
Insight: What Is It, Exactly?

A Commentary on Ursula Voss & Allan Hobson

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In “What is the state-of-the-art on lucid dreaming? Recent advances and questions for future research”, Ursula Voss and Allan Hobson provide a detailed view of the features characterizing lucid dreaming and put forward four innovative hypotheses to explain why and how lucid dreaming occurs, as well as how lucid dream states are related to other states of consciousness. Their aim is to show that not only is there benefit to studying lucid dreaming in itself, as this would give us a deeper understanding of dream consciousness, but also that it is an important endeavor because of the kind of conscious state lucid dreaming is. To be sure, Voss and Hobson make important in-roads into the empirical study of lucid dreaming that ought to sprout new and exciting research in the area. As I will show, however, there remains much conceptual work to be done. In this commentary I tease out three aspects of Voss and Hobson’s view that would greatly benefit from philosophical consideration. First, I highlight the lingering confusion with what exactly insight is, and I point to how one might go about clarifying this notion. Second, I argue that our understanding of insight and meta-awareness in lucid dreaming could be greatly increased by looking at how these concepts are used and understood in relation to meditative states. Last, I explore the role of the body in lucid dreaming and argue that one’s bodily awareness in lucid dreams is far more multi-faceted than at it might at first seem.

Keywords

Bodily awareness | Consciousness | Dreaming | Insight | Lucidity | Meditation | Meta-awareness

1 Introduction

In “What is the state-of-the-art on lucid dreaming?—Recent advances and questions for future research”, [Ursula Voss & Allan Hobson \(this collection\)](#) aim to defend the veracity of, and value in empirically studying lucid dreaming. They provide a detailed view of the features characterizing lucid dreaming as well as hypotheses for why and how lucid dreaming occurs. As they claim, not only is there benefit to studying lucid dreaming in itself, as this would give us a deeper

understanding of dream consciousness, it is also an important endeavor because of the kind of conscious state lucid dreaming is. The authors argue that the study of lucid dreaming will also deepen our understanding of the structure of consciousness more broadly—the nature of meta-awareness, the notion of a self, and its relation to our ability to be meta-aware, etc.

To be sure, I think that Voss and Hobson make important in-roads in defending the vera-

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city of lucid dreaming and putting forward hypotheses that ought to sprout new and exciting research in the area, as I will elaborate in section 2. However, I think there remains a need for caution in how we describe and define lucid dreaming, a great need for further clarification of what lucidity involves, and potentially fruitful connections to be drawn between lucid dreaming states and meditative states. In what follows, my goal is to elaborate on each of the following three points with a view to generating future discussion and discovery not only in the area of lucid dreaming research, but also in areas of meditation research and embodied awareness research.

The first point on which I focus—in section 3—is the concept of “insight”. To be sure, Voss and Hobson do offer us a definition of insight—an awareness of being in a dream, knowing that what one is currently experiencing is not real, etc.¹ However, their definition conflates and confuses whether the insight involved in lucid dreaming is a state or an ability, and whether it is an epistemic or phenomenal state/ability. In other words, does it involve knowledge of something, is it simply experiential, or is it an ability to do or know something, etc.? In this section, then, I delve deeper into what the authors mean by “insight” and explore these questions, as well as inquire whether insight is best understood using epistemological or phenomenological frameworks. Moreover, I consider what the consequences of an underdeveloped understanding of the concept of insight might be for the current state of research on lucid dreaming.

The second point on which I focus—in section 4—is the authors’ suggestion that we look at other states of waking consciousness with a view to determining how exactly insight comes to co-occur with REM sleep. I consider the potential similarities between lucid dreaming and meditation, and suggest that there are fruitful connections to be drawn between the meta-awareness associated with insight in lucid

dreaming and the meta-awareness involved in certain meditative practices.

The third point I consider—in section 5—is the experience of the body in lucid dreaming. In particular, I argue that if we accept one of the authors’ hypotheses—the Hybrid State Hypothesis—then we can enrich our understanding of the bodily awareness involved in lucid dreaming by looking at certain accounts of bodily awareness in waking consciousness. More specifically, I offer one interpretation for why the dual experience of the dream body and the real body in lucid dreaming is said to demand a lot of concentration by appealing to my recent work on bodily awareness in waking experiential consciousness. Before I begin exploring each of these three points, however, let me first summarize Voss and Hobson’s important contributions.

2 Voss & Hobson—A summary

In their piece, Voss and Hobson consider the latest empirical evidence on lucid dreaming and set forth four hypotheses that, they suggest, would begin to explain the whys and the hows of lucid dreaming. The four hypotheses proposed—the BMH (Brain Maturation Hypothesis), the GBH (Gamma Band Hypothesis), the HSH (Hybrid State Hypothesis), and the SCH (Space of Consciousness Hypothesis)—are based on five years of scientific research on lucid dreaming and, together, are meant to provide a multi-faceted picture of what lucid dreaming is, how it arises, why it arises, and how it relates to other states of consciousness.

The first hypothesis they propose is the BMH (Brain Maturation Hypothesis), which serves as a potential explanation for *why* there is lucid dreaming. Evidence shows that lucid dreaming occurs naturally and most often during certain periods of brain development and maturation in children and young adults.² The empirical evidence also suggests that lucid dreams are peculiar mental states that occur during the final stages on frontal lobe integration and, as such, are “nothing but an

¹ See Voss and Hobson’s target article in this collection, and their development of the LuCiD (Lucidity in Dreams) scale in Voss et al. (2013).

² See Schredl & Erlacher (2011), as well as the Voss & Hobson target article (this collection).

accidental confounding of conscious states during a time of high cerebral diversification” (Voss & Hobson [this collection](#), p. 8). For these reasons, Voss & Hobson hypothesize that “during childhood and puberty, frontal lobe activity is sometimes decoupled from the arousal state so that frontal lobes can become active in a state for which this type of activity is untypical”—the BMH ([this collection](#), p. 8). This, they propose, explains *why* lucid dreaming occurs.

Voss and Hobson then offer three other hypotheses—GBH, HSH, and SCH—as explanations of *how* lucid dreaming occurs. The GBH (Gamma Band Hypothesis) provides an account of how lucid dreaming arises by appealing to specific changes in brain activity associated with the onset of a lucid dream during ongoing REM sleep. Specifically, this hypothesis holds that the principle brain correlate of lucid dreaming is 40Hz activation of the frontal cortex—activation at this frequency brings about the meta-awareness associated with secondary consciousness. The HSH (Hybrid State Hypothesis) & SCH (Space of Consciousness Hypothesis) shift away from particular brain activity and, rather, provide a brain-based explanation and classification, respectively, of what lucid dreaming is in relation to other mental states. The HSH suggests that lucid dreaming involves elements of both waking and dreaming consciousness, and is, indeed, a destabilized hybrid state involving both frontal cortex activation, as suggested by the GBH, and REM sleep cortical activation. The HSH explains the *how* of lucid dreaming by offering a way to reconcile the subjective reports of lucid dreamers with the empirical data of cortical activation. The SCH lays out a three-dimensional model with which to categorize various states of consciousness and to see how the spectrum of mental states relate to one another along certain variables. This model allows us to situate lucid dreaming within a state space of consciousness and ascertain the similarities it might hold with other waking states of consciousness. These four hypotheses work together to consolidate the quantitative and qualitative data on lucid dreaming and provide a picture of why and how lucid dream-

ing occurs. For my purposes here, I will set aside the BMH and the GBH and will instead return to the HSH and the SCH in sections 4 and 5.

Importantly, the authors specify that their interest lies in considering REM-sleep lucid dreaming. In other words, the focus of their paper is to consider cases where the dreamer correctly achieves insight into the fact that he or she is dreaming while the dream continues (see Voss & Hobson [this collection](#), p. 4). The authors appeal to the Lucidity and Consciousness in Dreams Scale (LuCiD) they developed to assess the various features of a lucid dream state, and with this they describe eight features of lucid dream consciousness: insight, realism, control, memory, thought, positive emotion, negative emotion, and dissociation.³ Of these eight factors, three are highlighted as particularly important to the study of lucid dreaming—insight, control, and dissociation—as they do not typically appear in non-lucid dreams.⁴ The core criterion of lucid dreaming, however, appears to be insight. This feature, once it appears, then causally enables the possibility of control and dissociation. One of the issues that I will explore further in the next section is whether insight should be thought of as an epistemic or a phenomenal state, and what either of these interpretations might mean for understanding the role of insight in lucid dreaming.

Most of Voss and Hobson’s article discusses the features of insight and dissociation in relation to recent empirical evidence, and although there is indeed very illuminating discussion of these features, I nonetheless think there is still much conceptual confusion and semantic vagueness with regard to what exactly they are and how they relate to our non-dreaming conscious states. As I show in the next section, this is where philosophical considerations can help clarify the conceptual landscape and help move the empirical project forward.

3 Voss and Hobson don’t discuss the possibility of there being varying degrees of lucidity, and thus how these features might relate to such varying degrees. For a discussion of this, see Noreika et al. (2010).

4 There are rare cases where some of these aspects do occur in non-lucid dreaming states. See Voss et al. (2013) and Voss et al. (2014).

3 Understanding insight

The first element of Voss and Hobson's piece on which I want to focus my attention is the concept on insight. More specifically, I want to explore what the notions of lucidity and insight involve and how they relate to dream consciousness. As the authors clearly state throughout their paper, lucidity involves insight, and insight seems to be the key feature of lucid dreaming as it serves the basis of dream lucidity and enables the other elements of dream lucidity to arise, e.g., dissociation, control, etc. Without insight, it appears, one could not have lucid dreaming. Or, at the very least, it seems conceptually essential to have insight in order to be in a state of lucid dreaming.⁵ Given the importance of insight, it is key that we obtain a clear view of precisely what it is.

In the first place, I think it is necessary to distinguish between the *state* of insight and what one has insight about—let us refer to this as the *content* of insight. With regards to the state of insight, it is not so clear what this precisely is, and the authors do not adequately clarify it. For example, if it is an epistemic state, then it would have an intentional object. The questions then become: what are the intentional objects of the state of insight? What kind of knowledge does the state of insight involve? It is in the second section of their paper, “Quantification of Dream Lucidity as Subjective Experience”, that Voss and Hobson attempt to describe and define what the state of insight is. There, they liken insight to a subjective awareness of our mental state. This subjective awareness, they go on to claim, is a form of secondary awareness, or meta-awareness that arises in lucid dreaming. They define meta-awareness, following Metzinger (2013), as “an instance of actively acquired self-knowledge or a sudden insight, regardless whether it is accurate or counterfactual” (Voss & Hobson this collection, p. 4). In short, insight appears to be a form of awareness that arises out of a more primary

awareness, and it allows the subject to attend to, or “see” what is occurring in primary awareness.

Now, a number of questions and issues arise from this definition of the state of insight. First, it seems quite problematic to define insight as a form of meta-awareness, and then to define meta-awareness as an instance of sudden insight. Perhaps, however, we might want to rely on the first half of the disjunct in the definition quoted above and understand insight as a form of actively-acquired self-knowledge. Given that the authors refer to insight as a form of reflection (Voss & Hobson this collection, p. 6) and as a form of knowing (*ibid.* p. 8) elsewhere in the text, I will assume that this is the more accurate reading of the definition. However, this still raises questions. In what way are we to understand “actively acquire” in the case of lucid dreaming? What does the dreamer *do* in a non-lucid dream state to acquire insight and thus bring about lucid dreaming? Is lucid dreaming an ability?⁶ If so, then perhaps it is trainable. Trainability might, in turn, provide us with an answer to the first two questions: namely, what might be involved in actively acquiring insight and what exactly the dreamer does. If it is an ability, perhaps the ability in question is one of moving into a state of meta-awareness. Moreover, if the ability to shift into a state of meta-awareness is an element of what the subject “does” to actively acquire insight while dreaming, then looking to other mental states that involve meta-awareness and that are also “trainable” could be beneficial.

One such set of mental states that involve an aspect of trainability are meditative states. Meditation is a practice, and with practice one is able to achieve and sustain certain forms of awareness—focused attention, open awareness, etc.⁷ If we take the element of practice in meditation as being akin to a form of trainability, and the forms of awareness in meditation to be

⁶ For a review of the ways in which lucid dreaming is trainable see Stumbrys et al. (2012).

⁷ Focused attention meditation involves developing one's ability to concentrate on an object for an unlimited amount of time. Open presence/awareness meditation involves opening one's awareness to all experiential aspects of the moment, e.g., mental states, bodily sensations, environmental stimuli, etc., and not attending to anything in particular.

⁵ We might not, however, be warranted to make a similar empirical claim, i.e., that insight is empirically essential *and* sufficient for lucid dreaming. Indeed, there is controversy over whether insight is empirically sufficient for lucid dreaming. See Voss et al. (2013) and Windt & Metzinger (2007) for further discussion of this issue.

akin to meta-awareness, then looking at the practice of meditation—what one does, how one improves, and so on—might be informative in ascertaining whether actively acquiring insight in lucid dreaming is something that is trainable.⁸ As I will detail in the next section, I believe there are also other reasons to consider meditation in relation to lucid dreaming.

Another line of questioning that arises from Voss and Hobson’s definition of the state of insight relates to the concept of self-knowledge that, they claim, is an element of insight. How are we to understand the concept of “self-knowledge” as it applies to the insight gained in lucid dreaming? What is the “self” involved? And how strict a use are we making of the concept of knowledge—do we mean a justified true belief? The state of insight seems to involve very different characteristics. Voss and Hobson hold that insight involves knowledge, or the realization that one is dreaming, and they also describe insight as an experiential phenomenon, and one that involves reflection. The issue here is that “knowledge”, “realization”, “experiential phenomenon”, and “reflection” are not interchangeable concepts. It remains quite unclear from the descriptions of insight provided whether we should view the state of insight as an epistemic or phenomenal state of consciousness. Based on the information Voss and Hobson provide in their piece, I am inclined to move away from an epistemological view of the state of insight as I think the concept of self-knowledge is too complex for the phenomenon that Voss and Hobson describe. What I mean here is simply that with the concept of self-knowledge come notions of identification, veridicality, the self, and so on, and I do not think that such a complex concept is necessary to account for the *experience* of insight in lucid dreaming. As Voss & Hobson explain, insight is “[t]o some extent, the dreamer [having]”—“however limited”—“access to secondary consciousness, enabling her to reflect on her present state” (this collection, p. 8), and “[b]y secondary consciousness we mean the subjective

awareness of our state in dreaming” (*ibid.*, p. 4). Instead, I would suggest using the concept of self-awareness to capture what is involved in insight, and by self-awareness I mean here simply the awareness of being in a certain experiential moment.⁹ So, in the case of insight, one becomes aware of dreaming—a self-awareness—rather than acquiring the self-knowledge that one is dreaming. Perhaps, however, there is reason to separate the concept of insight from that of lucidity, and with this distinction we might want to describe lucidity as a phenomenal state and insight as an epistemic state. I think there might be good reason to take this route, and I explore this in the next section by considering the potential relation between insight in lucid dreaming and insight in meditative states.

Now, these are issues that arise when considering what is meant by the “state” of insight. As I distinguished earlier, however, there is also the “content” of insight. With regards to the content of insight, in cases of lucid dreaming things are relatively clear: one gains insight on the nature of one’s current dream state, i.e., that one is currently dreaming. In other words, insight involves coming to realize *that* one is dreaming. This way of describing what occurs in insight, however, could be seen as problematic in that it takes insight to involve a particular kind of knowledge, namely, knowledge-THAT. If indeed insight involves knowledge-THAT, then this opens the door to theory-contamination; that is, the content of insight is contaminated by what one already believes about dreams, consciousness, etc.¹⁰ Although I grant that this issue shows that there is a need to clarify what exactly the content of insight is, I am uncertain that it is as problematic as it might at first seem to hold that insight involves knowledge-THAT. How else would one be able to “realize” that one was dreaming if one was not able to identify, to some degree, that the state one is in is a dream state? Moreover, it certainly seems that to perform such an identification one

⁸ The Tibetan Buddhist practice of dream yoga is a particularly interesting area worthy of exploration in relation to this issue. See LaBerge (2003) for a discussion of dream yoga in relation to lucid dreaming research.

⁹ The “self” in self-awareness here does not refer to an ego or any robust notion of a self. Moreover, the kind of awareness I’m suggesting is not a categorical awareness, i.e., an awareness of the experiential moment as belonging to a category of consciousness (see Metzinger 2009). Rather, it is meant simply to point to a reflexivity of awareness (see the concept of “pre-reflective self-awareness” in Zahavi 2005).

¹⁰ Thanks to Thomas Metzinger for pointing out this issue.

would rely on theory-contaminated beliefs—certain conceptions of what a dream is like, etc. Perhaps there is no way of avoiding theory-contamination altogether, and thus the issue becomes one of determining how much contamination is allowable in the case of insight.

I certainly grant that given the state of research into lucid dreaming—it is still very much in its infancy, no doubt—it is not unexpected that a clear understanding of a complex concept such as “insight” is still lacking. To be sure, the authors have provided a good starting point for developing a full description of the state of insight. However, given that it is, arguably, the key element of dream lucidity, I worry about how well we can empirically investigate, or interpret our empirical findings of the whys and hows of lucid dreaming if we don’t first ensure that we have a working understanding of insight. To define insight as a form of meta-awareness, or secondary consciousness that involves actively acquired self-knowledge, is not informative enough to allow us an understanding of what insight in dream consciousness is or why it is so special and important.

To be sure, I think it would be entirely inappropriate to hold Voss and Hobson accountable for not teasing out the concept of insight further. They are empirical researchers, and as such have paved the way for future research in this area. However, I think that the lack of conceptual clarity and the semantic vagueness that remains in this area point to the need for philosophical inquiry and the value of integrating philosophical work with empirical work on lucid dreaming. It now lies in the hands of philosophers to ensure that the future progress of this research is based on a strong conceptual foundation. One direction to take in this endeavor is to follow Voss and Hobson’s suggestion and look at other areas of research concerned with meta-awareness, reflection, and insight. In the next section, I propose that one such area is that of meditation.

4 Lucidity, meta-awareness, and meditation

The second point I want to focus on is Voss and Hobson’s desire to consider other states of con-

sciousness to better understand the state of lucid dreaming. In particular, they express an interest in considering altered states such as hypnosis or mind wandering. I suggest that there might also be benefit in considering meditation. Specifically, I think we can fruitfully make use of how the notion of insight in meditative experiences is developed to clarify that of insight in lucid dreaming. We would first have to show that there are enough important similarities between the notion of insight involved in meditation and the notion of insight involved in lucid dreaming, and this will be my aim in what follows.

To be sure, there are many and various meditation styles and practices, each with its own experiential path to higher states of awareness. Broadly speaking, there are three categories of meditative practice, each with variants, and there is overlap in some respects between the categories.¹¹ First, there is focused attention meditation—this involves developing one’s ability to concentrate on an object for an unlimited amount of time. Second, there is open presence meditation—this involves opening one’s awareness to all experiential aspects of the moment, e.g., mental states, bodily sensations, environmental stimuli, etc., and not attending to anything in particular. Third, there is insight meditation—this involves developing mindfulness or meta-awareness over one’s mental states. More specifically, and most interestingly when compared to the concept of insight in lucid dreaming, “[insight meditation] is also one of the earliest and most fundamental forms of meditation. For Buddhist theorists, [insight meditation] is a style of meditation that, in combination with the focus or stability provided by cultivating [focused attention], enables the practitioner to gain insight into one’s habits and assumptions about identity and emotions” (Lutz et al. 2007, p. 504). For my purposes here, I will set the finer variations among these three main styles of meditation aside since I’m merely concerned with drawing out the similarities, in broad strokes, between the sought-after meditative state and the insight it is intended to provide,

¹¹ See Lutz et al. (2007) for a more detailed account of the various styles of meditative practice and their historical roots.

and the lucid dreaming state and the insight required to bring it about. Interestingly, however, the concept of insight applied to the practice of insight meditation is quite similar in many respects to the concept of insight applied to the experience of lucid dreaming.

To be sure, the concept of insight, as it relates to meditation, is very complex, and also not fully defined. There are many levels of insight, and many aspects of mental life, the self, and life more broadly that one achieves insight about, depending on the style of meditation one engages in and the level of mastery one develops in one's meditative practice. For example, in the practice of focused attention meditation, a novice practitioner might be said to have gained insight upon becoming aware of the difficulty involved in maintaining attention on the flow of the breath through the nostrils. The insight here is of a particular aspect of mental life, namely, the fleeting nature of attention. Whereas in the case of an experienced practitioner with hours of meditative experience, the insight gained may involve the nature of the self—for example, that it is characterized by desire and craving, or that it is ultimately an illusion. Nevertheless, I think that we can certainly make use of the way the concept of insight is broadly understood in meditation to clarify its relation to lucid dreaming, if it has any relation.

First, I take it that when we speak of insight gained through meditation, we aren't referring to a particular state that is achieved, but rather to a form of knowledge that is gained within a state of consciousness. The state from within which we might be said to achieve insight is a state of meta-awareness, but being in this state doesn't necessarily imply that insight has been achieved. For example, the novice practitioner may become meta-aware of what it is like to try to maintain focused attention on the breath, but this doesn't necessarily mean that he gains knowledge from this about the nature of attention and consciousness more broadly. Conversely, it seems that in the case of lucid dreaming, at least as described by Voss and Hobson, insight is understood to be synonymous with meta-awareness. This seems a natural understanding given that, as per Voss

and Hobson, when lucidity is achieved there is necessarily insight. That is, one could not, it appears, be meta-aware of their dreaming without having insight into the fact that they are dreaming. However, is this really *insight*? This is where I think we may want to tease apart the notions of lucidity and insight, following our understanding of meta-awareness and insight in cases of meditation.

In the case of lucid dreaming, there certainly is the experience of coming to realize one is in a dream state. This is the phenomenological interpretation of the state of insight I discussed in the previous section—what I also called the self-awareness of dreaming. However, we may want to refer to this aspect of lucid dreaming as lucidity, rather than insight. In other words, when lucidity occurs while dreaming, why should we not be satisfied saying that one has simply become aware of their dreaming? Why should we take this to be insightful? Maybe because lucidity doesn't merely involve a passive awareness of the dream state, but also an understanding by the dreamer of *what* she has become aware of—and this enables dissociation, plot control, etc. The suggestion that there is now an understanding that the dreamer has of being in a dream, however, brings into the picture the epistemological interpretation mentioned earlier. Given this, insight is better viewed as an epistemic state. In fact, maybe there is not only a need to dissociate lucidity from insight in the case of lucid dreaming; we may want to grant that both admit to phenomenological and epistemological degrees.¹² As we see in meditation, there are many levels of insight—many areas of our existence of which we can gain knowledge—and so maybe there is also reason to think that there are further forms of insight to be had in lucid dreaming as well. One particularly interesting point of convergence between the empirical work on lucid dreaming and meditation is in the phenomenon of dream yoga.¹³ As a result, we might not want

¹² This very idea has been explored in Windt & Metzinger (2007), as well as in Noreika et al. (2010).

¹³ In particular, the case of Tibetan dream yoga mentioned earlier, which involves using meditative practice in the dream, might be an instance of exploring just how meditation and lucid dreaming can come together, and could be informative for our understanding of

to define insight as a state of consciousness, or as a meta-awareness. Rather, we may instead see insight as a form of knowledge that accompanies lucidity, and lucidity as a form of meta-awareness.

Another area of similarity between meditation and lucid dreaming that I want to explore lies in the structure of each of these experiences.¹⁴ Both seem to involve some form of dissociation. As [Voss & Hobson \(this collection\)](#) describe, “lucid dreams can be considered dissociated states of consciousness in which the dream Self separates from the ongoing flow of mental imagery. The dream is still a dream but the person is able to distance him/herself from the ongoing imagery and may even be successful in gaining (at least partial) control over the dream plot” (pp. 8–9). The experiential feature of separation of the dreamer from the dream while the dream continues to unfold is akin to the observational stance that one strives to take in meditation, in particular in focused meditation. When meditating, one aims to become aware of one’s stream of consciousness—one tries to separate oneself, as it were, from the stream of thoughts, beliefs, desires, etc., in order to become aware of its transient nature. For example, one becomes aware of, say, the fleeting nature of attention and mental life. Similarly in lucid dreaming, one becomes aware of being in a dreaming state.

However, the concept of “self” that seems to underlie Voss and Hobson’s discussion of lucid dreaming is quite different from how the self is understood in meditation. Voss and Hobson appear to have a very robust sense of self at play, and I’m not quite sure why this is so, or whether we want to bring such a conception of self into the picture. One of the most telling passages in their article, and one that I find most problematic is the following:

both the nature of meditative states and that of lucid dreams. As [LaBerge](#) notes, “for more than a thousand years Tibetan Buddhists have believed that it is possible to maintain the functional equivalence of full waking consciousness during sleep. This belief is not based on anything as tenuous as theoretical grounds but upon firsthand experience with a sophisticated set of lucid dreaming techniques collectively known as the Doctrine of Dreams or dream yoga” (2003, p. 233).

¹⁴ See [Evan Thompson’s](#) entry in [this collection](#), as well as [Thompson \(2014\)](#).

This fits well with the common description of lucid dreams as (partial) awakening in your dreams and of involving a split between dreamer and dream observer who coexist and change relative dominance of the mind at will ([Occhionero et al. 2005](#)). The implications of this line of reasoning have profound impact on the theory of mind. There are two selves suggesting that the self is a construct elaborated by the brain ([Metzinger, 2003, 2009, 2013a](#)). The two selves of the lucid dreamer [...] ([Voss & Hobson this collection](#), p. 9, emphasis added).

Why would we want to describe the result of the dissociation in lucid dreaming as one that involves a split between a dreamer self and a dream-observer self? Furthermore, on the basis of what would there be reason to argue that the self is a construct?

If the experience in lucid dreaming is one of shifting back and forth between being meta-aware of being in dream consciousness and being in the dream itself as the dreamer, why would we not want to speak of this as a change in experiential perspective rather than as an experience of two selves?¹⁵ Moreover, if we look to how similar meditative experiences are described, we don’t speak of there being two selves, the self within the stream of consciousness and the self that observes the stream of consciousness. Rather, we speak of our shifting experiential perspectives wherein we move, as a single subject of experience, from being within the flow of consciousness to observing the flow of consciousness. Furthermore, one of the insights gained from meditative practice is that there is indeed no self.

I grant that it is perhaps in keeping with the subjective reports of lucid dreamers to speak of two selves in the lucid dream state. If the subjective report that [Voss & Hobson](#) quote in their paper ([this collection](#), p. 9) is but one example of the way in which subjects describe their experiences, then it certainly seems nat-

¹⁵ The shift in experiential perspective might even be more complex than this; see [Rosen & Sutton \(2013\)](#) for an interesting discussion of self-representation in dreams.

ural to take on such a view of the self. However, I suspect that the subjective reports may be constructed in a manner that is biased by a certain colloquial manner of speaking about the self,¹⁶ and thus don't rightly capture if and what the self is in relation to the structure of consciousness. Certainly I am not suggesting that we shouldn't take the subjective reports seriously—indeed I think that they provide invaluable information into the phenomenology of lucid dreaming. However, we must be careful to properly interpret these reports, and perhaps this will involve developing ways to discover whether certain biases have come into play in the subject's report of her experience, and how these biases have affected the qualitative data.

5 The hybrid state hypothesis and bodily awareness

The third and last point I want to consider is the place of the body, and bodily awareness, in lucid dreaming. I was particularly struck by two lucid dreamer reports. The first is the one that [Voss & Hobson](#) quote in their paper wherein the lucid dreamer explains that “[i]n these short periods of lucidity the awareness of the acting dream body and the real body in bed exist simultaneously and it costs a lot of concentration to keep the balance between both” ([this collection](#), p. 9). The second comes from Dutch psychiatrist Frederik van Eeden, who coined the phrase “lucid dreaming”:

In January, 1898 [...] I was able to repeat the observation. [...] I dreamt that I was lying in the garden before the windows of my study, and saw the eyes of my dog through the glass pane. I was lying on my chest and observing the dog very keenly. At the same time, however, I knew with perfect certainty that I was dreaming and lying on my back in my bed. And then I resolved to wake up slowly and carefully and observe how my sensation of lying on my chest would change to the sensation of lying on my back. And so I did, slowly and

deliberately, and the transition—which I have since undergone many times—is most wonderful. It is like the feeling of slipping from one body into another, and there is distinctly a double recollection of the two bodies. I remembered what I felt in my dream, lying on my chest; but returning into the day-life, I remembered also that my physical body had been quietly lying on its back all the while. This observation of a double memory I have had many times since. It is so indubitable that it leads almost unavoidably to the conception of a dream-body. ([van Eeden 1913](#))¹⁷

I found the description of there being two bodies rather interesting, and, particularly in the subject report cited by Voss and Hobson, the mention of the cost of concentration to be very intriguing. To be sure, there is but one physical body, namely the one lying in bed. Yet the dreamer experiences both the body in bed and the body with which she is engaged in the dream, and finds it somewhat demanding to maintain an experiential balance between both. In this last section, I put forward an explanation of this experience by relying on the Hybrid State Hypothesis alongside my work on bodily awareness during waking consciousness.

According to the HSH Voss and Hobson put forward, lucid dreaming is a hybrid state with both elements of waking and dream consciousness. This is so because there is a dissociation that occurs between the dream self and the ongoing dream imagery. Physiologically, although brain activity associated with REM sleep continues, in lucid dreaming there arises, in addition, brain activity in parts of the brain associated with conscious awareness and executive ego functions. The hypothesis, then, is that “lucid dreams push the arousal system towards waking yet remaining within the region occupied by REM sleep [...]. Lucid dreaming is, thus, a fragile, destabilized hybrid state” ([Voss & Hobson this collection](#), p. 9). If this hypothesis is correct, then there may be value in looking at how we are aware of our body in a waking con-

¹⁶ This, as Metzinger would point out, would be another instance of theory contamination.

¹⁷ Thanks to Metzinger for pointing out this classical description of a lucid dream experience.

scious state to help better understand the seeming duality of bodily awareness involved in lucid dreams. More specifically, if we take seriously the above-quoted subjective report, then the hybrid state hypothesis in combination with certain hypotheses about bodily awareness in waking conscious states might shed light on how the experience arises.

What I find particularly interesting about the reports are two things:

- a. the simultaneous experience of a dream body and the real body in bed; and
- b. the amount of concentration needed to keep the balance between both.

In regards to the first, I find myself wondering the following: what does the subject mean by simultaneous, here? Does she mean that both bodies are experienced *at the same time*, or rather, that there is a very quick and continuous shift back and forth from the dream body to the real body, such that it *seems* like they are both being experienced simultaneously? I am inclined to think that what is happening is a very quick attentional shift back and forth between the two “bodies”. My reasons for thinking this come from how I account for our bodily awareness in waking life.

I take it that in our everyday experiential lives we are aware of our body both as an object and as a subject. The distinction between awareness of the body as object and as subject stems from the Phenomenological tradition¹⁸ and it is best understood as follows. I can be said to be aware of my body as object when I direct my attention to my body and thereby perceive it as I would any other object in the world. The key characteristic of our awareness of the body as object is that it is attentional. Alternatively, I can be said to be aware of my body as subject when I am aware of my body as that *through* which I experience the world—not as an object onto which I turn my attention, but rather as that which engages with my environment. My awareness of my body as subject is

also referred to as a bodily self-awareness, and it is characterized by an inattentive awareness—a form of awareness that does not involve holding attention to an object.¹⁹

Now, my typical experiential consciousness involves a bodily self-awareness, although it doesn’t always involve an awareness of the body as object. This is because I don’t always attend to my body. Take, for example, my sitting in a chair reading a book. Typically, my attention lies with the book—I focus on the words on the page, say. In attending to the book, I don’t simultaneously attend to my hands holding the book, although they are certainly a part of my overall experience insofar as they don’t disappear from my awareness entirely. I certainly can shift my attention to my hands, and thereby become aware of them as object; however, in doing so, I contend, I am no longer attentively aware of the words I was reading a moment ago. In fact, I take it that if I were to try to be aware of my hands and the words on the page simultaneously, I would find this quite difficult as it would involve a continuous and rapid shift in attention back and forth between the words and my hands. I think a similar account holds in the case of lucid dreaming with regard to the dream body and the real body.

I propose that in the case of one’s bodily awareness in lucid dreaming, the real body is experienced both as subject and as object. It is the subject’s actual body, and therefore one that she is aware of as subject, but in addition her experience of her real body, in the lucid dream, is of her body as an object—she becomes aware of her body as object by her attention shifting to it momentarily. However, her attention does not remain with her real body; instead it quickly shifts back to the dream body as well. In that experiential moment, the dream body becomes an object for her as she attends to it. I think the further clue as to why we should interpret the experience of the body in lucid dreams as one of shifting attention, and even perhaps competing attention between the real and the dream body, comes from the second element of the subject’s report men-

¹⁸ A philosophical tradition most often associated with the work of Husserl, Merleau-Ponty, Sartre, etc.

¹⁹ I develop this distinction further in my thesis, “Embodiment and Subjectivity—the Origins of Bodily Self-Awareness”.

tioned above—the claim that “it costs a lot of concentration to keep the balance between both”.

Why is there a need to keep a balance between the real and the dream body? Perhaps because, as the HSH suggests, there are elements of both waking and dreaming states at play. If we take bodily awareness to be a fundamental element of waking consciousness—or even consciousness tout court, as I do—as well as a key element of dream consciousness, then it makes perfect sense that in a lucid dream the subject finds herself with these two bodies that must be balanced in the same way that the waking and the dream states must be balanced to remain in the lucid dreaming state.²⁰

The question then becomes: why does it cost a lot of concentration to maintain this balance? I think the answer to this question brings us right back to my suggestion above, namely that the simultaneity of the dream and real body experience is one of shifting, or even competing attention. If there is a continuous shift in attention, rather than a joint experience of both bodies, then this would explain the apparent cost of trying to maintain concentration on both bodies in a lucid dream state. It would be like walking a tightrope, trying to avoid leaning too far to the right or too far to the left, and doing so by continuously shifting your body to maintain that balance. It would require an incredible amount of concentration—in a general sense, one experiences everything all at once, but in a more precise sense, one’s attention is continuously shifting between one’s body and one’s environment in order to maintain balance.²¹

One last point of inquiry. As I mentioned above, there is a distinction to be made in accounting for our bodily awareness in waking experiential consciousness between our awareness of the body as object and our awareness of the body as subject, i.e., bodily self-awareness.

²⁰ The place and role of the body, and our bodily awareness in lucid dream states, is far more complex than I can show here—in fact, there are instances of bodiless dreams. Although a complete consideration of these issues is beyond the scope of this commentary, an excellent discussion of this topic can be found in [Windt \(2010\)](#).

²¹ This is also how lucid dreams are commonly described in the literature, i.e., as a balancing act. See [LaBerge \(1985\)](#) and [Brooks & Vogel-song \(2000\)](#).

However, I wonder if a similar distinction might also apply in cases of lucid dreaming given the HSH. In other words, is there a bodily self-awareness—of the real body or even the dream body in a lucid dreaming state? And, if so, how does it relate to the awareness of the dream body and the real body described by subjective reports? To begin answering these questions we would need to explore the subjective reports of lucid dream experience in relation to bodily awareness more specifically. Perhaps we might begin by looking back upon the report by van Eden. Indeed, I certainly take this to be an interesting avenue of exploration given the ever-increasing interest in taking an embodied approach to consciousness.

6 Conclusion

In closing, let me review the three points of inquiry on which I chose to focus here. First, I inquired as to what exactly the concept of insight involves in the case of lucid dreaming and whether we should think of insight as a phenomenal or epistemic state. I suggested that the lack of clarity with regard to the concept of insight shows the need for rigorous philosophical inquiry with a view to laying down a solid conceptual foundation from which to pursue future empirical research. Second, I inquired as to how meditation and lucid dreaming are similar and where research on meditation might provide information to research on lucid dreaming. I highlighted some interesting overlaps in the concepts of insight in meditative practice and lucid dreaming, and explored the feature of dissociation in lucid dreaming in relation to the notion of a self. Third, I looked at how we are aware of our body in lucid dreaming and considered whether our accounts of bodily awareness in waking consciousness can be used to inform our understanding of bodily awareness in lucid dreaming. I also suggested that the distinction between awareness of the body as object and of the body as subject used to describe waking bodily awareness could help us tease out the ways in which the body is experienced in lucid dreams.

As I stated above, the empirical study of lucid dreaming is still very new and, thus, still very much in an exploratory phase. As a result, it is easy to point out various areas for further inquiry and suggest avenues of future investigation. However, it is nonetheless important to acknowledge the work that Voss and Hobson have done to advance our understanding of the phenomenon of lucid dreaming. Not only have they provided a convincing account of why lucid dreaming occurs (BMH), they also put forward an interesting hypothesis for the neural basis of lucid dreaming (GBH). Moreover, their HSH and SCH will serve to further the conceptual analysis of lucid dreaming and its relation to other mental states across the spectrum of sleeping to waking consciousness. In short, I agree with Voss & Hobson that “the experimental study of lucid dreaming is a powerful paradigm for understanding the brain basis of conscious experience” (this collection, p. 4). Moving forward, we must now expand the area of research to allow for important philosophical considerations that will strengthen the conceptual framework underlying this exciting new paradigm.

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