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Is Lucid Dreamless Sleep Really Lucid?

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Abstract
Recently, the construct '*lucid dreamless sleep'* has been proposed to explain the state of 'clear light' described by Tibetan Buddhist traditions, a special state of consciousness during deep sleep in which we're told to be able to recognise the nature or essence of our mind (Padmasambhava & Gyatrul 2008; Ponlop 2006; Wangyal 1998). To explain the sort of awareness experienced during this state, some authors have appealed to the sort of lucidity acquired during lucid dreaming and suggested a link between both phenomena (Thompson 2014, 2015; Windt 2015a; Windt et al. 2016). Whilst these authors appeal to a non-conceptually mediated form of lucidity, which doesn't consist of reflective awareness and propositional thought, the question as to whether the state of clear light should be considered a lucid state similar to lucid dreaming still arises. I argue that the concept 'lucidity' used to describe this sort of state is imprecise and that two theoretical notions of lucidity should be distinguished. The first one, which I call the *technical notion*, requires the recognition of the hallucinatory character of my current experience. The second, the *broader notion*, involves the seeming recognition of being directly acquainted with the phenomenal character of my experience. I spell out these two notions of lucidity and argue that only the latter could apply to the state of clear light sleep.

1 Introduction

While the notion of lucidity might be described in a pre-theoretical sense to allude to a state in which one has rediscovered something forgotten or has gained a certain truth, there's a specific sense in which the notion is used *technically* to describe certain conscious states. A paradigmatic case of the application of such a notion of lucidity is that found in the realm of dream and sleep research to describe a particular sort of dream; that in which one realises that one is dreaming while dreaming, commonly known as 'lucid dreaming' (henceforth, LD). Such a technical notion

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draws upon certain intuitions about what lucidity is. In the case of dreaming, lucidity is a state in which one realises that what they took to be reality, or the wakeful world, is indeed a dream. Although this notion of lucidity is used in a technical way to provide a theoretical explanandum of a certain phenomenon, there are different ways in which this notion is accounted for in the literature of dreaming. In turn, those understandings affect how the notion of lucidity, in a technical way, is applied to other conscious states outside dreaming. An example of this is '*lucid dreamless sleep*', a construct that has recently acquired increased attention in the study of the nature of consciousness (see Thompson 2014; 2015; Windt 2015a; Windt et al. 2016).

The construct of lucid dreamless sleep has been proposed to describe a particular state of awareness during sleep widely reported in contemplative traditions, such as the Dzogchen lineage in Tibetan Buddhism. According to classical Dzogchen teachings, by engaging in certain meditation practices, one can aspire to reach a state of 'clear light' during deep sleep (cf. Padmasambhava & Gyatrul 2008). The state of clear light is then conceived as a state of consciousness different from any other conscious state such that it lacks thoughts, cognition and perceptual experience (see Olivelle 1998). For these contemplative traditions, the state of clear light doesn't involve an ordinary state of consciousness with a subject-other distinction (Holecek 2016; Raveh 2008)—i.e. an 'I' who is aware of 'something'. Instead, the state of clear light is understood as a state of non-dual awareness, also conceived as "pure awareness" (Wangyal 1998) or "bare awareness" (Ponlop 2006). Moreover, some commentaries and translations of the original Dzogchen texts refer to it as a state of "luminosity" (Fremantle 2001; Ponlop 2006) or "clarity" (Rinpoche 2002); a state where we're said to perceive things clearly and recognise the "true" or "fundamental" nature of the mind (Dalai Lama 1996; Ponlop 2006). During this state, one is able to recognise the qualitative character of the experience, which is taken as an essential and intrinsic aspect of consciousness (MacKenzie 2007:41).[1] Thus, there is a sense in which the clear light is understood as a state of phenomenal awareness, inasmuch as there is something it is like to be in such a state (cf. Nikhilananda 1949; Thompson 2014, 2015). While one isn't able to engage in reflective thought while in it, one can be aware of the qualitative aspect of such a state and report it afterwards.

Some authors have attempted to explain the sort of awareness present during the so-called state of 'the clear light sleep' by relating it to LD awareness. Evan Thompson (2015) illustrates the link between LD and the clear light sleep in the following way:

> "Whereas lucid dreaming consists in knowing that you're dreaming, *lucid dreamless sleep* is said to consist in being able to witness the state of dreamless sleep and recall its phenomenal clarity upon waking up" (p.15, stress added)

[1] Note that several Tibetan Buddhist traditions assert that all conscious experiences involve a self-awareness aspect; according to those traditions, conscious states involve a form of pre-reflective self-awareness, which is referred to as the "self-awareness" or "self-luminosity" aspect of consciousness (see McKenzie, 2007 for a discussion). According to these traditions, self-awareness is a non-dual state that lacks the subject/object structure of ordinary awareness (see Kellner 2010; Williams 1998). I will comment this further in §4.1.

While Thompson suggests a link between both phenomena, LD and lucid dreamless sleep, he also notes that the sort of lucidity in the latter doesn't involve the kind of reflective or higher-order thought traditionally ascribed to LD. Instead, lucid dreamless sleep involves what he regards as "non-conceptual meta-awareness" (2015:1)—a state of meta-awareness that doesn't involve conceptually mediated representations. Windt (2015a) follows Thompson in conceiving the sort of lucidity occurring during the clear light sleep as a form of "non-conceptually mediated" insight (p.20), or what she takes to be a state involving the feeling of knowing about the nature of one's ongoing conscious experience (ibid). Both authors also acknowledge that not all instances of awareness during the clear light sleep are instances of lucidity. For instance, Windt suggests how a simpler state of non-lucid awareness could be had, involving a sense of pure temporality or "now" (Windt 2015a, b). Moreover, these authors describe both non-lucid and lucid cases of the clear light sleep as instances of phenomena they refer to as '*dreamless sleep*'—sleep experiences that shouldn't be regarded as dreaming inasmuch as they don't involve the experience of a self in a dreamt or simulated world (see Windt et al. 2016).

Notwithstanding the extensive conceptual and theoretical work undertaken by Thompson and Windt, there is a way in which the construct of 'lucid dreamless sleep' is misleading and requires further clarification. If such a state is considered as dream-*less* and, thus, isn't meant to be a state of perception similar to dreaming, can such a state still be conceived as 'lucid' in the technical sense of the word used in LD, even if regarded as 'non-conceptual'? Is this the sort of state that can be lucid in this technical sense? And if not, could the state of lucidity reached during the clear light sleep be considered as 'lucid' in a different sense, and if so, what sense would that be? In this paper, I claim that the construct of 'lucid dreamless sleep' is imprecise and that further theoretical examination of the notion of lucidity is needed. I start by spelling out the different notions of lucidity used in dream research, and the problems they face. I then put forward a technical account of lucidity aimed at describing a state of minimal lucidity. According to this view, a state of lucidity, in a technical and strict sense, is a state in which one recognises that one's experience falls short of perception. I then examine how the technical notion of lucidity fits within other similar states, both during dreaming and during wakefulness. Finally, I show how a broader theoretical account of lucidity should be applied if we want to conceptualise dreamless sleep as 'lucid'. I propose that a state should be considered 'broadly lucid' if it involves the seeming recognition that one is directly acquainted with the phenomenal character of the experience.

2 What Makes a Dream State Lucid?

2.1 Views on Lucidity in Lucid Dreaming Research

Since the inception of the term 'lucid dreaming' by Van Eeden (1913), LDs are described as those dreams in which one knows that one is dreaming (Gillespie 1983; Green 1968; LaBerge 1985). However, in the literature, we find slightly different characterisations as to what this 'knowing that one is dreaming' amounts to.

Classical views of this phenomenon portray dream lucidity as a state of reflective awareness, or reflective thought, a state where the dreamer reflects on their current experience and concludes they're dreaming (Gackenbach & LaBerge 1988; Green 1968; LaBerge et al. 1981; Tart 1979; Van Eeden 1913). In this respect, classical views of lucidity emphasise how LD involves a state of 'clarity' or clear mind closer to that of ordinary wakefulness (LaBerge 1980; Tholey 1988). Some classical views go further and claim that dream lucidity also involves a phenomenal shift in the experience, phenomenologically regarded as 'hyperreal' (Brooks & Vogelsong 1999; LaBerge 1985; Metzinger 2003, 2009). LD is then conceived as an all-pervading experience different from any ordinary waking state (Tart 1979, 1984). Other classical accounts of lucidity have focused on studying the behaviour associated with the acquisition of lucidity: the capacity for controlling one's dreamt and/or physical body. Such an approach, usually accepted in experimental research, was initiated with Stephen LaBerge's eye-signalling method for LD.[2] For these accounts, lucidity is taken as an operationalised notion that can be tested experimentally with lucid dreamers volitionally performing certain actions in their dreams.

While classical views of lucidity highlight some of the distinctive features of LD, contemporary empirical research indicates that such descriptions of LD only account for certain instances of lucidity and leave many more cases out. First, a wide body of research on dream metacognition shows how the capacity for self-reflectiveness isn't exclusive to LD. Non-lucid dreamers can also think and reflect on the dream events as well as execute rational thought (Bosinelli 1995; Cicogna & Bosinelli 2001; Kahan 1994; Kahan & LaBerge 1996, 2011). From the evidence presented in these studies, many authors claim that reflective thought while dreaming isn't a dichotomous phenomenon and moves along a continuum, as it does during waking states (Kahan & LaBerge 2011; Mallett et al. 2021). Second, LD rarely involves a subject who can fully realise the implications of their dream being a dream, as some classical views claim (Tholey 1988). Lucidity lapses are frequent and common in LDs, and thus, the dreamer doesn't always seem to acknowledge the consequences of their experience being virtually generated (Windt & Voss 2018). Moreover, lucidity might be only gained towards certain aspects of the dream but not others. For instance, the dreamer might still take some elements of the dream as real like regarding a dream character to be a real person or believing that actions in the dream impact the waking world (Barrett 1992; LaBerge and DeGracia 2000).[3] Third, most LDs don't involve a phenomenal shift like the experience of the dream as unreal and when they do it's quite rare (see Voss et al. 2013). Thus, the need

[2] LaBerge developed a pioneering experimental method to assess dream lucidity in real time consisting in asking participants to carry out a distinctive pattern of eye movements when dreaming and realising they are dreaming. Those distinctive eye patterns can be observed on the EEG and allow researchers to conduct empirical validations of dream lucidity (LaBerge 1980, 1985; LaBerge et al. 1981). Recently, such eye-signalling method has also allowed researchers to carry out a two-way communication channel in which the researcher 'communicates' with the lucid dreamer in-real time (see Konkoly et al. 2020).

[3] Windt and Voss (2018) point out how lucidity lapses aren't exclusive from LD, but that they also appear in contexts enhancing the feeling of presence—feeling of being there—, such as virtual reality settings and threating situations (p.400) According to these authors, lucidity can then co-exist with naïve-realistic beliefs about our experience (see also Windt 2015b:436).

for a phenomenal shift for a dream to be considered lucid might be unnecessary—one might become lucid in a dream without experiencing their dream phenomenally differently.[4] Finally, the operationalised definition of LD dreaming in the realm of experimental research seems to only cover certain sorts of LD, namely, those in which the dreamer can control their dreams. However, empirical research reveals the rarity of full-fledged forms of LD, including those which feature dream control (Stumbrys et al. 2014). As such, considering only LDs as dreams involving control over dream events, or execution of certain pre-established actions (as instructed by LaBerge's eye-signalling method) might only cover a subset of LD (see Horton 2020 for a discussion).[5] Besides, the capacity for controlling one's dream is a multifaceted skill which doesn't only involve executing actions under one's own will, but also certain components of self-determination, planning, and intention (see Dresler et al. 2014). While some components of behaviour and action control are most prominent during LD, they aren't exclusive from LD and some of those components are also observable to a lower extent during non-LD (Kahan et al. 1997; Kozmová & Wolman 2006; Wolman & Kozmová, 2007).

Given these limitations of classical views of LD to only explain certain LDs, more researchers are shifting towards graded views of lucidity, claiming that dream lucidity isn't an all-or-nothing phenomenon, but a graded one (Mallett et al. 2021; Noreika et al. 2010; Stumbrys et al. 2014; Windt 2015b). Graded accounts of lucidity aim at considering the full lucidity spectrum and the variability of lucidity across different LDs. An example of a graded view is that put forward by Windt and Metzinger (2007) who distinguish between full-fledged forms of lucidity and what they regard as 'weaker' ones. According to these authors, the sort of lucidity portrayed by classical views as a state of reflective thought usually refers to a strong form of lucidity, or what they coin "Cognitive" or "C-Lucidity" (p.222)—the capacity to form and apply certain concepts to our current mental state. However, as some empirical research indicates, lucidity in dreaming isn't always experienced as a state of higher-order awareness, such as the awareness of the content of our state as that of being in a dream state. To explain those cases, these authors appeal to subsymbolic and nonconceptual representations occurring at a subpersonal level—our current conscious state is represented as that of a dream, yet we lack conceptual awareness of our experience as that of a dream (Windt, 2015b:428). According to these authors, in some LDs, the dream is experienced *as a dream*, yet in a non-propositional and non-conceptual way (Windt and Metzinger 2007:222). Windt and Metzinger regard these cases as instances of "Attentional" or "A-lucidity" and deem them as forms of

[4] Some research points towards the fact that the onset of lucidity might be experienced as having a particular phenomenal character (Barrett 1992; Mallett et al. 2021), however, there's not enough data to conclude that dream lucidity is always experienced as involving a phenomenal shift, and that this is a necessary condition for LD.

[5] Similarly, such an approach might also deem as LD certain dreams that might not involve lucidity in the technical sense of the word. For instance, some classic LD reports highlight the fact that the dreamer might be able to carry out the desired dream task, yet still deeming the dream environment as reality (see Worsley 1984). Moreover, some research has pointed out to the fact that the pre-established eye-signal might sometimes not even be carried out during sleep but during REM to wakefulness transition (see Mota-Rolim 2020 for a discussion).

"weaker lucidity" (ibid). Other authors like Noreika et al. (2010) also distinguish amongst different types of lucidity, such as "Emotional" or "E-lucidity" (p.41)—dreams in which the dreamer's emotional response is appropriate to what would be expected if they knew they were dreaming (i.e. I don't become scared if I run into a tiger in a dream). More recently, Windt (2015b) has suggested that 'weaker' forms of lucidity (or A-lucidity) could be related to the sort of non-conceptual awareness present in epistemic feelings or noetic feelings (Dokic 2012; Koriat 2000), like the tip-of-the-tongue feeling or feelings of knowing. I'll later delve into this view but for now, the main point here is that, according to Windt, weaker forms of lucidity might be instances where one has a feeling of knowing that one is dreaming without involving further propositional thought about our current experience (see Windt 2015b: 432).[6]

This shift towards graded views of lucidity has highlighted the variability of lucidity in dreaming which doesn't always involve a subject with a full recovery of their cognitive capacities or who can fully realise the non-veracity of some elements of their experience. Insofar as the subject is in a state that yields true justified belief about their current state as one of dreaming (to a lesser or higher degree, they know that they're dreaming), most current dream researchers would regard their experience as a lucid, regardless of whether the dreamer has full conceptual awareness of this fact or a mere feeling of knowing that this is the case (as proposed by Windt and Metzinger). However, some further clarifications as to what that feeling of knowing that one is dreaming amounts to are needed to frame which sort of dreams should be considered minimally lucid. I'll examine some of the problems arising from a graded view of lucidity, especially when used to distinguish between pre-lucid states or dreams that might lead to lucidity and minimally lucid dreams.

2.2 Disambiguating Between Pre-Lucidity, Weak Lucidity and Minimal Lucidity in Dreaming

The notion of 'pre-lucidity' is often used in the dream literature to describe dreams in which the dreamer shows some signs of knowing that their experience is a dream yet fails to classify it as a dream—we might then say that the dreamer *fails* to become lucid. These signs include wondering or asking oneself if one's dreaming (Green 1968), observing the bizarreness or incongruities of one's experience (Mallett et al. 2021; Sparrow et al. 2013, 2018) or recognising some but not all dream

[6] Windt has related the sort of awareness occurring during A-lucid or weakly lucid dreams to the notion of "non propositional" or "procedural" metacognition (Proüst, 2007, 2014). According to a growing number of theorists, metacognition doesn't always require re-representation of our mental states, and thus, it shouldn't be exclusively understood in terms of second-order state (or reflective awareness). Theorists holding such a framework argue that subpersonal processes can also monitor cognition (Beran et al. 2012) and thus, we can explain metacognition without appealing to propositional knowledge. Proponents of the existence of procedural metacognition argue that we can know something in virtue of knowing-how or having procedural knowledge (Fridland 2015:713). While is a contentious topic of debate whether procedural metacognition should be regarded as 'meta'-cognition, here I remain neutral about whether this should be regarded as a form of 'meta'- cognition.

elements as unreal (Barrett 1992; Moss 1986); all without actually recognising the dream as a dream. However, there is an equivocal sense in which the notion of pre-lucidity has sometimes been used in the literature, thus, leading to the conflation of pre-lucidity with weak or simple forms of lucidity. As the term indicates, pre-lucidity is a state that *precedes* lucidity, not a state that should count as lucidity.

The conflation between pre-lucidity and weakly lucid states can be seen in various examples found in the literature. For instance, Windt and Metzinger (2007) illustrate a case of weak lucidity (or A-Lucidity) by quoting a dream where the dreamer becomes lucid in virtue of gaining an awareness of an unreal or odd quality of the experience; in the example given, that the colours perceived in the dream are like no other experienced before (see LaBerge & Rheingold 1990 in Windt and Metzinger 2007:223).Yet it isn't clear from the analysis provided by these authors whether the state described is one of (weak) lucidity at all or it's just an *enabling condition* that brings about lucidity. If we stick to Windt and Metzinger's account of weak lucidity, a weakly lucid dream is that in which the dreamer can represent in a non-conceptual manner (or subsymbolically) their state as that of a dream state. There's a non-propositional way of knowing that one is dreaming. However, Windt and Metzinger regard the dreamer of the previous example as lucid inasmuch as they become self-aware of the qualitative aspect of their experience, in this case, that the colours they're experiencing are like no other colours ever experienced before. While this fact might be an enabling condition for the dreamer to become lucid, it doesn't seem that this self-awareness alone can explain lucidity. Moreover, Windt and Metzinger also refer to weak lucidity states as 'pre-lucid states' (p.222) raising the question as to whether pre-lucidity should be then considered as a state that *precedes* lucidity, as a form of lucidity, or as something else.[7]

The problem of disambiguating what should count as "weakly lucid" or "pre-lucid" (i.e. enabling lucidity) is also found in other characterisations of LD as a state of 'insight' or 'metacognitive insight'(see Baird et al. 2019; Filevich et al. 2015; Voss et al. 2013; Voss & Hobson 2015; Windt & Voss 2018). Some researchers describe LD as "insight into the fact that one is currently dreaming" (Voss & Hobson 2015:5). However, 'insight' is an ill-defined notion and it isn't always clear what it refers to. As in the case of 'knowing that one is dreaming' put forward by classic views of LD to describe dream lucidity, different authors understand differently what this 'insight' amounts to. Kühle (2015) offers an extensive conceptual analysis of this notion and argues that insight can be read in two ways. It can refer to a state of self-knowledge about the fact that one is dreaming, such as a state in which I have knowledge of the content of my state of awareness (i.e. a state of second-order awareness such as the 'knowledge that *p*'). However, it can be read as a state of self-awareness about dreaming which Kühle describes as an instance of knowledge-how, procedural knowledge, or as experiential insight (p.7); there's no propositional

[7] Similarly, Noreika et al. (2010) also talk of "lucidity types" (p.41) when coining what they consider as "pre-lucid" or a "weaker" sort of lucidity, like *Attentional, Behavioural* and *Emotional* lucidity types (*A*, *B* and *E-lucidity* respectively). Nevertheless, they assert that only C or Cognitive lucidity should be considered as actually lucid (ibid).

thought such as "this is a dream" that I'm aware of, yet I'm aware of my ongoing state as that of a dream. In this case, what makes me aware of the dream state *as a dream* is my awareness of the subjective character of my experience—according to Kühle, there's reflexive awareness of our current state as one of dreaming given in the phenomenal character of our experience.[8] While Kühle teases apart the different ways in which the notions of insight can be portrayed, it still raises similar questions as to whether awareness of the phenomenal character of my experience as a dream-like one would count as a case of weak lucidity or just as an enabling condition for lucidity, and thus, a pre-lucid state.

The previous characterisations of how insight about the nature of our current state as one of dreaming can be brought about seem to demand a further explanation as to how lucidity exactly takes place. It seems that merely gaining awareness of the content of the phenomenal character of our experience—even if the content of such is about an experience that seems odd, unreal or dreamlike—isn't enough for a state to be considered lucid. Such an awareness might be merely an enabling condition for becoming lucid. Windt (2015b) also discusses this issue by presenting a case falling within the borders between pre-lucidity and weak lucidity. In the example brought by Windt, one might have certain feelings of knowing within their dream experience, for instance, by feeling that one knows a dream character or that one knows that one's dream's apartment is different from the real one (p.429). Windt describes those feelings of knowing as epistemic or noetic feelings—feelings that represent our current cognitive state in a non-conceptual and non-propositional manner (see Proüst 2014). According to Windt, those feelings point towards a non-conceptual representation of my current state as that of a state of dreaming—I know in a non-conceptual way that I'm dreaming. Following on her account of lucidity put forward with Metzinger, Windt describes such an example as an instance of *weak* or A-lucidity. However, as Windt notes, not any sort of noetic feeling would do to regard this example as an instance of (weak) lucidity; lucidity won't be brought about by merely having a sense of familiarity with some elements of the dream, but those noetic feelings should "spread to the process of dreaming itself, thus enabling the dreamer to hit on the right explanation of this strange feeling, namely, that all of this is a dream" (p.431). From this remark by Windt, it seems that the condition for a noetic feeling to trigger a state of weak lucidity is a bit more demanding—a state of weak lucidity isn't a state in which I only have self-knowledge about the phenomenal character of my experience, in this case, realising about a feeling of familiarity within my experience, but my current state needs to be represented as one of dreaming (or a virtually generated one). I will comment on this further in §2.3.

[8] This way of understanding 'insight' and thus, LD, is also portrayed by some authors under the notion of 'pre-reflective self-awareness'. For instance, Windt claims that certain forms of lucidity don't involve "conceptual mediated insight" and instead should be understood as forms of pre-reflective awareness (2015:26). Other authors also refer to it as a form of "non-propositional meta-awareness" (see Dunne et al. 2019) described as the experience of a certain phenomenal feeling during a dream. These authors use a notion of pre-reflectiveness similar to that used by the phenomenological tradition, understood as the self-awareness given in the experience (see Zahavi 2005).

In the next subsection, I put forward a technical account of lucidity aiming at capturing what exactly makes a state minimally lucid by drawing from the different views of lucidity in the literature and by addressing some of the problems that those views face.

2.3 The Technical Account of Lucidity

While graded views of lucidity do consider the full lucidity spectrum, contra classic views which only focus on the top extreme of lucidity, graded views aren't often able to properly spell out the necessary conditions for a dream to be considered lucid, and thus, what distinguishes non-lucidity from pre-lucidity and minimal lucidity. Here, I put forward a technical account of lucidity drawing from the assumption that lucidity is a graded phenomenon but also by considering what makes a state minimally lucid, contra a non-lucid or pre-lucid state. Following on the descriptions found in the literature, I argue that a lucid state is one in which I recognise the hallucinatory character of my experience, a distinctive feature that is only found during episodes of lucidity, regardless of the degree of lucidity.

Different views of lucid dreaming seem to point to a representational state in which our current state is represented as one lacking perception.[9] For instance, classical views of lucidity only consider cases in which this representation involves conceptually meditated content—the dream is considered lucid insofar as one correctly categorises their current experience as a 'dream'. Graded views of lucidity depart from this by arguing that the concept 'dream' can be applied afterwards, and thus, doesn't specify the content of the current experience—one can be lucid in a dream yet lack the concept 'dream' or fail to apply that concept at that moment. In this respect, graded views consider cases of non-conceptual awareness and argue that a state can be lucid if it represents our current state as a dream state (or as a state that is hallucinatory or virtually generated), yet this representation isn't conceptually mediated—I don't need to possess the concepts that canonically specify the content of my mental state. Thus, we could take a state of non-conceptual awareness to be lucid in the strict sense if the state described is one in which my current state (or a property of my current state) is represented as simulational or as lacking perception. It yields a justified true belief, although it might not be until we wake up that we apply the concept of 'dreaming' to that state. We know that we're dreaming in a non-conceptual way, which could be described as merely having a feeling of knowing that we're dreaming (as opposed to having a state of propositional knowledge about that fact).

From the different definitions of LD found in the literature, I propose a unified account of minimal lucidity which attempts to assess all the different cases of lucidity. For that, I claim that lucidity, in a technical sense, should be regarded as a state in which I recognise the hallucinatory nature of my current perceptual state. For a

[9] Note that here I stick to the use of the term 'perception' as a successful term—a state in which my phenomenal experience matches the experience of a worldly object (a 'real' object) under the right conditions. My experience is a veridical one.

dream to be minimally lucid, I must realise that what I took to be reality is indeed a simulation or a hallucinatory experience, and thus, that I'm not currently in perceptual contact with the world.[10] This proposal isn't a new one and relies on claims already made in the literature. Several authors assert that the realisation of the hallucinatory character of the current experience by the dreamer is one of the key features of dream lucidity (Noreika et al. 2010; Revonsuo 2006; Voss & Hobson 2015; Windt & Metzinger 2007).[11] Such a feature seems to be crucial for becoming lucid and is maintained across different degrees of dream lucidity, as found by Voss et al. (2013). From all the above, lucidity, in the technical sense, should be described as the following:

> **Technical notion of lucidity:** A state involving the representation of our current state as one that lacks perceptual contact with the world, or a state that falls short of perception.

Moreover, given the different degrees of lucidity characterised in the literature, we can regard the technical notion of lucidity more strongly or weakly, thus, giving place to different sorts of lucid states:

> **Strong lucidity**: Requires conceptual awareness and categorisation or classification of the dream as a dream.
> **Weak lucidity**: Doesn't require conceptual awareness, yet it involves non-conceptually representing my state as one of dreaming or a state not amounting to perception.

[10] Here I follow a simulational account of dreaming which takes dreams to be simulational experiences of a self in a hallucinated world (cf. Revonsuo 2006; Windt 2010, 2015b). It should be noted that other rival views about the ontology of dreaming exist, such as the imagination theory of dreams (Ichikawa 2008, 2009) or the pluralist account (Rosen 2018). For the purposes of this paper, I'm focusing on taking an account of dreaming that considers its phenomenal character, in particular, the phenomenological profile of LDs as recognised hallucinations (or pseudo-hallucinations if you wish). In any case, rival views on the ontology of dreams as imaginative experiences shouldn't pose a problem on the technical account of lucidity outlined here; if dreams are conceived as imaginative experiences, LDs, under that view, would still involve a state in which I represent my current experience as not consisting of perceptual contact with the world.

[11] Note that Windt and Metzinger (2007) go a step further and argue that the perfect recognition of the virtual character of one's own experience can only be achieved during LD. According to these authors, perfectly fully-fledged lucid dreams allow the dreamer to recognise the fact that one's experience is a hallucination or a virtually generated world which might trigger a sense of depersonalisation caused by the fact of realising that everything, including oneself, is a hallucination (p.224). However, when asserting this, these authors have in mind the experience of full-lucidity, not minimal lucid states. Following their view, full-fledged lucidity involves a phenomenal shift in our experience such as the experience of my conscious state as a simulation. As such, their view doesn't allow for the possibility of what Metzinger coins "lucid waking", the experience of full-fledged lucidity during waking states (cf. Metzinger 2003:542). As per their view, full-fledged lucidity could only be had during psychiatric conditions or mystical experiences (ibid). Note again that here I only address what a minimally lucid state, on the bottom end of the lucidity spectrum, would be like.

In the technical sense, a strong LD is a dream in which one categorises and classifies one's own state of awareness as that of a dream. In that sense, lucidity might involve linguistic or propositional thought, yet doesn't need to. Note that here I'm only considering those cases of lucidity that are at the bottom end of the spectrum and leave out more full-fledged cases of lucidity which might involve explicit awareness of the content of one's conscious state, reflective thought or dream control. To a weaker degree, we find LDs where the dreamer still represents their current experience as that of a dream, yet in a non-conceptual manner at a subsymbolic level.[12] The dreamer might possess the concept 'dream' which they might apply upon waking up. The difference in the 'weaker' case is that the concept 'dream' doesn't specify the content of the dreamer's current state of awareness. In a weaker sense, a LD might merely involve a feeling of knowing that one is dreaming. Nevertheless, is crucial to point out that regardless of taking lucidity to a stronger or weaker degree, under the technical account, such a state would only be lucid if it involves a specific sort of content: that of a state that doesn't consist of perceptual contact with the world. Thus, in the case of LD, the specific content of my conscious state is that of realising that my current experience is simulational (or hallucinatory).

By counting with such a unified account of what minimal lucidity should amount to, we can distinguish better between pre-lucid and minimally lucid states. Under the account I present here, pre-LDs are regarded as *a class* of non-lucid dreams and thus, shouldn't be accounted as LDs, even in a 'weak sense'. Pre-LDs might sometimes precede lucidity, hence their name, but insofar as they don't represent our current state as that of a dream (or a hallucination), and thus, don't yield awareness of our current state as that of a dream, they aren't lucid, not even in the weaker sense. Pre-LDs might involve a representation of some aspects of my experience as hallucinatory, thus leading me to have some feelings of unreality or oddness about my experience which might prompt me to question whether this is a dream without concluding that it is, as Green originally described (1968). Similarly, I might realise that my current phenomenal state has a particular distinctive feeling, like in the report of the dreamer describing seeing colours as they never have seen before (LaBerge & Rheingold, 1990). In this respect, one might have self-knowledge about their current state of awareness, as some research in non-LD metacognition shows (cf. Kahan 1994). Yet what matters and what distinguishes pre-lucidity from weaker lucidity is that in a lucid dreaming state my whole perceptual experience is represented as that of a state of dreaming, while in a pre-lucid one, only some elements are represented

[12] Note that here I stick to a reading of 'non-conceptual' endorsed by many theorists who take graded views of lucidity as referring to mental states that represent the world in a certain way yet don't require the bearer of those states to possess the concepts that specify the contents of such state (Bermúdez 1995). Thus, nonconceptual content is usually understood as a sort of content that eludes linguistic expression and that explains the existence of tacit knowledge, like that involved in grammar or skill learning (Cussins 1992), but also to explain the sort of representational content involved in perception (Bermúdez 1995; Peacocke 2001).While some authors do account for the existence of non-conceptual content as a sort of low-level of subpersonal information processing in which some aspect of another representation or a representational property is represented (see Bermúdez 2001, 2007; Proüst, 2007; Shea 2014) it's a contentious point of debate in analytic philosophy whether non-conceptual content exists at all, or whether such content should be considered as representational (see Toribio 2007 for a discussion).

as hallucinatory. For a state to be lucid in the technical sense, the content of the state needs to be one in which the *whole* state is represented as a state that falls short of perception.

Such a technical account of lucidity can also explain the case of noetic feelings characterising what Windt and Metzinger describe as A-lucidity or weak lucidity. As introduced in §2.2, Windt (2015b) suggests that for a state to be lucid, certain feelings of knowing, like the feeling of familiarity, shouldn't be restricted to certain contents of my dream experience (i.e. recognising someone or something as familiar), but enable me to recognise that my experience is a dream (p.431). Here I take this suggestion made by Windt and argue that, in fact, it's this recognition of the hallucinatory nature of my state which enables me to provide the right explanation for my feeling of familiarity; the fact that all this is a dream. Merely having self-knowledge about the phenomenal character of my experience, namely, realising about my feeling of familiarity, won't do—the feeling of familiarity alone cannot be counted as an instance of lucidity, only as a case of pre-lucidity if it leads to the recognition of the hallucinatory character of my experience. For a noetic feeling to count as a case of minimal lucidity, such a feeling should be brought about in virtue of representing my current state as a state falling short of perception (in a conceptual or non-conceptual way).

3 The Technical Account in States Outside Dreaming

After having considered the technical notion of lucidity used in dream research, fleshed out the different ways in which it can be understood, and proposed a unified account, I show how this notion of lucidity can also be applied to other states outside dreaming. Since, after all, the question that I raised in this article is whether the sort of conscious sleep experiences described by Tibetan Buddhist traditions could be regarded as being lucid in this respect, we ought to see whether the technical account of lucidity can apply to other states other than dreaming.

Remember that the technical account of lucidity refers to states in which our current state is represented as one that lacks perceptual contact with the world, or a state that falls short of perception. Described in this more generalist way, without being specific about the case of dreaming, this definition applies to other conscious states, like instances of recognising simple visual hallucinations or illusions in non-pathological cases. Think of the first time you were told about a particular visual illusion (or try a new one by yourself). If we take the Hermann-Herring grid as an example, when looking at the grid we usually experience (more or less intensely) black dots appearing and disappearing at the intersection points. The onset of lucidity comes when we're told that the black dots aren't actually drawn in the picture, but that they're afterimages. We have a sudden realisation that we were wrong—that which we were taking to be 'seeing' isn't indeed a real percept but a hallucination; or, in this case, a form of illusion if you wish (see Macpherson & Batty 2016). In those cases, the episode of lucidity might be very brief but meets the same conditions for the technical account of lucidity outlined above: there's a recognition in a conceptual or non-conceptual way of the hallucinatory character of our current

experience.[13] We find more immersive examples in virtual reality (VR) environments. When wearing the head-mounted display, and especially if it's our first time in VR or in a new environment, we feel fully immersed in the VR scenery.[14] Yet, while in VR, we (implicitly) know that we're not indeed at a mountain's peak or under the sea but that we're in fact standing on our living room floor and that what we're taking as being in front of us is a computer-generated image. In those cases of illusions, hallucinations and VR, what we're lucid about is that we correctly characterise our perceptual experience as illusory or hallucinatory; we know that what we take to be perceiving doesn't exist but is just simulated perception.

Thus far I've argued that the distinctive feature of lucidity is that of recognising the hallucinatory nature of our ongoing experience. Nonetheless, it should be noted that this is a *strict way* of interpreting this technical notion of lucidity; it only considers cases where I rightly recognise my current experience as one that falls short of perception. However, a more *liberal* reading of this notion can be taken to include cases in which I either realise that *my past* experience fell short of perception (which at that time taken wasn't taken to be a hallucination), I correctly realise that I'm right now in a non-hallucinatory state—I'm in *a state of perception*—, or both. I suggest the case of 'insightful psychosis' to illustrate this alternate reading of the technical account. Sometimes, psychotic patients spontaneously, or after therapy, gain an understanding of the nature of their hallucinatory experiences; they acknowledge them as being hallucinations (Voss et al. 2018). A tentative suggestion is that what these patients realise is that their current experience is one of perception; that they're indeed perceiving something and were previously mistaken. This suggestion would fit nicely with preliminary research pointing at similar mechanisms playing a role in the acquisition of lucidity between psychotic patients and LD (ibid). Furthermore, considering the shared phenomenological features between lucidity in psychotic patients and lucidity in LD, some researchers are promoting the potentiality of LD therapy to treat psychotic patients (Dresler et al. 2015). Given this possible connection between the sort of lucidity in dreaming and other pathological cases, it could be beneficial to take the technical notion of lucidity in a more liberal sense to include cases where lucidity is gained by virtue of recognising reality *as reality* and acknowledging that we had previously been in a hallucinatory or altered

[13] Note that this definition of lucidity would somehow depart from some graded views asserting that lucidity, explained as the (conceptual) realisation of the hallucinatory character of our experience can only be had during dreams and other altered states of consciousness but not during wakefulness. For instance, according to Windt and Metzinger (2007), full-blown lucidity, understood as the realisation that I'm currently in a state of no perception, can't be brought about during wakefulness—I can't fully realise that my wakeful experience is a simulation created by my brain, and thus, regard my current perceptual state as simulation. Thus, these authors reject the idea of a state of "lucid waking" (p.212). Nonetheless, such a claim involves a strong view of what lucidity is and only considers the top extreme of the lucidity spectrum as conceived by classic views: a state of reflective and conceptual thought that might involve a phenomenal shift in our experience.

[14] In the literature of VR this illusory perceptual experience is known as the 'place illusion'— the experience of the VR environment as real, including a sense of immersion or 'being there' in the VR environment, even though we know that the environment is a simulation (Slater 2009). VR experiences can be very realistic and even have similar emotional effects as real ones (Slater & Sanchez-Vives, 2016).

state of consciousness. This approach would not only facilitate the investigation of the phenomenal features of lucidity across different conscious states but would also shed light on the different degrees of lucidity one can have, and the different ways it can be expressed.

Moreover, a liberal reading of the technical notion of lucidity might also shed light on certain cases of LD where explaining lucidity in a strict sense might not work. For instance, consider cases of double awareness of one's dreamt body and physical body described by some lucid dreamers. In one of his first descriptions of the term dream lucidity, Van Eeden (1913) describes a LD in which he could observe the sensations on the chest in his dreaming body and the sensations on his back in his physical body resting in the bed. Thus, there's a way in which Van Eeden realises that his current experience has both hallucinatory and perceptual features (i.e. the dreamt body and the physical body). Similar cases are reported by lucid dreamers taking part in experimental research that uses light cues as an induction method for lucidity (Carr et al. 2020). In those cases, lucid dreamers realise about the external cues and recognise them as veridical (they realise them as veridical percepts), but at the same time, they realise that other features of their current mental state don't amount to perceptual experience (and thus, that they are LD). By teasing out the technical notion of lucidity in the strict and liberal sense, we're able to account for those cases in which one is *strictly* lucid about certain aspects of the experience and *liberally* lucid for others.[15]

Finally, there's another alternate reading of the technical notion of lucidity that can be made to account for other phenomena that share some phenomenological features of lucidity, yet they aren't usually considered lucid states since they don't yield justified true belief about our current state. This is the case of false awakenings (FAs); dreams involving a false belief that we have just awakened and that our previous experience was a dream. In the literature, FAs are taken as cases of non-lucidity (Buzzi 2011)—after all, we don't realise that we're indeed dreaming. Nevertheless, FAs have some distinctive features that remind us of full-fledged forms of LD since they're described as being an experience of "striking realism" (Green & McCreery 1994), as "real as wakefulness" (Buzzi 2011:122). FAs are experienced in such a realistic way that some individuals, even after properly awakening, still take FAs to be instances of actual awakenings, or worry whether they have finally awakened at all (ibid, p.114). Moreover, FAs can occur several times in a row, and some report 'waking up' many times in a FA, every time being convinced of having finally woken up (ibid). By sticking to the technical account of lucidity, we can regard FAs as cases of *false lucidity.* Like lucid states read in the *liberal* sense, cases of false lucidity involve a representation of our state as that of perception. However, contrary to states of strict or liberal lucidity, false lucid states yield a false belief about the fact that I'm actually perceiving something.

Some of the benefits of regarding states like FAs as instances of false lucidity is that we could strengthen the link between the similar phenomenological features of such states and LDs (Buzzi 2011; Zink & Pietrowsky 2015). In this respect, we can

[15] Thanks to an anonymous reviewer for raising this point.

piggyback the sort of experience had during FAs to that of pre-lucidity outlined in the previous section. During FAs, the dreamer wonders whether they're dreaming, yet they erroneously conclude that they're awake.[16] In a way then, these sorts of experiences provide the dreamer with self-awareness of their current state, yet they aren't lucid in the technical sense insofar as they don't yield awareness of the whole state as a hallucinatory state. Other altered states of consciousness also provide examples of false lucidity, such as mystical or religious experiences (James 1982; Stace 1961). Some mystics phenomenologically describe those states as revelatory experiences involving an "intellectual illumination" about having understood something new (see the report by Bucke, 1901 in James 1982:385). Others regard their mystical experiences as being in *direct* contact with a deity or unreal entity (Forman 1990). For some mystics, mystical experiences are regarded as cases of perception, "states of insights into the depths of truth" (James 1982:367). As with false awakenings, the mystic is convinced about knowing what the nature of their state is, yet they categorise it wrongly.[17] By broadening our understanding of lucidity to include cases of false lucidity we could examine more carefully the onset of lucidity and investigate whether there's something special about having a true or false belief about the nature of our current state or whether this isn't a required condition for experiencing lucidity in the technical sense.

4 Towards a Broader Account of Lucidity

4.1 Lucid Dreamless Sleep and the Clear Light Sleep

Thus far, I've argued that what makes a state to be minimally lucid, in a technical sense and taking a strict reading of the notion, is the fact that our current state of awareness is represented as a state that falls short of perception or lacks perceptual contact with the world. I've examined how such a notion could be applied to other conscious states outside dreaming and the different readings that could be made of it to account for similar states. In this last section, I examine a recent proposal which characterises the phenomenon of the clear light sleep as a state of 'lucidity' similar to that had during LD. I apply the technical notion of lucidity and show the problems arising from understanding such a state as "lucid" in the technical sense. I then consider an alternative reading and how a more relaxed notion of lucidity could be applied to such a state.

The clear light sleep is an aspirational state of consciousness described by the Dzogchen lineage in Tibetan Buddhism. By following a series of proficient

[16] Sparrow et al. (2018) also take instances of FAs as cases of pre-lucidity.

[17] A similar case can be found in out-of-body experiences (OBEs). During those, the individual experience themselves as having left one's own body, usually in a crystal-clear manner (see Metzinger 2009: 133). Some have suggested that OBEs might be a case of misinterpreted dreams—we dream that we're leaving our bodies (see Windt 2015b: 485). While further research about the ontology of OBEs during sleep is needed, a wide body of research has previously highlighted the link between the sort of lucidity had during OBEs and LDs (Blackmore 1988; Green 1968; Levitan & Zimbardo 1999).

meditative practices, one is said to reach a state where one realises that all phenomena have an illusory nature and perceives reality as it is (Padmasambhava & Gyatrul 2008). Such practices can be followed while awake, but also during sleep, as detailed by the practice of 'the bardo of sleep' (Padmasambhava & Gyatrul 2008; Ponlop 2006). This practice aims to cultivate a sort of awareness that allows one to reach a state of "luminosity" or "clarity" (Fremantle 2001), a state where one recognises the "nature of the mind" (Dalai Lama, 1996; Ponlop 2006:86)—one recognises the essence of the mind.[18] What's more, according to Dzogchen, such a state is conceptualised as a state of pure awareness or "bare awareness" (Ponlop, 2006:13; Wangyal 1998). It's important to note that these descriptions of the clear light sleep rely on metaphysical claims about the mind by Tibetan Buddhism and not on phenomenological or first-person reports offered from such a state.[19] Moreover, it should also be noted that the aspirational state of clear light is heterogeneously described in the literature. It's then a question for further research whether such descriptions are, in fact, talking about the same state, that of a state of pure awareness conceptualised by the Dzogchen tradition or are indeed talking about different states. I'll come back to such a worry in the last subsection. For now, I'll focus on examining the state of the clear light sleep characterised as a state of non-duality, a state that lacks the subject-other distinction of ordinary conscious states and that is taken by Tibetan Buddhist traditions to be an *objectless* state; it's said to lack an object-directed awareness inasmuch as it lacks a distinctive object of awareness from the mind itself (cf. Alcaraz-Sánchez 2021; Alcaraz-Sánchez et al. 2022).

While certain descriptions of the clear light sleep allude to a state of lucidity or clarity in which one recognises the essence of the nature of consciousness, here it's important to note that Tibetan Buddhist traditions don't understand this state as involving any sort of second or higher-order awareness (i.e. a state that takes a distinct first-order state as its intentional object). Instead, many authors endorse a reflexive account of consciousness and defend that what makes a state conscious is an aspect of consciousness that refers to itself, or self-awareness—in short, every conscious state is conscious of itself (see MacKenzie 2007).[20] According to authors supporting this account, when we're conscious, we're pre-reflectively (or reflexively) self-aware of our current conscious state in virtue of being phenomenally conscious; the self-awareness is said to be given in the phenomenal character of the experience. Thus, these traditions support the existence of a state in which the only thing that

[18] Descriptions of such practices are detailed in the Bardo Thödol, widely known as the Tibetan Book of the Dead, which is a compilation of the 8th Century originals "Liberation Through Hearing During the Intermediate State" and "The Profound Dharma of the Natural Liberation through Contemplating the Peaceful and Wrathful" by Tibetan Buddhist master Padmasambhava.

[19] Thanks to an anonymous reviewer for pointing out this. Note that according to Tibetan Buddhist doctrines, we live in a state of ignorance about reality since what we usually perceive are mere appearances and we don't apprehend reality as it is, such as the perception of a 'self' who perceives 'something' (see Fremantle 2001 for a discussion).

[20] It's worth noting how this view is reminiscent of other more contemporary philosophical traditions, such as the phenomenological tradition in Western philosophy. Proponents of this tradition hold that consciousness is characterised by an essential aspect that is for-itself (Sartre 1956). See Kriegel (2003, 2004), Kriegel & Zahavi (2015) and Zahavi (2005) for contemporary accounts supporting this view.

remains is this self-awareness aspect of consciousness, that which is intrinsic and essential to consciousness.

Following this view on the reflexivity of consciousness portrayed by Buddhist traditions, the state of luminosity or clarity achieved during deep sleep should be attributed to the apprehension of the qualitative character of the experience—the what-is-it-likeness of the experience (Nagel 1974). Under this reading, a luminous state is a state of awareness of the subjective character of experience; what's experienced is the quality of consciousness itself (Fasching 2008; Ram-Prasad 2007; Thompson 2014). It seems that the most natural way to understand such a state would then be to conceptualise it as a state of *phenomenal consciousness*—a state in which there's something it is like to be in that state. However, Thompson (2015) has pointed out how this approach won't do justice to the descriptions made by Buddhist traditions that consider access to the content of our phenomenal experience during the clear light sleep (p.11).[21] As such, he has attempted to explain this sort of awareness during the clear light sleep as a state of "non-conceptual meta-awareness" (2015:1) and suggested a possible link with the state of LD, thus coining the term "lucid dreamless sleep" (Thompson 2014). Windt (2015a) has also proposed that during the clear light sleep what remains is a "feeling of just having become aware of the nature of one's ongoing state" (p.20) and pointed out its possible connections to LD. While the proposal by Thompson and Windt seems to be quite modest—that certain instances of the clear light sleep could be explained as a similar sort of awareness had during certain sorts of LD— their construct of "lucid dreamless sleep" and the adoption of it in recent literature is imprecise and unclear. Here, and in the following section, I examine the different ways to interpret it, and its different implications.

Given the suggestion by Thompson and Windt the state of lucid dreamless sleep could be related to that of lucid dreaming, the most intuitive way to understand this new construct is to interpret it by applying the notion of lucidity used in lucid dreaming research. That is, to apply the technical notion of lucidity. Note though that lucidity, in the technical sense, can be understood in a stronger or weaker sense. Thompson and Windt say is the latter what they're considering, a state of "non-conceptual lucidity" or "weak lucidity". I argued that we could grant a state of non-conceptual awareness to be lucid if it still involves the representation of my current state as one that falls short of perception (or as one of veridical perception, if we take a more liberal sense of the notion). While it's a contentious point of debate whether such a state should be in fact a state of non-conceptual awareness, I noted that what's important when conceiving states of weak lucidity (in technical terms) is to consider the content of such a state: that of representing the hallucinatory character of my state. We could then agree with Thompson and Windt and regard the

[21] It's beyond the scope of this article to offer an exhaustive analysis about the ontology of the clear light sleep as per Buddhist traditions, and how we should indeed be interpreting those descriptions. However, for the purposes here of examining how such a state could be taken to be a state of lucidity (in the technical sense) I will stick to Thompson's account. Further research should spell out more carefully the different readings that can be made of the descriptions of clear light found in the literature and its metaphysical consequences.

state of "lucid dreamless sleep" as lucid in this weaker sense of the technical notion of lucidity. However, by applying the technical notion of lucidity to lucid dreamless sleep, we would then be describing a state that involves representing our current state as falling short of perception, even if we grant that such representation could be done in a non-conceptual manner, as Thompson and Windt defend.

Although this approach of applying the technical notion of lucidity to lucid dreamless sleep might seem the most straightforward one, given the suggested link between this state and the state of dream lucidity, such an approach would then raise the question as to whether the state of clear light sleep, as described by Tibetan Buddhist traditions, is the sort of state that can be regarded as lucid in this technical sense. If according to Tibetan Buddhist traditions the state of the clear light sleep is indeed a state of pure awareness, a state in which I'm not cognising or perceiving anything, it doesn't seem to be the sort of state in which anything is represented as hallucinatory or not, or as falling short of perception, and thus, the technical notion of lucidity cannot be applied in this case. Similarly, from the descriptions provided by Thompson and Windt of the state of lucid dreamless sleep, it doesn't seem either that this is the sort of notion of lucidity they have in mind, and thus, it calls into question the suggestion that the sort of lucidity during dreamless sleep should be akin to that had during lucid dreaming. Considering this, we have two alternatives. We can either cease using the technical notion of the term 'lucidity' to describe the clear light sleep, since it doesn't seem to be the right sort of state to be lucid (either because there's nothing to be represented as hallucinatory or because there's nothing that can be represented at all) or abandon the technical account of lucidity and find a more relaxed one. For the remainder of the paper, I'll focus on the latter and offer an account that aims at overcoming this problem.

4.2 The Broader Account of Lucidity

I propose a broader sense in which a state can be understood as lucid, drawing from the descriptions offered by the Tibetan Buddhist literature of the state of the clear light instead of the notion of lucidity used in LD research. According to those traditions, the aspirational state sought while engaging in clear light sleep practices is a state in which one realises the true nature of the mind. As I mentioned, such descriptions rely on metaphysical claims taken by Tibetan Buddhist traditions about the mind, namely, the fact that one encounters the essence of consciousness in such a state. Here, I leave aside how such a state should be considered in metaphysical terms, and instead, focus on how it might be like phenomenologically:

> **Broader lucidity:** A state involving the seeming recognition that one is directly acquainted with one's phenomenal character of one's experience.

This broader account of lucidity is meant to be an alternative notion of lucidity that can be used to explain cases that cannot be covered or are difficult to explain using the technical account exposed earlier. For instance, in the case of dreaming,

the broader account might prove to be useful to distinguish between pre-lucidity and minimal lucidity. In a pre-LD, I might have a feeling that I'm dreaming, yet not represent the hallucinatory character of my current state, and thus, not be lucid in the technical (and strict) sense. However, I can be said to be lucid in the *broader sense,* if such a state involves the feeling of seeming to be acquainted with the nature of my current state; to realise what makes my state distinctive and to be the sort of state it is (as accounted by Tibetan Buddhist traditions). By counting with these two notions of lucidity, we could make sense of limit cases that are difficult to discriminate as "weakly lucid" or "pre-lucid" as the example of realising that one is experiencing colours as one has never done before, as illustrated by Windt and Metzinger (see §2.1). Regarding the latter example, we could say that the dreamer wasn't technically (minimally) lucid (since the state wasn't one of representing the current experience as hallucinatory). Yet, we could say that the dreamer was lucid in a *broader sense* since they seemed to be in direct contact with the nature of their current state, namely, the distinctive phenomenal character of their experience.[22]

Similarly, we can apply this broader notion of lucidity to some instances of the clear light sleep, or "lucid dreamless sleep" as referred to by some authors. Recall that such a state of clear light is conceived by Dzogchen teachings as a state of non-dual awareness, a state in which one is merely conscious of consciousness-as-such; one is said to be in a state of pure awareness. Nevertheless, according to traditional descriptions of the clear light sleep, such a state doesn't involve any sort of object-directed or second-order awareness, but instead, it should be described as a state of pre-reflexive self-awareness. Thus, according to these traditional descriptions of the clear light sleep, such a state involves an awareness of the qualitative aspect of consciousness simpliciter; an awareness of the phenomenal character of the experience of 'just awareness'. Thus, we could say that the clear light sleep might be broadly lucid if it involves the phenomenology of seeming to be in direct contact with the nature of one's experience, the distinct phenomenal character of such a state.

I argue that such an account of broad lucidity can describe better what Thompson and Windt seem to have in mind when describing the state of lucid dreamless sleep. Moreover, such an account would fit in nicely with Windt's recent proposal regarding the state of "lucid dreamless sleep" as a state of "phenomenal knowing" (2015a:20), a state involving "the feeling of just having become aware of the nature of one's ongoing state" (ibid). For Windt and Thompson, the state of "lucid dreamless sleep" is a conscious state involving the noetic feeling of knowing that one is aware—our current conscious state is represented non-conceptually as a state of consciousness or phenomenal consciousness. They take this state to lack any sort of propositional thought, yet they still conceive it as involving certain intentional content, that of representing the state as a state of awareness (see Thompson 2015;

[22] Notwithstanding the benefits of the broader account, it should be stressed that such an account can't accommodate certain states of lucidity, for which we would still want to keep the technical notion, such as cases of full-fledged lucidity.

Windt 2015a).[23] While this state might appear as resemblant to the sort of lucidity experienced during LD, it's a different one since it doesn't represent our current state of awareness as being a state that lacks perceptual contact with the world. Instead, such a state might be represented as a state that otherwise lacks content (a state of just awareness), or if we take the metaphysical claim of Tibetan Buddhism at face value, might be a state in which nothing is represented at all.[24]

4.3 Imageless Lucid Dreaming and Experiences of the Void

In the previous sub-section, I have shown how the state of the clear light, as understood by certain Tibetan Buddhist lineages like Dzogchen, shouldn't be regarded as a state of lucidity in the technical sense of the word since this would instead portray a conscious state involving a representation of the hallucinatory character of my current state. In order words, such a state would involve representing my current state as one that falls short of perception. As I showed throughout §2, this account of lucidity considers the technical definition of lucidity in LD research and points out what is distinctive of this state. However, if we want to be faithful to the Tibetan Buddhist descriptions of the clear light sleep, it seems that such a state cannot be characterised as 'lucid' in that technical sense. The sort of state at stake seems to be one that merely involves the representation of a state of 'pure awareness', a state that otherwise lacks content, or if we're strict about the meaning of 'pure awareness', we're then conceiving a state that doesn't represent anything at all. Either way, it seems that the technical notion of lucidity cannot be applied in this case, and thus, the construct of "lucid dreamless sleep" should either be dropped or clearly used in reference to the broader sense of lucidity I presented in §4.2. Notwithstanding this alternate approach, one could argue that there's still a way in which the state of the clear light could be understood as lucid in the technical sense. In this last subsection, I consider this possibility and its implications.

As previously mentioned, the state of clear light is heterogeneously described in different Tibetan Buddhist texts and their translations which might lead us to question to what extent those descriptions are indeed talking about the same phenomenon. An example of it are the descriptions of the attainment of clear light via the dissolution of the dream environment mentioned in practices of "dream yoga" or "yoga nidra" (Holecek, 2016; Norbu 1983; Saraswati 1984; Wallace 2012). The teaching of those practices describes the achievement of the state of clear light by actively making the dream environment disappear while in a LD (Chang 1963; Evans-Wentz 1960; Wallace 2012). Other teachings also mention the possibility of reaching the

[23] One might take this to be a state in which one knows (non-conceptually) that one is dreamlessly sleeping; that is, the nature of one's state is that of being in a state of dreamless sleep. However, if we want to be faithful to the descriptions of the clear light sleep made by the Dzogchen tradition as a state in which one is merely aware of the phenomenal character of such a state; a state in which there's only awareness of the pre-reflective character of consciousness.

[24] Note that further research should investigate whether a state of pure awareness is in fact a state that lacks content altogether, including representational content, or whether it still involves some representational content. For a further detailed discussion, see Metzinger (2020)

clear light while falling asleep and remaining on the threshold of dreaming (Wangyal 1998).[25] If taken at face value, those descriptions would be pointing at a state of clear light, a state of pure awareness achieved after the dissolution of the dream or before the appearance of the dream. Anecdotal phenomenological descriptions of this state can be found in the Tibetan Buddhist literature but also amongst LD practitioners, usually under the name of 'void' experiences or 'clear light dreams' (Johnson 2020; Magallón, 1987).

Here I claim that such states of 'void' or 'clear light dreams' could be understood as per the technical notion of lucidity if such states are regarded as perceptual states; states in which I'm aware that I'm in a state that lacks a dream environment. This claim would be supported by recent phenomenological reports of those experiences collected by empirical work (see Alcaraz-Sánchez 2021; Alcaraz-Sánchez et al. 2022). Those reports point to an experience that in some cases seems to involve a certain 'distinct' object of awareness, like the awareness of one's location in the 'void' or one's self-experience in such a state (ibid). These reports also seem to match with previous descriptions of the experience of the 'void' in the LD literature which describe such states as involving a minimal sense of self-other distinction like a very minimal perception of spatiotemporality (see Johnson 2020). This is the case of what is usually referred to as "imageless lucid dreams" or "minimal perceptual environments" (Gillespie 2002; LaBerge & DeGracia 2000a, b; Magallón, 1987), sleep experiences that lack imaginative or visual experience yet they still involve some sort of perceptual experience. By understanding those experiences as perceptual, we could regard them as lucid in the technical sense and say that one was lucid in the void insofar as one was aware of the hallucinatory character of their experience (or one was aware that their experience was one of perception if we consider a liberal reading as outlined in §2.3). However, the consequence of regarding such states as involving a minimal sort of perceptual experience is that such states would then be conceived as a sort of dream, and thus, not as a sort of dream-*less* sleep experience (as described by Windt et al. 2016). Some authors have suggested that these experiences of the 'void' or 'clear light dreams' could indeed be understood as minimal forms of dreaming insofar as they involve a minimal sense of immersion and self-other distinction (Windt 2015a:16), as well as a minimal sense of spatial location (see Alcaraz-Sánchez 2021:21–22). Therefore, we would need to conduct further research to conclude whether the experience of clear light, as described by Tibetan Buddhist traditions, refers indeed to a minimal sort of dreaming. Note that the use of the technical notion of lucidity to describe those states of the void could only be considered if we conclude that such states are a sort of minimal dreaming, and thus, perceptual experiences. If, on the contrary, we conclude that such states aren't a type of minimal dreaming, or are indeed dreamless sleep experiences, we could only consider them as 'lucid' as per the broader notion introduced in §4.2, states in which I know about the nature of my current conscious state in virtue of seeming to be in direct contact with the phenomenal character of my experience.

[25] Padmasambhava presents a technique for reaching this state through the dream state (see Padmasambhava & Gyatrul, Chapter 4).

5 Conclusion

This paper examined the suggestion made by some authors (see Thompson 2014; 2015; Windt 2015a; Windt et al. 2016) that the state of the clear light sleep, as described by Tibetan Buddhist traditions, could be understood as 'lucid' in a similar sense to the state of lucid dreaming. To that aim, I put forward a unified *technical account* of lucidity aiming at capturing what makes a state minimally lucid. I propose that a minimally lucid state is that which represents our current state as a state that falls short of perception—it represents the hallucinatory nature of our state. I showed the motivation for such a technical account by applying it to other states outside dreaming, and by teasing apart the different readings that can be made of it (*stricter, liberal* and *false lucidity*, as well as stronger and weaker lucidity). I argued that none of these readings can be applied to the state of the clear light sleep since this isn't the right sort of state that can be represented as lacking perception, and thus, a more relaxed notion of lucidity is needed. I finished by suggesting the notion of *broader lucidity*, which regards lucidity as the seeming realisation that one is in direct contact with the phenomenal character of the experience. I argued that, in this broader sense, we could take the clear light sleep as lucid if it's conceived as a state involving the representation of my current state as that of just awareness. Moreover, I also examined how the so-called state of the clear light could be regarded as lucid in the technical sense if it's instead regarded as a state of dreaming, and thus, a perceptual state. Overall, I provided a more fine-grained analysis of the construct of "lucid dreamless sleep" than that found in the literature, and the many ways in which the state of clear light sleep, as described by Tibetan Buddhist traditions, can be conceived. Further empirical and conceptual work is required for understanding better the different ways in which lucidity during dreamless sleep can be instantiated and how such states could be linked to other sorts of sleep phenomena, such as dreaming, lucid dreaming or even other forms of sleep consciousness.

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Declarations

Conflict of Interest The author declare that they have no competing financial interests.

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