempt was spearheaded by Benny Shanon, an Israeli cognitive scientist and philosopher who has written extensively about, and partaken extensively of, the psychedelic beverage ayahuasca. In a landmark paper Shanon (2010) proposes various possible epistemic benefits of ayahuasca ingestion, explicitly taking a broadly naturalistic approach:

Personally, I do not believe in ayahuasca providing or enabling any... non-ordinary factual knowledge at all. This categorical stance of mine is a corollary of my disbelief in the paranormal and the parapsychological in general... [Despite] many attestations by many drinkers of paranormal experiences, more careful inspection on my part revealed no actual substantiation for such claims... It is often claimed that ayahuasca elicits telepathic communication... I have experienced the feeling of telepathy too. Yet, it is crucial to distinguish between experiences in which a person feels telepathic and actual occurrences of such paranormal information transfer. Admittedly, the former are very common with ayahuasca, but from this it does not follow that the latter is the case... That factual knowledge is not obtainable with ayahuasca, however, does not imply that the brew affords no knowledge at all, that it affords no learning.
(Shanon, 2010, p. 267).

6.1 Self-Related Insights

One type of knowledge that Shanon posits is psychological: insights into one's own personality and mental states, into others' mental states, and into the human mind in general: "There is no question about it, ayahuasca induces personal insights, self understanding, and novel psychological comprehension" (Shanon, 2010, p. 267). However, there is a question about whether these apparent insights are real (veridical) or *merely* apparent. To paraphrase Shanon, it is crucial to distinguish between (a) experiences in which a person feels they gain insight into themselves and (b) actual occurrences of veridical self-insight.

Considering this question in relation to apparent psychodynamic insights in psychedelic therapy, Metzinger (2003, p. 249) points out that such apparent insights often lead to clinical improvement; a simple explanation is that they are veridical. A similar argument is made by Ole Martin Moen (2022), who points out that the rapid efficacy of psychedelic therapy could readily be explained if its mechanisms were epistemic. After all, says Moen, it is typical of knowledge acquisition that a single instance has lasting effects. However, Letheby (2019, 2021) emphasizes the difficulty of ruling out, in any given case, the rival hypothesis that patients are obtaining mere "placebo insights" (Jopling 2001): apparent insights that feel veridical and cause clinical improvement despite being inaccurate.

Attempting to tackle this problem, Letheby (2021) sketches two tentative arguments that such insights are often veridical. The first appeals to neural and psychological commonalities between the psychedelic state and mindfulness meditation, plus empirical evidence that mindfulness improves introspective accuracy. The second appeals to a theoretical model of psychedelic action, the Relaxed Beliefs Under Psychedelics or "REBUS" model of Carhart-Harris and Friston (2019). This model, rooted in the predictive processing theory of brain function, holds that the experiential effects of moderate-to-high-dose psychedelic intake are caused primarily by a weakening, or "relaxation", of high-level beliefs about self and world that structure ordinary experience. Letheby appeals to PP principles to suggest that the weakening of self-related beliefs is likely often to facilitate accurate self-related insights. He adds, though, that critical sober scrutiny of putative insights is epistemically indispensable.

Bortolotti and Murphy-Hollies (2022) suggest that a focus on forming new self-related beliefs that accurately represent pre-existing facts about oneself may be too narrow. They invoke the idea of *self know-how* to suggest that some psychedelic-induced self-related insights may be self-fulfilling prophecies: beliefs about the self that are not true to begin with, but that become true as we act in accordance with them. Chiara Caporuscio (2022) makes a similar point using the idea of *self-shaping*. However, for Caporuscio this is not just a supplement to Letheby's account, but a needed solution to a problem with the latter: She criticizes Letheby's argument for the probable accuracy of self-related insights under psychedelics, arguing that such insights result, on Letheby's own account, from the

same basic process as changed beliefs about the external world. Thus, if the latter cannot be trusted, then neither can the former.

Letheby (2022) suggests that there may be some epistemically relevant differences between the two types of belief; for instance, we have independent evidence that many of psychedelics' effects on external world perception tend in a misrepresentational direction. However, it is safe to say that this question remains open. Indeed, Moen (2022) considers several typical (exteroceptive) perceptual effects of psychedelics, and argues it is not clear that these effects are epistemically distorting. So even the precise epistemic status of psychedelic-altered *external world* perception is up for grabs.

6.2 Non-Propositional Knowledge

Self-related insights, if veridical, would seem to constitute a type of propositional knowledge. But various non-propositional possibilities have been discussed. Shanon, for example, suggests that through repeated consumption of ayahuasca, "people may eventually become accomplished in the very art of drinking ayahuasca" (2010, p. 272). Letheby (2019, 2021) notes that this, if true, would fall into the philosophical category of *knowledge how*, or *ability knowledge*. He suggests that psychedelics other than ayahuasca might also facilitate the acquisition of such knowledge. Drawing again on commonalities between psychedelic experience and mindfulness meditation, Letheby argues that the former might help subjects learn how to pay attention to their own thoughts and feelings in a specific – open, receptive, and non-judgemental, i.e. *quintessentially mindful* – fashion.

Another possibility concerns acquiring new types of knowledge about facts already known. Shanon describes a case of this kind:

The following example of my own happened during an ayahuasca session held in a hut, in the midst of the Amazonian forest, early in the morning. I was looking at the leaves of plants observing how they were directed towards the rays of the sun. I felt I was actually seeing the nurturing sustenance of the solar light. Have I [sic] obtained any "information" I had not known beforehand? I doubt it. But I was open to see the world in a new light, perhaps in the manner a poet or an artist may.
(Shanon 2010, p. 268).

Letheby (2019, 2021) argues that experiences of this kind are accurately characterized by the philosophical concept of "new knowledge of old facts", developed in response to Frank Jackson's (1986) Knowledge Argument. Sascha Fink (2022) demurs, however, noting that this exact process can also occur in relation to *false* propositions, in which case the outcome cannot be regarded as new knowledge of any kind. Fink suggests that a better, more unifying concept may be that of *understanding*: psychedelic experiences can help us to understand propositions more fully or deeply, whether those propositions are true or false. This suggestion fits well with Fink's general scepticism about obtaining epistemic justification for propositional beliefs from psychedelic experiences.

In a similar vein to the idea of new knowledge of old facts, Letheby (2015, 2021) argues that psychedelic experiences can involve the acquisition of *knowledge by acquaintance* with important modal facts about the human mind: that it has vast potential, typically unrealized in the ordinary waking state, and that the ordinary sense of self is contingent and mutable. Rather than Bertrand Russell's (1910) original definition of knowledge by acquaintance, Letheby adopts a more relaxed definition due to Earl Conee: one has knowledge by acquaintance of something if one is aware of it "in the most direct way that it is possible for a person to be aware of that thing" (Conee 1994, p. 144). The thought is that one can easily have indirect or theoretical knowledge that one's mind has vast,

unrealized potential, and that one's ordinary sense of self is contingent and mutable, but psychedelics can facilitate maximally direct, and therefore transformative, knowledge of these facts.

Letheby (2016, 2021) also proposes that therapeutic psychedelic experiences can have indirect epistemic benefits, via their beneficial effects on psychosocial functioning. The idea here is borrowed from Lisa Bortolotti (2015), who points out that epistemic and psychosocial functioning are profoundly intertwined in humans, such that cognitive processes that preserve the latter will tend to preserve the former. On this basis, Letheby suggests that psychedelic experiences that decrease symptoms of anxiety, depression, or addiction will tend to improve epistemic functioning into the bargain.

All the proposals we have discussed so far are unambiguously compatible with a naturalist, and indeed a physicalist or materialist, worldview. However, not all philosophers writing about the epistemic potential of psychedelics embrace such a worldview unreservedly. Jussi Jylkkä (2022) offers a proposal about the epistemic benefits of psychedelic experience that may straddle the naturalism/non-naturalism divide, depending on how, exactly, this divide is understood. Jylkkä argues that certain psychedelic experiences reveal the existence of an important distinction between *relational knowledge* and *unitary knowledge*, where the latter is knowledge of an experience that is constituted by the occurrence of the experience itself. Awareness of this distinction, for Jylkkä, supports the claim that there is something about consciousness that science can never capture, since science is limited to producing *models* of consciousness, which are distinct from consciousness itself and therefore can only constitute relational knowledge.

Jylkkä does not claim that these observations refute physicalism, but he suggests that this broad way of thinking fits well with the influential "Intrinsic Nature Argument" for panpsychism. Others have gone further toward accepting the idea that psychedelics provide evidence against physicalism.

6.3 Beyond Naturalism

Several philosophers have considered the possibility that psychedelic experience might help us gain knowledge of a kind incompatible with standard versions of naturalism. The truth of some form of panpsychism is a fairly popular suggestion. The views of these philosophers are directly opposed to those of philosophers like Flanagan and Graham (2017), who describe psychedelic-induced mystical experiences as "metaphysical hallucinations", and Letheby (2021), who worries that psychedelic-induced non-naturalistic metaphysical beliefs may be "comforting delusions". For Flanagan and Graham, there is nothing wrong with inducing metaphysical hallucinations in the service of human flourishing, a sentiment echoed by Duff Waring (2023) – but Letheby (2016, 2021) suggests that if psychedelics did work therapeutically by inducing non-naturalistic beliefs, this would be a significant objection to their clinical use. Greif and Šurkala (2020) criticize this claim on the grounds that naturalism is a contentious metaphysical thesis that is not known to be true. But they do not claim that psychedelic experience can provide knowledge of the *falsity* of naturalism.

Sarah Lane Ritchie (2021) notes that there could be a mutually reinforcing relationship between a panpsychist metaphysics and the construal of (some) psychedelic experiences as genuine metaphysical revelations. Peter Sjöstedt-Hughes (2022) offers a similar suggestion, but with a narrower scope, focusing on a specific version of panpsychism – Spinoza's metaphysics – and on a specific type of psychedelic experience – the unitive experience often induced by 5-MeO-DMT: "A comparative analysis between the phenomenology attributed to the drug and Spinozism will then seek to show that the state is indeed aligned to the Spinozan metaphysic, thereby suggesting veridicality above delusion..." (Sjöstedt-Hughes 2022, p. 213). The idea, again, is that there might be a mutually supportive coherence between certain metaphysical views and a view of certain psychedelic

experiences as involving accurate metaphysical insights. Buchanan (2022) makes a similar proposal in relation to Whitehead's philosophy of organism, another version of panpsychism (cf. Segall 2022).

Finally, without explicitly taking any specific metaphysical view, Paweł Gładziejewski (2023) argues that psychedelic experiences can be epistemically beneficial in the formation of metaphysical beliefs. The approach here does not involve claiming that psychedelic experiences involve direct apprehension of metaphysical truths. Rather, Gładziejewski points out a standard methodological assumption in philosophy: That facts about experience can function as evidence for or against metaphysical claims. To the extent that this is true, he says, psychedelics can increase our metaphysical evidence base by allowing access to a broader range of experience. One possible result is the undermining of inconceivability arguments for metaphysical claims; undergoing psychedelic experiences can expand our sense of what is conceivable. Also, insofar as certain metaphysical systems are committed to the existence of certain types of conscious experiences – e.g. the totally selfless states discussed above – psychedelic experience can confirm the existence of those systems' posits.

7. Conclusion

The resurgence of psychedelic research in neuroscience and psychiatry raises many fascinating philosophical questions. Leaving aside ethical issues, which are outside the remit of this volume, three questions have attracted detailed debate among philosophers: (1) How does psychedelic therapy work? (2) Do psychedelics demonstrate the existence of totally selfless conscious states? And (3) what is the epistemic status of the psychedelic experience? Since the 1950s, academics have been suggesting that psychedelics merit substantial and sustained philosophical attention (Smythies 1953, Smith 1964, Shanon 2001). It seems that the call is being heeded at last.

DEFINITION OF THE KEY TERMS

- *Psychedelic*: A psychoactive serotonin-2a (5-HT_{2A}) receptor agonist capable of causing dramatic changes to perception, emotion, and cognition; a drug of the same pharmacological class as LSD, psilocybin, mescaline, and DMT.
- *Psychedelic therapy*: The use of very few (one to three) high doses of a psychedelic, in conjunction with psychotherapy, to treat mood and addictive disorders.
- *Totally selfless states of consciousness*: Phenomenally conscious mental states that totally lack all forms of self-consciousness or self-awareness (construed purely phenomenologically).
- *Psychedelic epistemology*: The emerging discussion of possible epistemic benefits, harms, risks, and opportunities of undergoing psychedelic experiences.
- *Naturalism*: The metaphysical thesis that the natural world is all there is; often treated as roughly equivalent to physicalism or materialism.

SUMMARY POINTS

- “Classic” (serotonergic) drugs such as LSD and psilocybin were subject to intense scientific interest in the mid-20th century
- A recent wave of research suggests that psychedelics can be given safely in controlled conditions
- In clinical trials, psychedelic-assisted psychotherapy (“psychedelic therapy”) has shown great promise for the treatment of anxiety, depression, and addiction
- An emerging debate in philosophical psychology concerns the mechanisms of psychedelic therapy: how does psychedelic administration lead to lasting symptom reduction?
- A debate in philosophy of mind asks whether some psychedelic experiences demonstrate the possibility of totally selfless states of consciousness
- A debate in epistemology examines the epistemic status of the psychedelic experience, with several philosophers proposing that it can confer epistemic benefits of various kinds

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