PhiMiSci
Philosophy and the Mind Sciences

Radical disruptions of self-consciousness

Editorial introduction

Raphaël Millière[a] (raphael.milliere@philosophy.ox.ac.uk)
Thomas Metzinger[b] (metzinger@uni-mainz.de)

This article is part of a special issue on "Radical disruptions of self-consciousness", edited by Thomas Metzinger and Raphaël Millière.

1 Consciousness and self-consciousness

Human beings are not only conscious creatures, but also *self*-conscious creatures: they have the capacity to be conscious of themselves, and indeed, to be conscious of themselves *as themselves*. One obvious way in which one can be conscious of oneself (as oneself) is to consciously think about oneself (as oneself), by making use of a concept of self. However, many philosophers share the intuition that self-consciousness is more pervasive in our conscious mental lives than sophisticated cognitive states that involve conceptually representing oneself as oneself. Indeed, some go so far as to suggest that a more basic form of self-consciousness or sense of self is *ubiquitous* in all conscious experiences. While it is easy to feel the pull of this intuition, it might be more difficult than it seems to provide compelling arguments and empirical evidence to support it.

Let us call the general claim that some basic form of self-consciousness or sense of self is *ubiquitous* is all conscious experiences the Ubiquity Thesis. This claim has a long history. In the West, early psychologists took it to be relatively obvious; thus, William James argued that "whatever I may be thinking of, I am always at the same time more or less aware *of myself*" (James, 1892/1961, p. 42). A few

[a]University of Oxford
[b]Johannes Gutenberg University, Mainz

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50
 https://philosophymindscience.org ISSN: 2699-0369

years later, Mary Whiton Calkins confidently stated that "all consciousness is self-consciousness, that is, one never is conscious at all without an awareness, however vague, confused, unanalysed, and unexpressed, of oneself-being-conscious" (Calkins, 1908, p. 68). In addition, versions of the Ubiquity Thesis can be found throughout the phenomenological tradition, for example in Husserl's work: "To be a subject is to be in the mode of being aware of oneself" (Husserl, 1973, p. 151). Clearly, it would be historically inaccurate to say that the Ubiquity Thesis is a marginal position.

A number of contemporary scientists and philosophers also explicitly endorse the Ubiquity Thesis. Here are just a few characteristic examples among many others:

> If "self-consciousness" is taken to mean "consciousness with a sense of self", then all human consciousness is necessarily covered by the term – there is just no other kind of consciousness as far as I can see. (Damasio, 1999, p. 19)

> I can recognize [...] a sense in which a special form of self-consciousness is built into the character of experience. [For example] some sort of peripheral consciousness of oneself as a situated, active perceiver [...] is essentially involved in the ordinary experience of looking. (Siewert, 2013, p. 256)

> [S]elf-consciousness is an integral and constitutive feature of phenomenal consciousness [...]. (Zahavi, 2014, p. 62)

If the Ubiquity Thesis was true, it should be impossible to be in a conscious mental state without thereby being self-conscious at all. The aim of this special issue is to scrutinize this hypothesis: could one be conscious without being *self*-conscious in any way? Is there any empirical evidence for the existence of conscious states that lack self-consciousness altogether? If one could undergo such "selfless" states, would one even be able to reliably remember and report them? These are some of the main questions that run through this collection of articles.

2 Philosopher's syndrome and the refrigerator light fallacy

This special issue is about something most of us might find very hard to conceive: states of consciousness in which self-consciousness is radically disrupted or altogether missing. There clearly seems to be *something* to the Ubiquity Thesis; it has a kind of raw appeal, even though it is difficult to give a positive account of the basic form of self-consciousness or sense of self that supposedly lurks in the background of every conscious experience. Why is the Ubiquity Thesis intuitively appealing? One possible explanation is that it is simply very difficult – if not outright impossible – to imagine what it would be like to be in a state of consciousness

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

lacking any kind of self-consciousness. Indeed, the appeal of the Ubiquity Thesis might be a particularly interesting instance of what Dennett calls Philosopher's Syndrome: "mistaking a failure of imagination for an insight into necessity" (Dennett, 1991, p. 401). One explanation of this failure of imagination might go as follows: every deliberate attempt at imagining a state of consciousness that genuinely lacks self-consciousness is a form of mental action; therefore, as an attempt to actively control your own state of mind, it automatically creates the phenomenology of mental agency, goal-directedness, and a sense of effort – thereby sustaining a sense of self precisely when one is trying to imagine its absence. Many of us have a deep-seated philosophical intuition that consciousness without self-consciousness is simply inconceivable, and this intuition might be rooted in the functional architecture underlying human consciousness, which in turn is a product of natural evolution and sociocultural priors. But as Dennett tells us one should resist the temptation to mistake a failure of imagination for an insight into necessity: from the fact that one cannot imagine being in a state of consciousness entirely lacking self-consciousness, it presumably does not follow that it is nomologically (or even metaphysically) impossible to be in such a state.

There is a sense in which the difficulty of thinking about states of consciousness entirely lacking self-consciousness is deeper than a mere failure of imagination. Consider the light inside your refrigerator: is it always on? Certainly, you can *imagine* it being off whenever the refrigerator door is closed. But every time you try to peek into the refrigerator – as if to take it by surprise – the light is invariably on. As we all know, the very act of opening the refrigerator automatically turns on the light. But suppose you didn't know how refrigerators work: how would you know, then, that the refrigerator light even turns off? This toy example illustrates the infamous "refrigerator light fallacy" (see Schear, 2009, p. 101, as well as Jaynes, 1976, p. 23), for an early version of the metaphor). Just because one cannot actually observe the refrigerator light when it is off, because of the functional architecture of refrigerators, one should not conclude that the light is always on. To paraphrase Dennett, one should not mistake a failure of *observation* for an insight into necessity.

Just like the light that turns off whenever one looks in the refrigerator, it might be the case that deliberately attending to one's occurrent conscious mental state is sufficient to sustain a form of self-consciousness. If so, it might be impossible to assess and validate the existence of states of consciousness entirely lacking self-consciousness through introspection. The very act of introspecting is a form of mental action that involves controlling the focus of inner attention. As such, it might always involve a phenomenal quality of "attentional agency" (Metzinger, 2017), together with a subtle but consciously experienced sense of effort. This sense of effort might be enough to sustain a consciousness of oneself as the subject attending to one's experience.

Consider Hume's infamous denial that one can find anything like a sense of self when introspecting one's occurrent experience:

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

> For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never can catch myself at any time without a perception, and never can observe any thing but the perception. (Hume, 1978, p. 252)

It could be argued that in this passage Hume misses an important aspect of introspection. Perhaps the very act of "entering" into oneself, "stumbling" upon conscious contents, and trying to "catch" or "observe" oneself sustains the very sense of self that Hume denies finding in his experience. But if this is the case, then it should be difficult if not impossible to assess whether one is undergoing a selfless state of consciousness, for the very act of attending to one's experience might be sufficient to endow it with a form of self-consciousness. Perhaps we are *constitutively* unable to introspectively assess the existence of states of consciousness entirely lacking self-consciousness.

Thus, one can see why the Ubiquity Thesis is *prima facie* attractive: most of us have probably never experienced, nor even successfully imagined, what it would be like to be conscious without being self-conscious in any way. Furthermore, it might impossible to introspect a genuinely selfless state of consciousness as such because of the very nature of introspective mechanisms. But this should not deter us from asking whether there are counterexamples to the Ubiquity Thesis. Indeed, there is an increasing amount of work on empirical conditions in which self-consciousness is disrupted. Analyzing such cases is crucial for assessssing the empirical plausibility of the Ubiquity Thesis, but it also raises their own set of concerns: how credible are reports of states of consciousness lacking self-consciousness? Can we take them at face value? And even if *some* form of self-consciousness can be disrupted in certain cases, are there conditions in which *all* forms of self-consciousness are entirely missing?

3 The need for a new research program

Over the past two decades, philosophers and scientists have paid close attention to a number of empirical cases portrayed as disruptions of self-consciousness, including schizophrenic thought insertion (e.g. Metzinger, 2003; Billon, 2013; Parrott, 2017), alienation symptoms (e.g. Lane, 2014, 2015), depersonalisation disorder (e.g. Metzinger, 2003; Gerrans, 2014; Simeon & Abugel, 2006), somatoparaphrenia (e.g. Metzinger, 2003; Liang & Lane, 2009; Vignemont, 2013), autoscopic phenomena (e.g. Blanke, Landis, Spinelli, & Seeck, 2004; Metzinger, 2013), and full-body illusions (e.g. Blanke & Metzinger, 2009; Alsmith, 2010).

However, most if not all of these conditions cannot adequately be described as involving conscious states in which self-consciousness is radically disrupted, let alone entirely missing. Take thought insertion, for example, which refers to schizophrenic patients' reported feeling that some of their thoughts are not re-

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

ally theirs and have been inserted or implanted in their heads. How should we characterize the experience described in such reports? It has been argued that the relevant reports might be prompted, at least in part, by the patients' lack of a sense of agency over the relevant thoughts (Gallagher, 2004; O'Brien & Opie, 2003; Stephens & Graham, 1994). According to this explanation, ordinary thoughts in healthy individuals come with the sense that one is the author of these thoughts; by contrast, inserted thoughts in schizophrenic patients are not accompanied by this sense of agency. The relevant feature that is allegedly disrupted in this case – the sense of being in control of one's mental activity and of causing one's thoughts – is arguably a form of self-consciousness: it refers to the experience of one's thoughts *as originating in one's own mental activity*. However, a flood of recent data on mind wandering and spontaneous, task-independent thought (Fox & Christoff, 2018) shows that the phenomenal qualities of "mental ownership" and "mental agency" can be dissociated even in the healthy population: when lost in discursive thought or immersed in a manifest daydream we experience ownership of our thoughts, but without a sense of cognitive control over them. Empirical research shows that this may actually be the case for two thirds of our conscious mental life (Metzinger, 2015). Accordingly, schizophrenic thought insertion might be better explained by the presence of an additional experience of "alienation" with respect to one's thoughts, or a feeling that one's thoughts are controled by an *external* agent, rather than the mere loss of the sense of agency over one's thoughts (as in mind wandering).

In any case, there are presumably other forms of self-consciousness than the sense of agency, some of which might not be missing during instances of schizophrenic thought insertion. For example, it might be the case that we often or always have a sense of bodily ownership – an experience of our bodies as our own (Vignemont, 2018). One might fail to experience one's thoughts as one own, and still experience one's body as one's own. Conversely, one might lack the experience of one's body as one's own, as in somatoparaphrenia and perhaps depersonalization disorder, and yet still be self-conscious in some other way(s).

More generally, there might be a number of different ways of being self-conscious that may individually go missing in specific conditions; but to cast doubt on the empirical plausibility of the Ubiquity Thesis, one would have to show that some states of consciousness lack *any* form of self-consciousness. None of the cases described above seem to fit that description. While it is plausible that some forms of self-consciousness are individually missing in these conditions, none of them appear to lack *any* forms of self-consciousness at the same time. At best, they offer examples of *partially* selfless states of consciousness.

Looking only at the conditions listed above, one might doubt that *totally* selfless states of consciousness ever actually occur. However, other conditions that have received less attention in recent philosophy of mind might provide more compelling examples of totally selfless states of consciousness. One of the goals of this special issue is to shed light on some of these cases. For example, the

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

subjective effects of certain psychoactive drugs, and particularly those of classic psychedelic drugs such as LSD, psilocybin, or 5-MeO-DMT, present a special interest for the assessment of the Ubiquity Claim. Indeed, these drugs are known to have dramatic effects on self-consciousness, and some reports even suggest that they might temporarily suppress any form of self-consciousness – a phenomenon known as 'drug-induced ego dissolution' in the scientific literature (Letheby & Gerrans, 2017; Millière, 2017; Nour & Carhart-Harris, 2017). Likewise, several meditation techniques explicitly aim at reaching a state in which self-consciousness is entirely missing; there is increasing empirical evidence that advanced meditators might actually reach such states (Millière, Carhart-Harris, Roseman, Trautwein, & Berkovich-Ohana, 2018; Winter et al., 2020). Beyond drug-induced and meditation-induced states, it has recently been suggested that conscious states might occur during deep sleep outside of dreams, and might lack ordinary content, including any form of self-representation (Thompson, 2015; Windt, 2015; Windt, Nielsen, & Thompson, 2016). Anecdotal evidence also suggests that totally selfless states of consciousness might occur during acute psychotic episodes (Saks, 2007) and partial epileptic seizures (Johanson, Valli, Revonsuo, & Wedlund, 2008). Finally, it is intriguing to consider whether patients in the minimally conscious state, as well as patients with Cotard syndrome who believe that they do not exist and often fail to refer to themselves with the first-person pronoun, might lack any form of self-consciousness (Billon, 2016; Metzinger, 2003, pp. 454–461). These are just a few examples of actual conditions that might be plausible candidates of states of consciousness entirely lacking self-consciousness; more research is needed to determine whether any of them actually satisfy this description. This special issue is a first step in establishing this research program.

4 Summary of contributions

In his article entitled "Dissolving the self: active inference, psychedelics, and ego-dissolution", **George Deane** (2020) agrees with many authors in the field that the capacity of classic psychedelic drugs to disrupt and even "dissolve" self-consciousness is of great philosophical and scientific interest. While there is a growing corpus of empirical research on the neural correlates and therapeutic benefit of psychedelic experiences, we still stand in need of a conceptually fine-grained theoretical account of their underlying mechanisms. In Deane's paper, psychedelic-induced ego-dissolution is accounted for within the framework of active inference: his central thesis is that the experience of drug-induced ego dissolution is mediated by the collapsing of the "temporal thickness" of the agent's deep temporal model, which is equivalent to lowered precision on high-level priors. Deane's argument here is composed of three steps: first, a view of the self-model is proposed as arising within a temporally deep generative model of an embodied organism navigating an affordance landscape in the service of allostasis. Second, a view of the action of psychedelics as lowering the precision

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

of high-level priors within the generative model is unpacked in terms of a high Bayesian learning rate. Finally, Deane argues that the relaxation of high-level priors causes a "collapse" in the temporal thickness of the generative model, resulting in a collapse in the self-model and a loss of the ordinary sense of being a self. This account has major implications for our understanding of ordinary self-consciousness and disruptions in self-consciousness present in psychosis, autism, depression, and dissociative disorders. Accordingly, George Deane also discusses the wider context of this novel conceptual approach, which has a rich spectrum of philosophical, theoretical and therapeutic implications.

Retrospective reports of conscious episodes entirely lacking self-consciousness might seem to have an air of paradox: How can subjects confidently report that they underwent such an episode, if they lacked any consciousness of themselves at the time? In his contribution, "Look who's talking! Varieties of ego-dissolution without paradox", **Sascha Fink** (2020) considers different ways to tackle this question and to interpret the relevant reports. Fink begins by pointing out how the main source of evidence for the existence of selfless states of consciousness are first-person reports. One might question whether these reports can be taken at face value. For example, Metzinger (2003, p. 566), Gennaro (2008), and Foster (2016, p. 6) have hinted at the self-defeating nature of such statements if we take them to be genuine reports: indeed, people reporting the relevant experiences (a) explicitly deny having been self-conscious during the relevant experience, but (b) suggest that they witnessed selfless experience in so far as they can report it (but see Millière (2020), this issue, for a defense of the claim that there is no inconsistency in retrospective first-person reports of experiences lacking self-consciousness). As Fink puts it, the *content* of such reports seems to conflict with the *pragmatics* of reporting. He argues that self-ascriptions of selfless states of consciousness can be explained in a number of ways, some of which do not entail that these self-ascriptions are self-defeating. Only some explanations for such utterances rely on an actual change in the content of phenomenal experience, and of those that do rely on a change in consciousness, only one (total ego-dissolution) is incoherent. But its alternatives do not lead to contradictions. Fink ends by arguing that when the relevant reports genuinely describe a past experience, it is plausible that this was an experience in which the sense of self *expands* rather than *disappears*.

In "Cotard syndrome, self-awareness, and I-concepts", **Rocco Gennaro** (2020) defends the higher-order thought (HOT) theory of consciousness against philosophical criticism relying on empirical data from various psychopathologies of self-awareness, such as somatoparaphrenia and thought insertion in schizophrenia. According to the HOT theory of consciousness, what makes a mental state M a *conscious* mental state is the occurrence of a higher-order thought with the content <I am in mental state M>. Having already argued in previous work that a HOT theorist can adequately respond to the conceptual challenges posed by somatoparaphrenia and thought insertion, Gennaro now turns to Cotard syndrome which is a rare neuropsychiatric disorder in which people hold the delusional be-

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50
 https://philosophymindscience.org ISSN: 2699-0369

lief that they are dead, do not exist, or have lost their blood or internal organs. In his contribution he analyzes Cotard syndrome in light of his previous discussion of somatoparaphrenia and thought insertion, arguing that HOT theory can provide a somewhat analogous account. His central point is that there are multiple concepts of self and corresponding levels of HOTs that provide a more nuanced explanation of psychopathologies such as the Cotard syndrome. Thus, on his view, Cotard patients are still capable of having some kinds of "I-thoughts" about their bodies and mental states.

In his article "Being for no-one: psychedelic experience and minimal subjectivity", **Chris Letheby** (2020) asks whether reports of drug-induced ego dissolution provide us with solid evidence against so-called "subjectivity theories of consciousness", according to which phenomenal consciousness constitutively involves a minimal form of self-awareness or "subjectivity". Billon & Kriegel (2015) have previously denied that thought insertion and depersonalization disorder constitute counterexamples to such theories. In particular, they suggested that putatively selfless states of consciousness associated with depersonalization might not in fact be phenomenally conscious at all, in which case they would not threaten subjectivity theories. Letheby argues that this line of defense does not work equally well for reports of selfless states of consciousness induced by classic psychedelic drugs, particularly potent and fast-acting psychedelics such as DMT and 5-MeO-DMT, because there is little doubt that the relevant states are phenomenally conscious. Letheby also considers an objection according to which drug-induced states may lack "me-ness" (an awareness *of oneself as oneself*) and "mineness" (an awareness of one's conscious mental state *as one's own*) but cannot lack "for-me-ness" (an awareness of one's mental state that presupposes a minimal form of experiential selfhood). Letheby addresses this objection with a dilemma: if "for-me-ness" is a component of phenomenology, then reports of drug-induced ego dissolution should suggest that this component is present in the relevant experiences. However, these reports suggest that this is not the case. If, by contrast, "for-me-ness" is not a component of phenomenology, then the claim that states of consciousness can lack any form of self-consciousness is vindicated.

Jakub Limanowski and Karl Friston (2020) analyze reports of selfless states of consciousness within the framework of active inference. In "Attenuating oneself: An active inference perspective on 'selfless' experiences", they address reports of "selfless" experiences from the perspective of active inference and predictive processing. They argue that phenomenal self-modelling is functionally grounded in active inference as action planning and precision control within deep generative models. This establishes a link between computational mechanisms and phenomenal selfhood. Limanowski and Friston propose that putatively "selfless" states of consciousness constitute rare cases in which normally congruent processes of computational and phenomenal self-modeling diverge in an otherwise conscious system. They think that two potential candidate mechanisms might lead to such a divergence by attenuating the conscious experience of selfhood: "self-flattening"

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

via a reduction in the *depth* of active inference, and "self-attenuation" via a reduction of the expected *precision* of self-evidence. Interestingly, Limanowski and Friston – like only one other author in this collection, namely Miguel Ángel Sebastián – conclude *in favour* of the Ubiquity Thesis.

Thomas Metzinger (2020) proposes a new methodological alternative to classical reductionist research strategies. These strategies target conscious experience by isolating minimally sufficient neural correlates and developing a functional analysis, ultimately leading to computational descriptions and mechanistic explanations. By contrast, he aims at a "minimal model explanation" for conscious experience, taking the phenomenal character of "pure consciousness" or "pure awareness" in meditation as its entry point. In "Minimal phenomenal experience: Meditation, tonic alertness, and the phenomenology of 'pure' consciousness", he tries to take the phenomenology of "awareness of awareness" or "consciousness *as such*" as seriously as possible – although for many centuries exactly this phenomenology has been claimed to be either non-existent or strictly ineffable. Metzinger develops the theoretical concept of "minimal phenomenal experience" (MPE) as a candidate for the simplest form of consciousness, substantiating it by extracting six semantic constraints from the existing literature and using sixteen phenomenological case-studies to incrementally flesh out the new working concept. One empirical hypothesis is that the phenomenological prototype of "pure awareness", to which all such reports refer, really is the content of a specific predictive model, namely, a Bayesian representation of tonic alertness. On a more abstract conceptual level, the phenomenal character of the relevant – and selfless – states can be described as referring to a model of an unpartitioned epistemic space.

In "The varieties of selflessness", **Raphaël Millière** (2020) argues against the Ubiquity Thesis through a divide-and-conquer strategy. After distinguishing six notions of self-consciousness commonly discussed in the literature, he argues on the basis of empirical evidence that each of them can individually fail to be instantiated at least in some states of consciousness. At a minimum, such states of consciousness can be said to be "partially selfless" insofar as they lack at least one of the ways in which one can be self-conscious. Millière subsequently argues that there is preliminary evidence that some states of consciousness lack *all* six forms of self-consciousness. These include states induced by certain psychoactive drugs and meditation practices, as well as – more speculatively – conscious states that might occur during dreamless sleep. Such states of consciousness might be said to be "totally selfless", insofar as they might lack all of the ways in which one can be self-conscious. Millière also considers four objections to the possibility and reportability of totally selfless states of consciousness. He concludes that there is no inconsistency in the idea that such states might exist and be retrospectively reported, and that it is in fact empirically plausible that such states actually occur – which undermines the Ubiquity Thesis.

Taking the opposite view, **Miguel Ángel Sebastián** (2020) defends a version of the Ubiquity Thesis against empirical objections in "Perspectival

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

self-consciousness and ego-dissolution: An analysis of (some) altered states of consciousness". He begins by pointing out how it is often claimed that a minimal form of self-awareness is constitutive of our conscious experience, and how some critics have replied that such a claim is only plausible for ordinary experience but seems to be contradicted by empirical evidence on altered states of consciousness. Sebastián argues that given a proper understanding of a minimal form of self-awareness that he labels "Perspectival First-Person Awareness" (or PFP-awareness), it becomes apparent that even putatively selfless states of consciousness do not entirely lack self-awareness. PFP-awareness is anchored in a non-conceptual, identification-free self-attribution that defines the ultimate origin of the first-person perspective of conscious experience. After offering a semantic account of PFP-awareness, Sebastián reviews the empirical literature on altered states of consciousness that have been claimed to lack any form of self-consciousness (including some discussed in this special issue). He concentrates on the phenomenology of states induced by psychedelic drugs, meditation and dreams, as they have been claimed to present the biggest threat to the Ubiquity Thesis. First, he argues that although there are good reasons to think that *some* forms of self-awareness that typically accompany our ordinary experience can be compromised in altered states of consciousness, this does not mean PFP-awareness is absent in these states. Secondly, he argues that most reports that seem to describe states of consciousness entirely lacking self-consciousness (including PFP-awareness) are probably due to confirmation bias grounded in expectations and metaphysical beliefs – and hence that we should not take these reports at face value.

As pointed out at the outset of this introduction, it seems difficult to imagine undergoing a state of consciousness lacking any form of self-consciousness. There is a sense in which such states are genuinely *inconceivable*, although we should resist Philosopher's Syndrome and conclude from this alone that they cannot exist. But even if one can provide a convincing conceptual account of such states, they might simply never occur in neurotypical humans, as a matter of brute empirical fact. In "Breaking the self: Radical disruptions of self-consciousness and impossible conscious experiences", **Wanja Wiese** (2020) asks whether there are logically possible types of conscious experience that are nomologically impossible, given independently justified assumptions about the neural underpinnings of consciousness in human beings. Wiese points out that in a sense, the answer is trivial: just consider the fact that the types of perceptual experiences we can have are limited by our sensory organs. But there may also be non-trivial types of conscious experience that are impossible. For instance, if a basic form of self-consciousness is nomologically necessary, then experiences lacking this phenomenal property are (nomologically) impossible. More generally, there might be deep causal dependencies between the neural mechanisms that are required to instantiate distinct phenomenal properties (in human beings). Accordingly, instantiating one of these phenomenal properties without certain others may be nomologically impossible.

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

In either case, there would be non-trivial cases of nomologically impossible types of conscious experience. Wiese's article clarifies this hypothesis and outlines a general methodology to assess it. Finally, he relates this discussion to the question of whether there can be states of consciousness lacking self-consciousness.

References

Alsmith, A. (2010). Minimal conditions for the simplest form of self-consciousness. In T. Fuchs, P. Henningsen, & H. Sattel (Eds.), *The embodied self* (pp. 35–41). Stuttgart: Schattauer.

Billon, A. (2013). Does consciousness entail subjectivity? The puzzle of thought insertion. *Philosophical Psychology*, *26*(2), 291–314. https://doi.org/10.1080/09515089.2011.625117

Billon, A. (2016). Making sense of the Cotard syndrome: Insights from the study of depersonalisation. *Mind & Language*, *31*(3), 356–391. https://doi.org/10.1111/mila.12110

Billon, A., & Kriegel, U. (2015). Jaspers' dilemma: The psychopathological challenge to subjectivity theories of consciousness. In R. J. Gennaro (Ed.), *Disturbed consciousness: New essays on psychopathology and theories of consciousness* (pp. 29–54). Cambridge, MA: MIT Press.

Blanke, O., Landis, T., Spinelli, L., & Seeck, M. (2004). Out-of-body experience and autoscopy of neurological origin. *Brain*, *127*(2), 243–258. https://doi.org/10.1093/brain/awh040

Blanke, O., & Metzinger, T. (2009). Full-body illusions and minimal phenomenal selfhood. *Trends in Cognitive Sciences*, *13*(1), 7–13. https://doi.org/10.1016/j.tics.2008.10.003

Calkins, M. W. (1908). Psychology as science of self: II. The nature of the self. *The Journal of Philosophy, Psychology and Scientific Methods*, *5*(3), 64–68. https://doi.org/10.2307/2012219

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. San Diego, CA: Houghton Mifflin Harcourt.

Deane, G. (2020). Dissolving the self: Active inference, psychedelics, and ego-dissolution. *Philosophy and the Mind Sciences*, *1*(I), 2. https://doi.org/10.33735/phimisci.2020.I.39

Dennett, D. C. (1991). *Consciousness explained*. London: Penguin Books.

Fink, S. B. (2020). Look who's talking! Varieties of ego-dissolution without paradox. *Philosophy and the Mind Sciences*, *1*(I), 3. https://doi.org/10.33735/phimisci.2020.I.40

Foster, C. (2016). *Being a beast*. London: Profile Books.

Fox, K. C. R., & Christoff, K. (Eds.). (2018). *The Oxford handbook of spontaneous thought: Mind-wandering, creativity, and dreaming*. New York, NY: Oxford University Press.

Gallagher, S. (2004). Neurocognitive models of schizophrenia: A neurophenomenological critique. *Psychopathology*, *37*(1), 8–19. https://doi.org/10.1159/000077014

Gennaro, R. J. (2008). Are there pure conscious events? In C. Chakrabarti & G. Haist (Eds.), *Revisiting mysticism* (pp. 100–120). Cambridge: Cambridge Scholars Press.

Gennaro, R. J. (2020). Cotard syndrome, self-awareness, and I-concepts. *Philosophy and the Mind Sciences*, *1*(I), 4. https://doi.org/10.33735/phimisci.2020.I.41

Gerrans, P. (2014). All the self we need. In T. Metzinger & J. Windt (Eds.), *Open MIND*. https://doi.org/10.15502/9783958570078

Hume, D. (1978). *A treatise of human nature* (2nd edition; L. A. Selby-Bigge & P. H. Nidditch, Eds.). Oxford: Oxford University Press.

Husserl, E. (1973). *Zur Phänomenologie der Intersubjektivität: Texte aus dem Nachlass. Zweiter Teil: 1921-1928* (I. Kern, Ed.). Dordrecht: Springer.

James, W. (1961). *Psychology: The briefer course* (G. Allport, Ed.). New York: Harper & Row. (Original work published 1892.)

Jaynes, J. (1976). *The origin of consciousness in the breakdown of the bicameral mind*. Boston, MA: Houghton Mifflin.

Johanson, M., Valli, K., Revonsuo, A., & Wedlund, J.-E. (2008). Content analysis of subjective experiences in partial epileptic seizures. *Epilepsy & Behavior*, *12*(1), 170–182. https://doi.org/10.1016/j.yebeh.2007.10.002

Lane, T. (2014). When actions feel alien: An explanatory model. In T.-W. Hung (Ed.), *Communicative action* (pp. 53–74). Singapore: Springer Science+Business.

Lane, T. (2015). Self, belonging, and conscious experience: A critique of subjectivity theories of consciousness. In R. J. Gennaro (Ed.), *Disturbed consciousness: New essays on psychopathology and theories of consciousness*. MIT Press.

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

Letheby, C. (2020). Being for no-one: Psychedelic experience and minimal subjectivity. *Philosophy and the Mind Sciences*, *1*(I), 5. https://doi.org/10.33735/phimisci.2020.I.47

Letheby, C., & Gerrans, P. (2017). Self unbound: Ego dissolution in psychedelic experience. *Neuroscience of Consciousness*, *2017*(1). https://doi.org/10.1093/nc/nix016

Liang, C., & Lane, T. (2009). Higher-order thought and pathological self: The case of somatoparaphrenia. *Analysis*, *69*(4), 661–668. https://doi.org/10.1093/analys/anp094

Limanowski, J., & Friston, K. (2020). Attenuating oneself: An active inference perspective on "selfless" experiences. *Philosophy and the Mind Sciences*, *1*(I), 6. https://doi.org/10.33735/phimisci.2020.I.35

Metzinger, T. (2003). *Being no one: The self-model theory of subjectivity*. Cambridge, MA: MIT Press.

Metzinger, T. (2013). Why are dreams interesting for philosophers? The example of minimal phenomenal selfhood, plus an agenda for future research. *Frontiers in Psychology*, *4*, 746. https://doi.org/10.3389/fpsyg.2013.00746

Metzinger, T. (2015). M-autonomy. *Journal of Consciousness Studies*, *22*(11-12), 270–302.

Metzinger, T. (2017). The problem of mental action: Predictive control without sensory sheets. In T. Metzinger & W. Wiese (Eds.), *Philosophy and predicitive processing*. https://doi.org/10.15502/9783958573208

Metzinger, T. (2020). Minimal phenomenal experience: Meditation, tonic alertness, and the phenomenology of "pure" consciousness. *Philosophy and the Mind Sciences*, *1*(I), 7. https://doi.org/10.33735/phimisci.2020.I.46

Millière, R. (2017). Looking for the self: Phenomenology, neurophysiology and philosophical significance of drug-induced ego dissolution. *Frontiers in Human Neuroscience*, *11*(245), 1–22. https://doi.org/10.3389/fnhum.2017.00245

Millière, R. (2020). The varieties of selflessness. *Philosophy and the Mind Sciences*, *1*(I), 8. https://doi.org/10.33735/phimisci.2020.I.48

Millière, R., Carhart-Harris, R. L., Roseman, L., Trautwein, F.-M., & Berkovich-Ohana, A. (2018). Psychedelics, meditation and self-consciousness. *Frontiers in Psychology*, *9*(1475), 1–29. https://doi.org/10.3389/fpsyg.2018.01475

Nour, M. M., & Carhart-Harris, R. L. (2017). Psychedelics and the science of self-experience. *The British Journal of Psychiatry*, *210*(3), 177–179. https://doi.org/10.1192/bjp.bp.116.194738

O'Brien, G., & Opie, J. (2003). The multiplicity of consciousness and the emergence of the self. In A. S. David & T. T. J. Kircher (Eds.), *The self and schizophrenia: A neuropsychological perspective* (pp. 107–120). Cambridge: Cambridge University Press.

Parrott, M. (2017). Subjective misidentification and thought insertion. *Mind & Language*, *32*(1), 39–64. https://doi.org/10.1111/mila.12132

Saks, E. R. (2007). *The center cannot hold: My journey through madness*. New York: Hachette Books.

Schear, J. K. (2009). Experience and self-consciousness. *Philosophical Studies*, *144*(1), 95–105. https://doi.org/10.1007/s11098-009-9381-y

Sebastián, M. Á. (2020). Perspectival self-consciousness and ego-dissolution: An analysis of (some) altered states of consciousness. *Philosophy and the Mind Sciences*, *1*(I), 9. https://doi.org/10.33735/phimisci.2020.I.44

Siewert, C. (2013). Phenomenality and self-consciousness. In U. Kriegel (Ed.), *Phenomenal intentionality* (pp. 235–257). Oxford: Oxford University Press.

Simeon, D., & Abugel, J. (2006). *Feeling unreal: Depersonalization disorder and the loss of the self*. Oxford: Oxford University Press.

Stephens, G. L., & Graham, G. (1994). Self-consciousness, mental agency, and the clinical psychopathology of thought-insertion. *Philosophy, Psychiatry, and Psychology*, *1*(1), 1–10.

Thompson, E. (2015). Dreamless sleep, the embodied mind, and consciousness. In T. K. Metzinger & J. M. Windt (Eds.), *Open MIND*. https://doi.org/10.15502/9783958570351

Vignemont, F. de. (2013). The mark of bodily ownership. *Analysis*, *73*(4), 643–651. https://doi.org/10.1093/analys/ant080

Vignemont, F. de. (2018). *Mind the body: An exploration of bodily self-awareness*. Oxford: Oxford University Press.

Wiese, W. (2020). Breaking the self: Radical disruptions of self-consciousness and impossible conscious experiences. *Philosophy and the Mind Sciences*, *1*(I), 10. https://doi.org/10.33735/phimisci.2020.I.32

Windt, J. M. (2015). Just in time – dreamless sleep experience as pure subjective temporality. In T. K. Metzinger & J. M. Windt (Eds.), *Open MIND*. https://doi.org/10.15502/9783958571174

Windt, J. M., Nielsen, T., & Thompson, E. (2016). Does consciousness disappear in dreamless sleep? *Trends in Cognitive Sciences*, *20*(12), 871–882. https://doi.org/10.1016/j.tics.2016.09.006

Winter, U., LeVan, P., Borghardt, T. L., Akin, B., Wittmann, M., Leyens, Y., & Schmidt, S. (2020). Content-free awareness: EEG-fcMRI correlates of consciousness as such in an expert meditator. *Frontiers in Psychology*, *10*, 3064. https://doi.org/10.3389/fpsyg.2019.03064

Zahavi, D. (2014). *Self and other: Exploring subjectivity, empathy, and shame*. Oxford: Oxford University Press.

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50

Millière, R., & Metzinger, T. (2020). Radical disruptions of self-consciousness: Editorial introduction. *Philosophy and the Mind Sciences*, *1*(I), 1. https://doi.org/10.33735/phimisci.2020.I.50