



Awareness in the void: a micro-phenomenological exploration of conscious dreamless sleep

Adriana Alcaraz-Sanchez¹

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Abstract

This paper presents a pilot study that explores instances of objectless awareness during sleep: conscious experiences had during sleep that prima facie lack an object of awareness. This state of objectless awareness during sleep has been widely described by Indian contemplative traditions and has been characterised as a state of consciousness-as-such; while in it, there is nothing to be aware of, one is *merely* conscious (cf. Evans-Wentz, 1960; Fremantle, 2001; Ponlop, 2006). While this phenomenon has received different names in the literature, such as ‘witnessing-sleep’ and ‘clear light sleep’ among others, the specific phenomenological profile of this state has not yet been rigorously studied. This paper aims at presenting a preliminary investigation of objectless consciousness during sleep using a novel tool in qualitative research that can guide future research. Five participants experiencing objectless consciousness during sleep were interviewed following the *Micro-phenomenological Interview* technique (MPI; Petitmengin, 2005, 2006). All participants reported an experience they had during sleep in which there was no scenery and no dream. This period labelled as ‘No Scenery/Void’ was either preceded by the dissolution of a lucid dream or by other forms of conscious mentation. The analysis of the results advances four experiential dimensions during this state of void, namely (1) Perception of absence, (2) Self-perception, (3) Perception of emotions, and (4) Perception of awareness. While the results are primarily explorative, they refer to themes found in the literature to describe objectless sleep and point at potential avenues of research. The results from this study are taken as indications to guide future operationalisations of this phenomenon.

Keywords Dreamless sleep · Micro-phenomenological interview · Qualitative research · Witnessing-sleep

✉ Adriana Alcaraz-Sanchez
adriana.alcaraz.sa@gmail.com

¹ Centre for the Study of the Perceptual Experience (CSPE), University of Glasgow, Oakfield Avenue, 67-69, Glasgow G12 8QQ, UK

1 Introduction

Vedic traditions, such as the Advaita Vedānta and Yoga, and also Tibetan Buddhism, describe a special state of consciousness occurring during deep sleep: *sushupti* (Sanskrit: सुषुप्ति).¹ According to the descriptions found in the Upanishads, the state of *sushupti* is special inasmuch as it lacks the self-other distinction characterising ordinary consciousness, and thus, it is taken as a state of non-duality (Prasad, 2000; Sharma, 2001).² Other descriptions of *sushupti* allude to the recognition of the nature of consciousness during this state. In *sushupti*, we are said to realise the “true nature of the mind” (Ponlop, 2006:86) or reach a state of ‘clarity’ and ‘luminosity’ (Padmasambhava & Gyatrul, 2008). However, during *sushupti* there is nothing to cognise (Thompson, 2014), we are not aware of anything, including any form of self-awareness (Raveh, 2008:320). Thus, *sushupti* cannot be taken as a state of object-directed awareness, but instead, as a state of pure awareness — a state in which we are merely aware and recollect this experience upon waking up.³

Recently, Windt et al. (2016) have considered *sushupti* as a special kind of *dreamless sleep experience* (DSE), which they describe as conscious mentation had during sleep that cannot be classified as dreams (p.873).⁴ According to these authors, DSEs are not dreams insofar they lack what they take to be the minimal features of dreaming; a sense of immersion and spatiotemporal location in a hallucinatory reference frame (Windt, 2010, 2015a, b).⁵ Some authors take *sushupti* to lack the experience of selfhood even in its most minimal form, such as a feeling of *here* or spatial location (cf. Windt, 2015b). Moreover, since *sushupti* lacks any of sort of reference frame, object-directed mentation, and perception, Windt and colleagues take this state to be different from other forms of non-immersive experiences had during

¹ The four states of consciousness according to these schools are ‘wakefulness’ (jagrat), ‘dreaming’ (svapna), ‘dreamless sleep’ (*sushupti*), and ‘the highest state of consciousness’ (turiya).

² Mentions of the state of *sushupti* can be found in the *Madhukya Upanishad* (see translations and commentary by Gambhirananda, 1937; Nikhilananda, 1949; Olivelle, 1998) and the Yoga Sutras of Patanjali (see Āraṇya, 1989; Arya, 1986; Bryant, 2009).

³ For some mentions of *sushupti* as a state of pure awareness see Wangyal (1989:115), Ponlop (2006:13) and (Thompson, 2014:265).

⁴ Note that Windt et al. describe dreamless sleep experiences (DSEs) as conscious experiences had during sleep that cannot be classified as dreams. Thus, these are *dream-less* experiences or non-dreams. This is a different meaning of ‘dreamless’ sleep to that usually found in the literature where ‘dreamless sleep’ is commonly used to refer to that period of sleep in which we lack consciousness (see Tononi, 2008; Tononi & Koch, 2008). For more discussion on whether dreamless sleep should be always described as the absence of conscious mentation see Thompson (2014, 2015); Windt (2015a, 2020) and Windt et al. (2016).

⁵ Similarly, note that these authors endorse a simulational view of dreaming that describes dreams as the immersive experience of a self situated in a hallucinatory scene or simulated world (dream-world) (Revonsuo, 1995, 2006; Windt, 2010, 2015a). While other views on the ontology of dreaming exist, for the purpose of this paper, I will stick to the simulational view since it focuses on investigating the minimal phenomenological features of dreaming (see Windt, 2010; Windt, 2015a, b), which will turn appropriate to consider what makes objectless sleep experiences different to dreams.

sleep and sleep-onset such as hypnagogic states, sleep thinking or kinaesthetic perception (Windt et al., 2016).⁶

Furthermore, the experience of sushupti has attracted the attention of researchers working on the nature of consciousness. Some authors have targeted this phenomenon as one of the simplest experiences one can have and described it as a pure sense of sentience (Thompson, 2014, 2015), pure temporality or nowness (Windt, 2015b), and the experience of tonic alertness (Metzinger, 2020). Undoubtedly, the experience of objectless awareness had during sushupti seems to be a perfect candidate to study altered states of consciousness and the minimal phenomenal experience (Metzinger, 2020; Windt, 2015b). If it is the case that we can experience a state where we are merely aware despite not being there any content or object of awareness, investigating such a state will shed light on the nature of consciousness and what the sufficient and necessary conditions to be conscious are. However, there exist important methodological barriers to the study of this phenomenon that should be considered before developing further conceptual accounts.

First, the experience of sushupti, due to its brief and ineffable nature, is difficult to remember and to describe. These features prevent sushupti from being an experience that can be properly reported by untrained individuals. Second, this phenomenon has been traditionally described within contemplative practices and traditions using specific terminology and concepts to refer to this experience. In turn, this terminology has been also adopted by individuals embedded in a particular belief system, such as meditative and religious practices, who describe the experiences like that of sushupti more often. And third, the very few reports of sushupti available in the literature are second-hand interpretations of original individual reports, again, embedded in particular terminology. For instance, some empirical studies were carried out to explore the phenomenology of sushupti from the perspective of the transcendental meditation programme (see Alexander, 1990; Mason et al., 1990, 1997; Travis, 1994; Travis & Pearson, 2000; Mason & Orme-Johnson, 2010). These empirical studies not only provide a very biased pool of participants but lack transparency about the first-hand reports made by the participants as well as lacking a careful analysis of the subjective reports.

Notwithstanding the problems that the research on objectless conscious sleep faces, is there a way in which we could explore further the phenomenological blueprints of this phenomenon? A pilot qualitative study was conducted to offer a preliminary investigation of the phenomenological character of these so-called objectless sleep experiences. Given the exploratory character of this study, and its focus on the subjective character of the experiences reported, the study did not aim to confirm empirically the existence of this phenomenon. A proper investigation of the target phenomenon would require serial awakening procedures combined with electrophysiological recordings. Thus, testing a specific hypothesis was not the goal of this study, but to set the groundwork for future research with a tentative analysis of

⁶ Windt et al. (2016: 873) consider sushupti under the label of '*Selfless' States and Contentless Sleep Experiences*', which is described as "any mention of sleep experience lacking subjective immersion, imagistic and propositional content", and it is considered as a special kind of DSE.

the target phenomenon using a new qualitative research technique. The preliminary findings of this study indicate that albeit alleged cases of objectless conscious sleep seem to lack content of awareness, a careful analysis of the individual reports unveil some minimal object-directed awareness. Moreover, the initial findings outline different avenues of research that should be considered in the future.

2 Methodology and procedure

2.1 Research question

Could we improve the lack of rigorous research made on instances of objectless awareness during sleep by using a tool that can increase the granularity of the subjective reports and help participants to remember their experiences? Moreover, could the results from such investigations pave the way for future conceptual and empirical work? If we were to undertake further research on this phenomenon by using rigorous experimental research, could we find a method that allows us to gather more fine-grained reports? And, if so, which dimensions of this phenomenon should be considered? With these questions in mind, a pilot study was conducted to explore the applicability of a novel tool in qualitative research that allows the collection of detailed subjective reports by helping participants to improve their evocation and reduce previous preconceptions about their experience.

2.2 Methodology

The *micro-phenomenological interview* (MPI), or elicitation interview, is a technique developed by Vermersch (1994/2010) and adapted by Claire Petitmengin in the realm of cognitive science (Bitbol & Petitmengin, 2017; Petitmengin, 1999, 2005, 2006) to gather fine-grained descriptions of lived experiences.⁷ One of the main tenets of the MPI is that we can become aware of the processes that lead to a particular experience if we focus on how the subject experienced a particular event (Petitmengin, 2006). For this purpose, the MPI method relies on the phenomenological conversion by Husserl (Petitmengin, 2006: 240) and focuses on guiding the interviewee to shift their attention from the content of the experience (the *what*) to the subjective character of the experience (the *how*). This conversion is done by helping the interviewee elucidate their experience and focusing on how the experience unfolded.

In recent years, different studies in cognitive science have applied this method for studying the dynamics of different experiences, such as the genesis of intuition (Petitmengin, 1999) epileptic seizures (Le Van Quyen & Petitmengin, 2002; Petitmengin, 2005; Petitmengin et al., 2006) the rubber-hand illusion (Valenzuela et al., 2013), the dissolution of self-boundaries (Ataria et al., 2015), and the practice

⁷ In phenomenological research, the term 'lived experience' is used to refer to how a specific event was experienced by a subject; the subjectivity of the experience.

of meditation (Petitmengin et al., 2017; Przyrembel & Singer, 2018; Sparby, 2018, 2020). To the best of my knowledge, no study to date has used the MPI approach as set by Vermersch and Petitmengin to explore the phenomenology of sleep experiences.⁸

Given the features of the targeted experience of objectless conscious sleep, the MPI was found to be the appropriate qualitative tool. First, contrary to other tools, the MPI facilitates the evocation of an experience, including parts of it that were unnoticed, which are appropriate for studying an experience that is usually brief, ineffable, and difficult to recall.⁹ Second, the MPI is characterised by ‘content-free’ questions and avoids the influence of both the researcher and the participant’s pre-conceptions and beliefs. Moreover, the MPI guides the interviewer to situate their experience in a well-defined moment in space and time and moves the participant away from generalisations. Finally, the MPI method allows the exploration of different dimensions of an experience and seeks to find the generic structure of a phenomenon, ideal for investigating unexplored phenomena whose dimensions we do not know, such as instances of objectless awareness during sleep.

2.3 Participants

All participants were recruited via social media by expressing their interest to participate in the study. The principal inclusion criterion was to have had a recent experience (not older than 6 months) of awareness during dreamless sleep in the absence of further mentation.¹⁰ Prospective participants were excluded if they had a severe mental or physical illness, were taking medication that could affect the central neuro-system or reported poor sleep quality. All prospective participants received an information sheet, consent form, and a screening questionnaire before partaking in the study. The screening questionnaire had different questions about demographics, medical information, lifestyle, sleep routine, and sleep experiences that participants needed to answer to ensure they met the inclusion criteria for the study.¹¹

Six participants were interviewed, although only five were included in the study (mean age = 46 years old; females = 2, males = 3; from the US, UK and New Zealand).¹² All participants had some experience with meditation, and three of them had a long record of practice and practised daily. They all reported excellent or good

⁸ The only study using a phenomenological method to investigate imagery during sleep-onset transition is Nielsen (2017) who used what he describes as “phenomeno-centric signalling procedure” (p.6) to collect and analyse reports of hypnagogic imagery. Moreover, he conducted a thematic analysis of the reports.

⁹ Other phenomenological tools in qualitative analysis include the Interpretative Phenomenological Analysis (IPA; Smith, 1995) and the Descriptive Phenomenological Psychological Method (Giorgi, 1970, 2009). For a detailed discussion on how these methods differ from the MPI, see Petitmengin et al. (2018)

¹⁰ The advertisement called for individuals that “recall episodes of awareness during sleep in the absence of dreams and that are willing to share their experiences in a 1:1 interview”.

¹¹ For more details about the participants, see Appendix I.

¹² One participant was excluded because during the interview they did not focus on one single experience, but reported a variety of brief experiences, making the subsequent analysis difficult to carry out. Moreover, some of those experiences were clearly full-fledged dreams.

sleep quality and excellent dream reports (daily). Moreover, all participants showed a particular interest in the topic of dreams and all mentioned to be practising techniques to enhance their dream lucidity and to experience it frequently. Four of them were acquainted with the targeted experience for this study (i.e. objectless awareness during sleep) and said they were exercising some training to achieve such a state. However, only two of them said they were experiencing this state regularly — the other two said that this was their first time experiencing it. Four participants reported an experience within the last month and one participant reported an older experience (within the last 6 months) that they had annotated in a dream diary.

2.4 Ethics

The pilot study was approved by the Ethics Committee from the University of Glasgow (reference 300,170,275) and followed the guidelines of the British Psychological Association (BPA).

2.5 Interview procedure

The interviews took place via *Zoom*, and they were recorded for transcription. Each interview consisted of three Secs. (1) Pre-Interview, (2) Micro-phenomenological interview (MPI), and (3) Post-Interview.

(1) Pre-Interview (30 min)

The first part of the interview aimed to train and get participants acquainted with the MPI method by making them carry out a short exercise, as per the advice of Petitmengin (2006:243). Participants were asked to memorise a short list of words and were interviewed about their experience memorising the list.¹³

(2) Micro-phenomenological interview (1h)

Each participant was asked to recall a specific experience had recently during sleep that could be described as “awareness in the absence of dreams”. The interview followed the steps described by Petitmengin (2006) in which the interviewer guides the interviewee to evoke an experience situated in place and time.¹⁴ Once the experience is identified, both interviewer and interviewee elaborate on each dimension of the experience.

(3) Post-Interview (30 min)

¹³ The list, in actual order, was: lion, daffodil, tyrolean, academic, distraction, teardrop, triumph, shade, validation and welcome.

¹⁴ For a detailed description of each of the stages an MPI should follow, see Petitmengin (2006).

After the MPI, participants were asked additional questions to clarify the context of the experience, the frequency of this type of experience, and to investigate other dimensions that were not previously mentioned.

2.6 Analysis procedure

All interviews were analysed following a qualitative content analysis. The procedure followed was based on the method detailed by Petitmengin et al. (2018), and Valenzuela-Moguillansky and Vásquez-Rosati (2019) tailored for the MPI technique. This method consists in locating ‘*procedural descriptions*’ made by the participants and analysing them. According to these authors, procedural descriptions are those utterances that refer to a particular event situated in space and time. Other descriptions that refer to general descriptions, judgements, and evaluations are excluded from the analysis.¹⁵ The procedural descriptions are taken and analysed for each participant and then for all to find common phases and themes. This analysis results in (i) phases that describe the evolution of the experience in time (diachronic dimension), and (ii) the themes involving the experience (synchronic).

3 Results

This section shows the phases and themes that were common to all participants during their experience of objectless awareness during sleep by providing the results of the diachronic and synchronic analysis of the reports. Both diachronic and synchronic analyses show the relevant *descriptemes* – “units of meaning” (Petitmengin et al., 2018) or phrases referring to a similar category that were common across the participants.

3.1 General Diachronic Analysis

The diachronic analysis shows how the experience reported by the participants unfolded in time. After analysing the diachronic structure for each report, two different diachronic structures were identified, one for P#02, #03 and #05 and one for P#02 and #04 (see Figs. 1 and 3 respectively).

- Type 1: Participants #01, #03 and #05

The diachronic analysis of participants #01, #03, and #05 revealed an experience that consisted of five phases (see Fig. 1). This experience started as an ordinary non-lucid dream (Phase 1) – participants were not aware that they were dreaming while

¹⁵ Petitmengin et al. (2018) refer to those utterances that do not refer to ‘how’ the experience was lived, but instead to ‘what’ the experience was as the ‘*satellites*’ (p.694). These should not be considered in the phenomenological analysis because they do not refer to how the experience was lived by the subject, but to how the experience is preconceived.

dreaming. Then, participants became aware of the fact that they were dreaming (Phase 2) and after this, they realised that the dream started to dissolve in front of them (Phase 3). After the dissolution of the dream, the participants said to be found in a void or a state that lacked any imagery or perception (Phase 4) which ends with the appearance of some brief imagery (Phase 5). Since only phases 3, 4 and 5 met with the targeted phenomenon of this study, namely an experience that *prima facie* lacks any object of awareness, these were the only diachronic phases considered for further analysis (see Fig. 2 for each participant's phases and sub-phases).

3.1.1 Phase 3, 'Dream Dissolution'

Phase 3 marks the precedent of the experience of conscious dreamless sleep, starting with the dissolution of the lucid dream. P#01 described the imagery in front of them "fading away"—the dream starts to fade (sub-phase 1), then becomes blurry, (sub-phase 2), and then loses its immersion (sub-phase 3). P#03 mentioned that the dissolution started while they were falling from the sky (they had a lucid dream in which they were flying), and then described the dream to be 'folding' (sub-phase 1 and 2, respectively).

"And after I said that to all the people in the mirror, the scene started to fade and all of it faded away". P#01

"As soon as the sensation of falling began to happen... the dream world around me (the dream construct with the café and the sky I was around) it folded as quickly as I was falling". P#02

P#05 described this dissolution as a more sudden process that started after them shouting out "*dissolve this dream in the ultimate state*" in the dream, something that they had been practising before without any success. After this, the dream scenery started spinning (sub-phase 1) and dissolved (sub-phase 2).

"So, I shouted out the same phrase ['dissolve this dream in the ultimate state'] and the room started to spin, it started to move but it never got that far [...] The whole dream was dissolving".

3.1.2 Phase 4, 'No Scenery'

The dissolution of the dream is followed by a phase lacking any visual perception (Phase 4). The transition between one phase and the other is marked by a '*transitional event*' (Petitmengin et al., 2018). The transitional event marks the switch between phases and allows differentiation between one phase and another (see Fig. 2 for all transitional events). For P#01, P#03 and P#05, the transitional event is noticing the absence of dream-scenery.

"it feels like there's nothing around it. It was just image and it's fading and there's nothing". P#01

"I dropped into nothing. A space of nowhere". P#03

"The next thing that happened is that there's empty space". P#05



Fig. 1 General diachronic structure for participants #01, #03 and #05. The reports started with the description of a non-lucid dream (Phase 1), which eventually turned into a lucid dream (Phase 2). This lucid dream started to dissolve (Phase 3) and participants described how the scenery around them fades and turns into a period of no scenery or void (Phase 4). Finally, participants mentioned that this phase ends with the appearance of some images and/or thoughts (Phase 5)

During this diachronic phase of ‘No Scenery’, the three of them reported noticing the absence, the nothing or the emptiness. They described how their perception was during this state, which did not only include the awareness of this emptiness or nothingness state, but also the perception of their body or lack of it, their cognition, and body. Different elements appeared during the description of the phase of ‘No Scenery’ which were considered further in the synchronic analysis (see Sec. 2).

P#01 described their attention to how their bodily-self dissolved, and then, to their cognition and the actions they wanted to undertake during this state (sub-phases 5, 6 and 7). P#03 explained how they were aware of the fact they were in the nothingness but also of their lack of physicality and the peace they felt (sub-phases 4, 5 and 6). Finally, P#05 mentioned the perception of a source of light and clarity and where it was positioned with respect to their body (sub-phase 4). However, they also mentioned a lack of feeling themselves during that period and how they were merely aware (sub-phase 5). After this, they realised they lacked a body (sub-phase 6).

3.1.3 Phase 5 ‘Other conscious phenomena’

For all three participants, the end of the ‘No Scenery/Void’ occurred with another transitional event that marks the beginning of this phase. In this event, they described how their attention moved into something else. Both P#01 and P#05 described the appearance of some visuals (Sub-phases 9 and 7, respectively):

“it seems to lose a bit the lucidity or something [...] when the colours appear, I was also less present...”. P#01

“Then smoothly this image appeared of two hands”. P#05.

P#03 said to feel ‘lowering and moving’ in the void (sub-phase 7) and then to start wondering whether they were still in bed (sub-phase 8) and feel their body again (sub-phase 9):

“I felt myself moving into a different...how do I describe it? Lowering in some way. Then, I started to think, ‘I wonder if I’m still in bed’”.

- Type 2: Participants #02 and #04

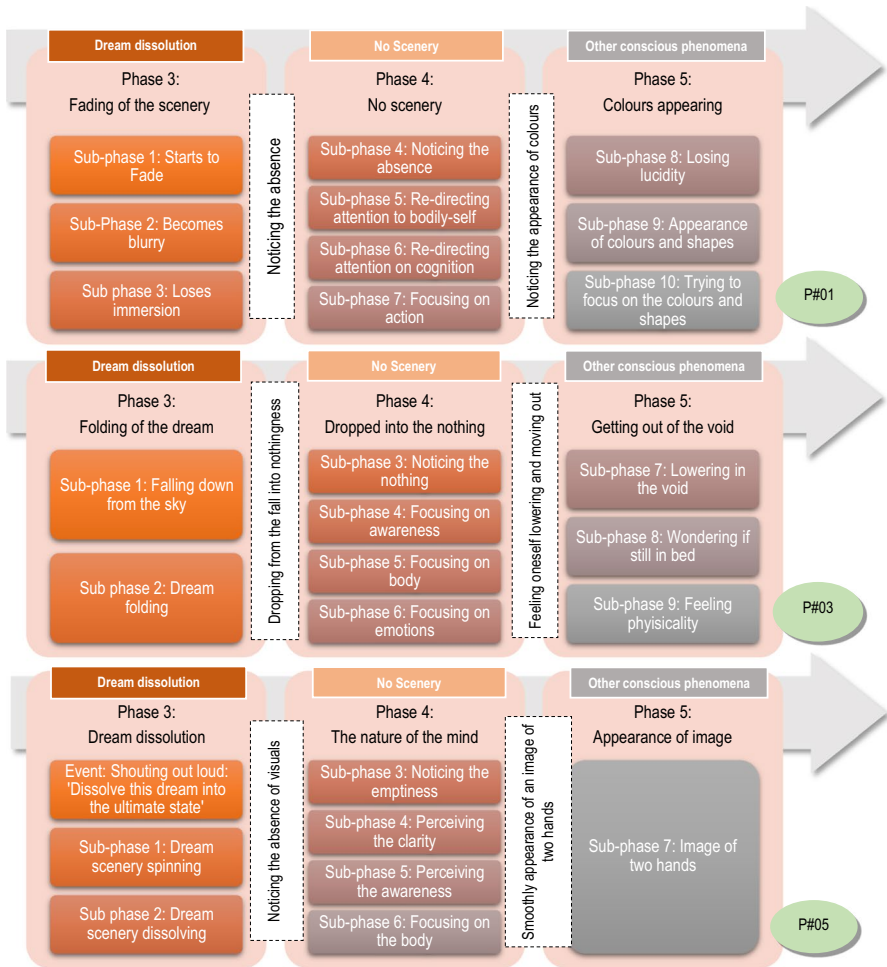


Fig. 2 Specific diachronic structure for each P#01, P#03 and P#05 during phases 3, 4 and 5. The diagrams show in detail the diachronic structure for each participant, including phases and the sub-phases. The dotted boxes in between phases show the transitional event that marks the change of phase for each participant. Note that Phase 4 involved the description of many elements that were perceived during the No Scenery period, and thus, the sub-phases are classified in the order they appeared in the reports, and not necessarily indicate a chronological order. The elements of Phase 4 are examined further in the synchronic analysis (see Sec. 2)

Participants #02 and #04 were not included in the same generic diachronic analysis as the other three participants because the diachronic structure of their reports was very different (see Fig. 3). P#02 began their report by describing a moment during their sleep in which there was an ‘opening to a lucidity’ (Phase 1), which started with the ‘opportunity to move to the lucidity’ (sub-phase 1). Then they described a feeling of relief and ‘moving into lucidity’ (sub-phase 2):

“there’s a sensation of an opening up into the lucid space. It’s like the regular dominating mind and out of a sudden, there’s a shift and there’s an opening up into the lucidity”.

After this apparent shift to the lucidity, Participant #02 said to notice the absence of visuals and notice what they referred to as ‘the dream matrix’ (Phase 3):

“In the dream matrix, I can’t see any visuals”.

In this state, P#02 is aware of the dream matrix (sub-phase 3) and the perception of ‘clarity’ (sub-phase 4).

“It also, as I mention, there’s a sense of clarity. Maybe this is related to the visual too –things are very clear. If the visual senses are active, it’s a way in which things are clear; there are no images”.

After this, they start feeling the loss of the ‘lucidity’ (Phase 3), with the dispersion of the lucidity by recovering their thoughts (sub-phase 5) and attention to their body (sub-phase 6).

“When I think back when it was dissipating it seems like the ruminating mind had such a momentum that the lucidity didn’t have enough energy to establish and continue in a way in which it would typically do”.

“It seems rather than staying in the dream matrix where the lucidity would continue, it pops out more to the ruminating mind”. P#02

While the experience reported by P#04 seemed to start in a similar way to the one reported by P#01, #03, and #05, it followed a more similar structure to that of P#02 than the other three. First, P#04 described what seemed a non-lucid dream. In this dream, P#04 wanted to become a tree, but for this, they realised that they must die. During the description of the act of dying in the dream, P#04 described an experience that lacked imagery, and thus, was not considered as an ordinary dream (Phase 3). Instead, they described how they accepted death in the dream (sub-phase 1), and felt a ripping in their spine (sub-phase 2) and perceived their awareness (sub-phase 3):

“So, at this point, I’d die and re-form. I don’t want to be a human, I don’t want a human experience. I chose death to have this experience”.

After this acceptance of death, P#04 moves to a different phase which they describe as ‘absorption of energy’ (Phase 4). From this point, P#04 described a phase where they absorbed a lot of energy through their spine (sub-phase 4) and a transition to the act of dying (sub-phase 5):

“At this point in the dream, I absorb a lot of energy. Something that might count as light, something that might count as vibrating ‘meta’” [...] “Isn’t a lucid dream... [...] It’s very abstract in nature”.

After this phase of absorption of energy and transition to death, P#04 describes the perception of what they call ‘the Void’ but also, ‘the dream matrix’ (like P#02) and ‘the field’ (Phase 5).

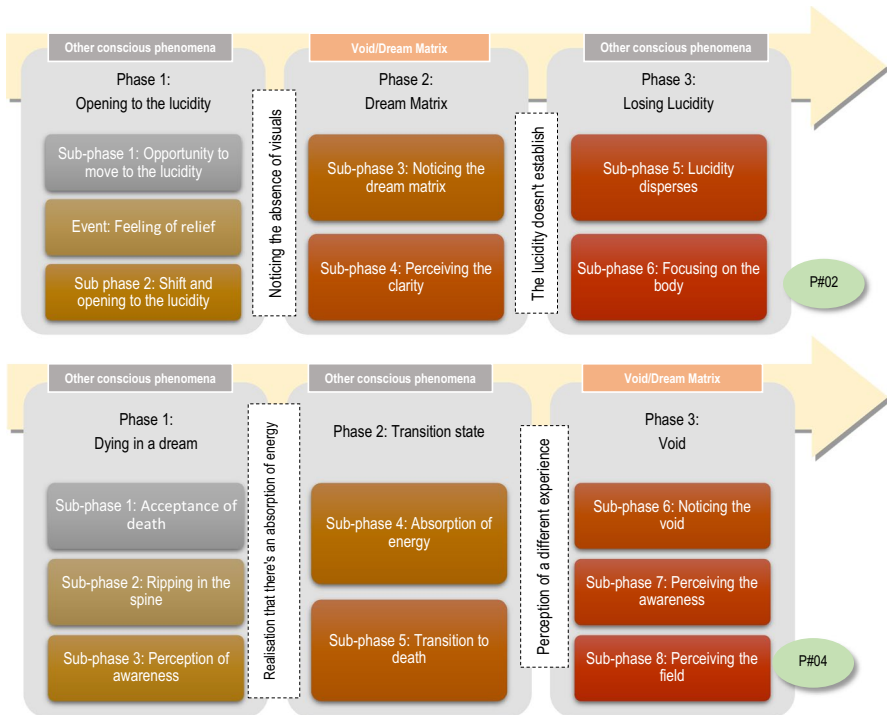


Fig. 3 Specific diachronic analysis for P#02 and P#04. The diagrams show in detail the diachronic structure for each participant. In between the phases, the dotted boxes show the transitional event that marks the change of phase for each participant

You got the void and within this space, there's the void [...] I call the field and exists in the darkness, in the void [...] In this space, the dream matrix appears and appears to the energy.

During this stage, P#04 describes the perception of the void (sub-phase 6), but also the perception of their awareness (sub-phase 7), and the way he perceives the 'field' (sub-phase 8).

"...and start to have an awareness [...] isn't you, it's just an awareness. It's like if we were going to drop a mind in a computer and whatever we drop into the computer it's what left [...] start having the thoughts of: 'this is pure image, It's pure energy'".

The experience for P#04 ends abruptly with them waking up but still feeling what they just experienced:

"This dream just stopped, and I was awake in bed. I still had all feelings, all vibrations".

Summing up, the diachronic analysis revealed three phases common to participants P#01, #03, and #05.

1. Dream Dissolution
2. No scenery
3. Other conscious phenomena

and two in P#02 and #04:

1. Other conscious phenomena
2. Void/Dream Matrix.

Of all those states, ‘No scenery’ and ‘Void/Dream Matrix’, respectively, were the only that unfolded similarly to all the participants in the study. Consequently, this state was renamed as ‘*No Scenery/Void*’ and became the focus of further analysis. The synchronic analysis investigated in detail the phenomenological structure of the period of ‘No Scenery/Void’ and found common features across all the reports.

3.2 Generic Synchronic analysis

Within the period of ‘No Scenery/Void’, four common themes among the participants were identified: (1) Perception of absence, (2) Self-perception, (3) Perception of emotions, and (4) Perception of awareness (see Fig. 4). For each theme, different subthemes were identified. The themes and subthemes are not presented in order of importance or influence, but instead, following the order that appeared in the transcriptions.

3.3 Perception of absence

This first theme was isolated from grouping descriptemes that specifically referred to how participants experienced the ‘*No Scenery/Void*’ itself. Participants described the features of the ‘No Scenery/Void’ as the perception of absence. In these descriptions, we can identify three subthemes: (i) Object of absence, (ii) Perception of visuals, and (iii) State’s quality.

i. Object of absence

Described as ‘Absence’:

“*There wasn’t any scenery, there are no images*”, P#01; “*The space around me was very... was not like the sky or the stars, it was like a void*”, P#03; “*There was nothing to see*”, P#05

Described as ‘Emptiness’:

“no physical infinite holding space”, P#03; “here’s empty space”, P#04.

ii. Perception of visuals

Although there was nothing to see, participants described this vacuum or void state as ‘Darkness’:

“there’s a visual sense but it’s like vibrant blackness”, P#02; “it was very dark”, P#03, “this black space”, P#04.

Simultaneously, they also described the ‘No Scenery/Void’ as being ‘Light’:

“there’s a clarity that this light”, P#02; “it wasn’t the absence of light, but it was very light”, P#03; “there was a light, and it was white in colour”, P#05

Finally, P#04 also described the void as a “multicolour lining but it’s everywhere around. A massive grid”.

iii. State’s quality

Participants also described the ‘No Scenery/Void’ by referring to its qualities. Two of the most frequent sub-themes were the terms ‘Familiar’ and ‘Non-conceptual’. Three participants described the ‘No Scenery/Void’ as something familiar to them:

“there are familiar spaces”, P#02, “I’ve experienced it before”, P#04.

Both P#02 and P#04 explained that they experienced this before, but in the case of P#04, this was the first time that the experience lasted so long and was fully lived. Although P#03 mentioned that they never experienced this before, once in this state, they recognised it as something familiar:

“It felt very...not familiar as in terms of me having been in there, but in terms of having known”, P#03

Both P#03 and P#04 described this state as ‘Without constructs’:

“It was like it was beyond any... there wasn’t no need for any constructs of the mind to have anything to do with that”, P#03; “Isn’t constructed in any way”, P#04

Other categories of Void’s quality include ‘Vibrance’ (“It has like a vibrant quality”, p#02) ‘Electrical’ (“It’s like is electrical or live”, P#02) and ‘Expansive and limitless’ (“I found it incredibly expansive. Very limitless”, P#03)

3.4 Self-perception

This theme includes descriptemes that referred to the experience of oneself while in the ‘No Scenery/Void’. In this theme, the descriptemes are not describing the features of the environment (such as the absence of imagery or the perception of darkness or clarity), but about describing the self-experience while in the ‘No Scenery/

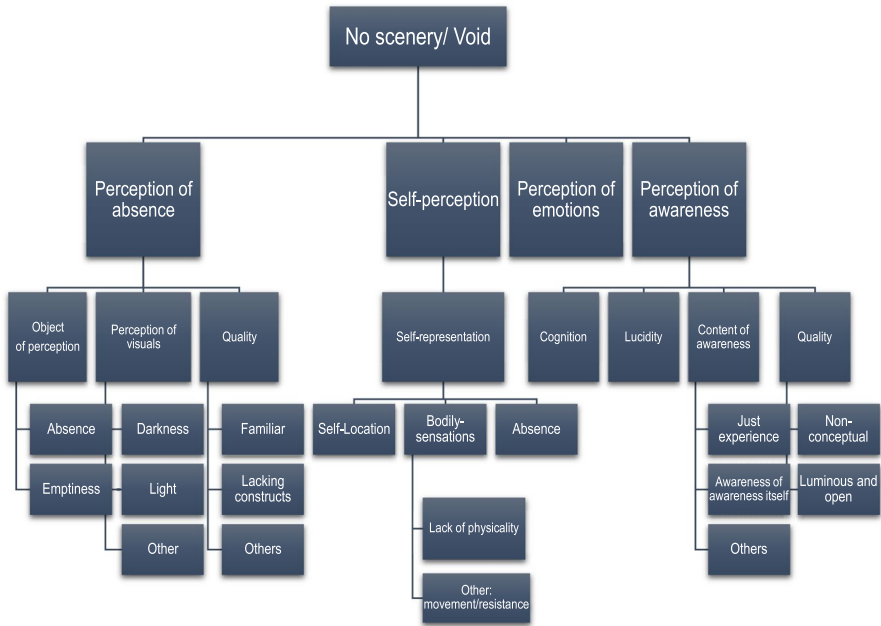


Fig. 4 General synchronic structure for all participants while in the phase of ‘No Scenery/Void’. The diagram includes all the themes and subthemes discussed in the general synchronic analysis section (see Sec. 2) that were either common to at least two participants or were mentioned several times by one of them

Void’. Three subthemes were identified: (i) Self-location, (ii) Bodily-sensations, and (iii) Absence.

i. Self-Location

Only P#01 mentioned that they could feel located while they were in the ‘No Scenery/Void’. They made several remarks about their body and location in space:

“I’m just left like in the centre of nothing” P#01

ii. Bodily-sensations

Again, P#01 was the only participant that mentioned the awareness of a body while in the ‘No Scenery/Void’. They made several descriptions referring to their body parts, including the perception of ‘Movement’:

“It’s all very like fluid movements, like being in water or something”. P#01

However, P#01 also described how they felt a sort of ‘resistance’ that prevented them from moving their head:

“I couldn’t move my head around” P#01

P#03 and P#05 mentioned having been aware of the absence of their body, ‘Lack of physicality’:

“I didn’t feel any physicality”, P#03; “I didn’t have my physical body”; P#05

P#02 and P#04 did not mention any awareness of their bodies.

iii. Absence

Not only did P#02 and P#04 mention no bodily feelings while in the ‘No Scenery/Void’ (including any mention of them lacking bodily feelings), but they also explained that their ‘selves’ were absent during this period. During the interview, both participants commented several times that they did not know how to describe this experience without using the indexical ‘I’ (e.g. ‘I was there’) because during the experience itself, they experienced a complete lack of self. For this reason, they make the following remarks about the experience:

“It’s like my experience is able to kind of sustain it. I don’t know if there’s an agency sustaining it”, P#02;

“There’s no scenes of self, no scenes of human, no scenes of being”, P#04.

P#05 mentioned lack of physicality during the ‘No Scenery/Void’, but they also stressed the fact that they did not have any sort of self-perception while in it:

“There was no intellectual content of awareness like ‘I’m [P#05’s name], I’m here’”, P#05

3.5 Perception of emotions

This theme was isolated to differentiate instances where participants described their emotions while in the ‘No Scenery/Void’. Although both P#02 and P#04 did not specifically mention any emotional features had during this state, given that this theme was recurrent for the other three participants, it was included in the synchronic analysis. The three of them, P#01, P#03 and P#05 described various emotions associated with this state, but all of them experienced this state as something positive.

“Now, I’m not nervous anymore”, P#01; “but not frightening in any way”, P#03;

“I loved it. I really loved being in there”, P#03; “It was very peaceful”, P#05;

3.6 Perception of awareness

This last theme was isolated from the others because it does not refer to either how participants experienced the ‘No Scenery/Void’ or how they experienced themselves. Here, the descriptemes refer to how participants experienced their perception

of awareness instead. Four subthemes were identified: (i) Cognition, (ii) Lucidity, (iii) Content of awareness, and (iv) Quality of the awareness

i. Cognition

This first category refers to those descriptemes in which participants describe the presence of thoughts during the 'No Scenery/Void'. I mentioned before that the presence of thoughts marked the end of the 'No Scenery/Void' and the start of 'Other conscious phenomena' period. However, in the case of P#01, the presence of cognition did not seem to disrupt their experience. While they described their thoughts, they still mentioned being in the 'No Scenery/Void'. They mentioned several times that while in this period, they were wondering what they were going to do.

"I'm just wondering to myself: 'I wonder if I should do something'". P#01

It is not until they noticed the appearance of some colours and shapes that they noticed that they were emerging from the 'No Scenery/Void'.

ii. Lucidity

Two participants described being aware that they were in this state of 'No Scenery/Void' while in it. These descriptions are categorised as 'Lucidity' because the participants have an insight into their state: they know that they are in a period of 'No Scenery/Void'.

"The experience of being aware of my consciousness inside this void was very... it felt like a more advanced and deeper understanding of that freedom of being lucid could offer", P#03;

"I realised I was awake inside the dream was still very present but in a much more profound way", P#03;

"That wasn't something that I could mistake for a dream. Nor could I mistake a dream for that. They are experientially very distinctive", P#05.

"When I had this experience of emptiness, I still know I was dreaming, I was aware I was asleep". P#05.

iii. Content of awareness

This subtheme involves descriptions of awareness that were distinguished on the basis of what the awareness refers to. P#02, P#03, P#05 described this awareness as 'just experience' – an awareness that did not have any content of awareness:

"It's emptiness. It's emptiness but awareness of emptiness. But well, when I say awareness you can say, 'Oh, there's awareness of emptiness', but sometimes, it's like emptiness and awareness are the same, there's no 'being' being aware of emptiness, it's emptiness is awareness", P#02

"[...] and start to have an awareness...isn't you, it's just an awareness. [...] It's like if we were going to drop a mind in a computer and whatever we drop

into the computer is what it's left. It can experience but isn't saying, isn't feeling, isn't tasting...it can't describe the experience", P#04

"I was aware [...] It wasn't that I was thinking consciously I'm in sleep or I'm in a dream. It was more that it was an awareness", P#05

However, at some points, this awareness does seem to have content. The more abstract one is that of an 'awareness of awareness itself':

"awareness of awareness being aware", P#04

This is also described in terms of awareness of clarity:

"Just clarity", P#02; "And then I realised that this was the nature of mind", P#05

Other mentions of awareness with some content included the awareness of energy ("It's like energy of your mind", P#02; "I was aware of my energy" P#03), the awareness of just being ("absence of physicality, and just moving into an essence of pure beingness", P#03; "being aware. Being present", P#05), and awareness of an observer ("There's an awareness of the observer, which I guess I identify with, but there's not a typical sense of the self", P#02).

iv. Quality of the awareness

Finally, the category of 'Quality of awareness' was identified to classify those descriptemes that mentioned how this awareness was. P#02 described this as 'non-conceptual':

'very non-conceptual stuff going on', "It's just awareness without an agenda, without movements," P#02

Thus, similar to the descriptions made by other participants referring to the 'No Scenery/Void', but in this case, P#02 was referring to the sort of awareness experienced. The perception of awareness is also described as 'Luminous and open' by P#05:

"is luminous and open awareness", "It was open, without being focused on anything"

4 Discussion of the study

This study explored how a qualitative research tool could be used to investigate further the phenomenology of objectless awareness during sleep. While instances of objectless awareness during sleep has been widely reported by Indian contemplative traditions, no study to date has provided a rigorous analysis of the phenomenological fingerprints of this state. Thus, the pilot study introduced here aimed at developing a research protocol for guiding future research by gathering reports of alleged instances of awareness during sleep in absence of further mentation. Although the results presented in this paper

are preliminary and exploratory, and thus should be taken with care, the MPI technique proved to be an adequate method to explore in depth this elusive and rare phenomenon.

The MPI technique helped participants evoke an experience that, given its features, is difficult to report. Moreover, it allowed the exploration of the dynamics of objectless consciousness during sleep by delving into the evolution in time of this phenomenon. The general diachronic analysis revealed a phase that was common to all participants and matched with the target phenomenon of this study, namely the state of 'No Scenery/Void'. Several common themes among the participants were extracted from this state, showing a possible generic structure that would describe this state of void. However, given the size of the sample, and the exploratory aim of the study, the results obtained cannot be generalised; the results presented here are purely used for illustrative purposes. Similarly, it is not within the scope of this paper to offer an exhaustive theoretical analysis or show how the results could fit within a particular conceptual framework. Instead, this last section aims to spell out the different ways in which we could understand the experience of the void reported by the participants and point towards avenues of research that should be addressed in future studies.

4.1 Recognition of a state of void

All participants mentioned a state of 'No Scenery/Void' during their sleep— they were aware *while* this state was unfolding. Although the events that preceded this state of 'No Scenery/Void' were different (see Sec 2.1), all participants described having perceived a state of absence; a state that lacked imagery and further mentation. Among the most common ways to describe this state, participants mentioned the 'lack of imagery', that 'there was nothing to see', and that there was 'emptiness' and 'blackness'. Some participants also described further perception during this state of void, such as the perception of light. Moreover, some participants mentioned a sense of familiarity towards this state and described it as a state that 'lacked constructs'. While two participants explicitly mentioned the lack of any sense of self during this state, the other three described the disappearance of their body and the awareness of their lack of physicality. Given these features of the experience of the void, we might wonder whether this state described by the participants was, in fact, the same sort of objectless awareness described by Indian philosophical traditions as *sushupti*— a state of awareness had during sleep where there is no object of awareness, including the awareness of our awareness. From the reports gathered and the analysis conducted, we can consider different options that will guide future explorations of this phenomenon.

First, we could follow the proposal from Windt et al. (2016) and consider the state of 'No Scenery/Void' as a dreamless sleep experience (DSE) — a conscious state had during sleep that does not meet the criteria to be classified as a dream. Remember that according to these authors, dreams are characterised as immersive experiences of a self in a hallucinatory reference frame (see Windt, 2010, 2015a, b). Thus, the state of 'No Scenery/Void' would be considered as DSE if we conclude that it does not involve a sense of

immersion, including a minimal sense of spatiotemporal location (*'here'* and *'now'*), and the simulation of a dreamlike environment.¹⁶ Furthermore, if we conclude that the state of *'No Scenery/Void'* is a DSE, we should then consider if this state is more akin to a sort of object-directed DSE (according to these authors, isolated hypnagogic imagery, bodily sensations and sleep thinking) or a *"Selfless' States and Contentless Sleep Experience"* like sushupti (Windt et al., 2016:873).

For the *'No Scenery/Void'* to be considered a DSE, the state should not include the instantiation of a simulated or hallucinatory scenery. However, from what we found in the preliminary results; we could question whether the recognition of the void by the participants would count as an immersive experience in a simulated reference frame. According to Windt, experiences leading into dreams — or what she calls *oneiragogic* experiences (Chapter 11, Windt, 2015a, b) — move along a spectrum, from a largely veridical reference frame to a largely hallucinatory reference frame (p. 522). On the lower extreme of the spectrum, we find those hypnagogic-like experiences that merely involve isolated or brief imagery, whereas, on the higher extreme, we find hypnagogic experiences that are more dream-like and complex (p.532). If the *'No Scenery/Void'* was considered a DSE, we should understand the sort of perception happening during this state as framed in a largely veridical reference frame (i.e. the actual sleeping environment).

We could then take the descriptions of the void at face value and understand them as the perception of absence; participants were in a state in which they were aware of nothing. During this state, there was nothing to perceive because there was not any sort of stimuli, similar to a sensorial or perceptual deprived environment. Relating the state of *'No Scenery/Void'* to environments of sensory and perceptual deprivation would explain away why some participants in the present study mentioned simple visual percepts, such as a *'light that was white in colour'* (P#06) or a *'multicolour lining...a massive grid'* (P#04). Mentions to simple hallucinations, such as dots, patterns and lights are common in the literature of sensory restriction and some recent studies have corroborated this fact (see Lloyd et al., 2012; Mera-bet et al., 2004). Moreover, some studies that exposed participants to long periods of sensorial deprivation found reports of more complex hallucinations, including dream-like experiences (cf. Heron, 1965; Heron et al., 1956; Zubek et al., 1961), which would explain why the *'void'* can be experienced as an actual simulated scenery for some participants. Similar simple visual percepts have also been described in research with expert meditators. For instance, Mavromatis (1987) observes that individuals describing mystical experiences and alike (i.e. episodes of trance resulting from religious and meditative practice) sometimes experience unusual percepts, such as specks of light and swirling colours (p. 117). Mavromatis speculates that

¹⁶ Note that not all authors would agree with this definition and would consider dream-like imagery occurring during sleep as dreams, thus, taking all variety of imaginative-like mentation as dreams (see Rosen, 2018). However, the point made here by authors endorsing the simulational view of dreams is that the sort of imagery that should not be considered as a form of dreaming is the sort of imagery that does not instantiate the experience of an immersed self in a hallucinatory world. Thus, experiences that lack a constructed scenery (even if minimal forms of scenery) will not be considered as dreams, but dream-less or DSEs.

the nature of these percepts could be retinal; they are in fact cellular and electron activities in our retina that form specks, clouds or colours, and, on occasions, more object-like images (p.118). Similarly, Lindahl et al. (2014, 2017) also found the experience of unexplored percepts during meditative practice. These authors refer to these percepts as ‘meditation-induced light experiences’— the perception of points of lights, phosphenes and patterns (e.g. grids). Describing the state of ‘No Scenery/Void’ as an oneiragologic experience (DSE as for Windt et al. 2016) is appealing since it would allow us to situate the different reports by the participants along the oneiragologic spectrum, ranging from experiences largely framed in a veridical environment, passing through brief hallucinatory-like percepts to more immersive experiences. However, by acknowledging that the experience had during the ‘No Scenery/Void’ involves some object-like perception we will also need to conclude that these are not indeed objectless and thus, they might not refer to the sort of experience reported by Indian contemplative traditions.

Second, we could instead regard the ‘No Scenery/Void’ not as a DSE, but as a minimal sort of dream. While we concluded that the ‘No Scenery/Void’, at least for the participants in this study, did not involve a fully immersive experience involving the perception of a hallucinatory scenery, it did instantiate a minimal sense of *here* or *now*, or what is called *spatiotemporal situatedness* (Windt, 2015a:520).¹⁷ According to a current framework of dreaming, a minimal sense of spatiotemporal location is a necessary and sufficient requisite for dreaming (Windt, 2010, 2015a, b). The possibility that the experience of ‘No Scenery/Void’ was a minimal type of dream would explain why some participants described a minimal sense of bodily awareness (ranging from a fluid/dissolved body to the absence of physical body). Similar mentions of a state of minimal dreaming or ‘*minimal perceptual environments*’ (LaBerge & DeGracia, 2000) are found in the literature. These experiences have also received the name of ‘*imageless lucid dreams*’ (Magallón, 1987) — a lucid dream that lacks any dream scenery or complex visuals. In some cases, these experiences include the perception of abstract imagery and/or concepts (Bogzaran, 2003:50) but also some minimal bodily perception (Johnson, 2014:63). Moreover, reports of these sort of lucid dreams lacking visuals are usually said to follow the dissolution of the dream scenery (see Chapter 21, Johnson, 2020) in a similar fashion to the reports gathered in this study.

The option of understanding the reports of ‘No Scenery/Void’ as minimal dreams could be problematic in cases where it is not clear whether the minimal condition for spatiotemporality was met. For instance, both P#02 and P#04 did not mention any sort of self-perception, including perceiving an absent body. They were also the only participants that did not report any associated emotions to this state. A speculative claim is that the lack of the first-person perspective influenced the lack of affection during this state. According to those participants, the experience of ‘No Scenery/Void’ was a completely selfless experience — the indexical ‘I’ to describe this experience was used only for reasons of language, but not because they experienced this state as

¹⁷ See Windt (2015a:523–4) for a detailed discussion of imageless lucid dreaming.

having a first-person perspective. Thus, we should explore further whether the experience indeed lacked a first-person perspective. These reports seem akin to selfless descriptions accompanying radical forms of self-disruption, including drug-induced ego-dissolution and certain forms of meditation (see Millière, 2017, 2018 for a review). In those cases, the use of the pronoun ‘I’ to describe the reported experience does not indicate that the original experience was actually experienced from a first-person perspective, but that the memory report of the experience did include a subject of the experience (Millière, 2020:32–33). A similar assumption could be applied to the rest of participants who reported a very minimal sense of self-awareness, and further studies should clarify whether the perception of a self was added once the experience is recollected, or whether it was experienced *while* the experience unfolded. Notwithstanding this possibility, an experience that lacked any sense of self, including any sort of first-person perspective would be extremely difficult, to report, and thus, we should consider whether an experience as such can even be reported or would fall within the limits of reportability (Windt, 2015b:22).

At this point, we would need to explore further whether this state that lacked even a minimal sense of spatiotemporal location was completely different from a dream and DSE, and thus, should be treated as a *sui generis* class.¹⁸ Moreover, some participants noted how this state was qualitatively different from any dream experience they ever had:

“That wasn’t something that I could mistake for a dream. Nor could I mistake a dream for that. They are experientially very distinctive”. P#06

Of course, the fact that this state of ‘No Scenery/Void’ was experienced as qualitatively distinct to any other dream experience or DSE does not rule out the possibility that this was a dream — it could still be a kind of dream, albeit a kind that can barely be recognised as a typical dream. In the same way that there is a continuum between oneiragologic experiences and dreams (i.e. oneiragologic spectrum; Windt, 2015a, b), there could be a continuum between minimal dreaming and objectless forms of dreamless sleep (see Windt, 2015b:16–17). In that case, we should also reconsider whether spatiotemporal location would be a determining feature to distinguish a dream from a dreamless sleep experience or whether this dimension can still be present during dreamless sleep. However, the fact that some participants said to lack at some points a total sense of self, indicates the possibility of a more of minimal experience — even more basic than a minimal dream — could be taking place. This fact brings us to consider the interesting remarks that some participants made about the sort of awareness they experienced during the ‘No Scenery/Void’.

¹⁸ Windt (2015b) has recently put forward an account of objectless dreamless sleep in which she describes some instances of these phenomena as lacking a spatial reference frame, but not a time reference. For Windt, these particular instances are different from dreams because they lack spatiotemporal location, but they still preserve a minimal notion of temporality or ‘nowness’.

4.2 The experience of consciousness-as-such

Interestingly, while all participants did describe the recognition of the ‘No Scenery/Void’ as a state that was reached during their sleep, they also describe it as a peculiar state of awareness. For instance, participants #02, #03, and #06 allude to this state as ‘just experience’; a state that could only be described as awareness itself (see § 2.4). As P#04 pointed out, this was “*awareness of awareness being aware*”. Besides, they also described this as a state of ‘clarity’ or ‘light’; a state in which there was not a perception of light (as in § 2.1), but a state that could only be described as ‘clear’. The question that arises here is what do participants mean when they allude to a state that is just awareness but that it is clear or luminous? How should we understand such states?

As I advanced in the introduction, the state of *sushupti*, has been widely described in Indian contemplative traditions as a special state of consciousness during sleep — a state where there is only awareness and nothing else. However, the notion of ‘just awareness’, ‘pure awareness’ or ‘consciousness-as-such’ has been understood in different ways in the literature.¹⁹ It will go beyond the scope of this paper to provide an account of consciousness-as-such, however, I propose two ways in which we could interpret these descriptions of ‘just experience’ provided by the participants and how we could study them further.

On the one hand, we could understand references to ‘light’ or ‘clarity’ as placeholders to describe an experience that lacked any apparent content of awareness. Thus, the experience of the ‘light’ should not be understood as the perceptual experience of ‘lightness’ (such as visual light or light percepts) but as a metaphor to describe the experience of awareness itself. Similar descriptions are found in the notions of the ‘dream of light’, ‘luminosity yoga’ or ‘sleep yoga’ by Tibetan Buddhism. This tradition describes instances of awareness during deep sleep as a period where we reach the ‘natural light’ (Norbu, 1983) or ‘clarity light’ (Gyatrul, 2002; Padmasambhava & Gyatrul, 2008). The practice of sleep yoga aims at maintaining awareness in the transition between sleeping and dreaming to recognise the nature of the mind or a state of ‘pure awareness’ (Ponlop, 2006:86; Padmasambhava & Gyatrul, 2008:209). It is important to note that participants who described the period of ‘No Scenery/Void’ using the concept of ‘light’ were either long-term meditators or had a good knowledge of meditative traditions.²⁰ They used the concept of ‘light’ to refer to a state in which they were merely conscious but nothing else happened. In words of P#06, there was the realisation that *‘this was the nature of mind’*. On this

¹⁹ The relation between *sushupti* and pure awareness can be found under the concept of ‘*sākṣīn*’ or ‘witness-consciousness’. According to the Advaita Vedānta and Yoga schools, the *sākṣīn* is the kind of consciousness that it is said to remain during dreamless sleep. This state has been described as an instance of reflexive consciousness, a mental state that is directed towards itself (see Chatterjee, 1982; Gupta, 1998; Albahari, 2009).

²⁰ Both participants #02 and #06 declared to be long-term meditators; #02 had extensive experience as Yoga practitioner and #06 was trained in the Tibetan Buddhist tradition. Although participant #03 admitted not following a regular meditative practice, they had a lot of knowledge on the teachings on sleep yoga and they were trying to practice this meditation technique.

reading, nothing was occurring during this state of ‘No Scenery/Void’; this was a state of just pure awareness and nothing else.²¹

On the other hand, we should carefully consider whether this state did not indeed involve some sort of intentional object at all (i.e. the state was about something), and thus, it might not be as ‘pure’. It could be that there was no object of awareness as such — a distinct object of perception or a self-other distinction — but that there was some content of awareness. There are two reasons for considering this. First, this state was described as something that was reached or achieved — a state that, in some cases, involved a minimal sort of first-person perspective and self-other distinction (‘here’ vs ‘there’). Besides, although some participants reported an apparently complete selfless experience, they were said to be aware *while* this state was unfolding. How could they experience some lucidity (awareness of their current state of awareness) during this state if there was not in place at least some sort of awareness of the state itself? This brings us to the second reason to consider this experience as a state involving some content. Although participants describe it as a contentless state, there seemed to involve an intentional object: that of awareness itself. The state of ‘No Scenery/Void’ was described as a state in which there was only awareness; an awareness that was aware ([...] *no ‘being’ being aware of emptiness, it’s emptiness is awareness*” P#02 “*awareness of awareness being aware*”, P#04). As such, we should consider whether this state did in fact carry some form of intentional content (see Shear, 2004:87, 2007:700; Metzinger, 2020:9). Thus, the state might appear as contentless to the experiencer, but there was still some intentional object instantiated (in this case, ‘awareness of awareness’). Future philosophical accounts should investigate if objectless dreamless sleep is indeed *objectless*, including those instances in which any sort of self-other perception is lost and the only thing that remains is the ‘awareness of the awareness’. (Table 1)

Again, given the size and purpose of this pilot study, we cannot give conclusive answers to the questions and issues raised above. Similarly, no stronger or more general conclusions can be drawn from the results presented here. However, the phenomenological analysis of the reports points to some issues that are addressed in the literature that require further research. Future studies should delve more into what objectless awareness during sleep is and consider in more detail how this phenomenon relates to other associated phenomena, such as sensory and perceptual deprivation, hypnagogic hallucinations, and meditative experiences. Similarly, we should undertake further explorations of the transition to and from the ‘No Scenery/Void’ and ‘Other conscious phenomena’, which were not analysed further in this study. Future research should also explore in more depth the phenomenal experience during this state, focusing on how participants perceive themselves and whether it instantiates a complete dissolution of their sense of self. Finally, future research should investigate the theoretical implications of the concept of ‘consciousness-as-such’ or ‘pure awareness’ and look at what the sort of awareness had by individuals during this state is. (Table 2)

²¹ There is a long tradition on using the notions of ‘luminosity’ or ‘self-luminosity’ to refer to the reflexivity aspect of consciousness, especially as a means to describe the sort of awareness occurring during dreamless sleep (Indich, 1980; Loy, 1988; Rao, 2002). On this reading, luminosity means “the manifest-ness of consciousness to the conscious subject” (Ram-Prasad, 2007:54). Therefore, luminosity is seen as ‘phenomenality itself’ (Fasching, 2008: 475), an experience of pure subjectivity.

4.3 Limitations

Regardless of its novelty, this study has its limitations that should be carefully considered. First, although the reports from the interviews present fine-grained descriptions of subjective experiences, with the current sample we cannot make generalisations about the experience of 'No Scenery/Void' during sleep to the wider population. Moreover, given the form of participant recruitment, a selection bias facilitated the participation of individuals that, due to their meditative practice, had experienced this sort of state and recognised it more easily.²² It would be interesting to see whether this phenomenon can also be had by individuals without previous meditative experience by designing a questionnaire that could help non-meditators to identify these sorts of experiences. Finally, there are important limitations in terms of the granularity of the reports. Some experiences reported were had up to six months ago, which goes against the gold standards of sleep research to gather reports immediately after awakening (Windt, 2015b:8). Also, since the interviews were not conducted in a sleep lab, we do not have any way to verify that the reported were had during sleep. In any case, the MPI method proved to be an adequate tool to help participants to evoke their recollection and describe different dimensions of the past experience that were originally unattended.

These limitations should not be seen as a barrier to developing future research. Instead, the questions raised in the discussion should be used to guide further investigations. The next steps for studying objectless awareness during sleep should be to develop a neurophenomenological approach that could combine the advantages of qualitative tools, such as the MPI, to dig further into the dimensions of the subjective experience with sleep research tools such as polysomnographic and neuroimaging devices.

5 Conclusion

This paper introduced the results of an exploratory study on instances of objectless awareness during sleep and addressed avenues of future research on this area. While instances of objectless consciousness during sleep have currently received a lot of attention, no study to date has undertaken rigorous research to investigate the phenomenological profile of this state. Moreover, the lack of first-hand reports mentioning this state and the anecdotal character of some of those reports has not facilitated a consensus about how we should better conceptualise instances of objectless awareness during sleep and how this state should be situated within a classification of sleep experiences. This study attempted to provide further information from first-hand reports and to provide a preliminary analysis to motivate future rigorous studies of dreamless sleep experiences using appropriate phenomenological questions with serial awakening procedures and concurrent electrophysiological measures. The preliminary results showed descriptions of a state of 'void' during sleep, following the dissolution of a dream or dream-like state. This state was described as

²² Thanks to Jennifer Windt for pointing this out.

involving the perception of ‘absence’ or ‘emptiness’, a state that was not unfamiliar and that could be recognised. Participants also described being aware of being in this state while it was unfolding, and some of them said they had a merely experiential state: a state in which there was ‘just awareness’.

While the results presented here should be taken cautiously, the paper offers insights about which questions future studies should address. Further research should be carried out to investigate whether alleged cases of objectless awareness during sleep are a type of dream, a dreamless sleep experience (DSE) or a sui generis class of experience. Future research should also delve further into the relationship between this objectless conscious state and associated phenomena, such as hypnagogia and other forms of sleep-onset perception, perception triggered by sensory and perceptual deprivation, and altered states of consciousness reached in meditation. Finally, we should address the issue of whether alleged cases of objectless consciousness during sleep is actually an ‘objectless’ experience, or if it involves some intentional object, such as the awareness of awareness itself.

Appendix I

Participant information collected from the screening questionnaire sent to them when they answered the call for participants.

Appendix II

The following are some excerpts of the transcription of the interview with participant #06. Every number specifies a different descripteme. P=participant #05; I=Interviewer.

- (1) I: You told me that you have experience awareness during dreamless sleep; that this was something that you knew about.
- (2) [Participant explains that they have been training in a practice told by Tibetan Buddhism in which you can go from a lucid dream to a special state of awareness during deep sleep. They have been trying on different occasions each time that they were becoming lucid during their dream, and in this time, they were successful. They report an experience that happened a few months ago but they wrote it down in their dream diary].
- (3) In this dream I was having a normal dream, non-lucidly aware and
- (4) I was with my driving instructor and
- (5) I pulled out of the house. It was a terrace house, I think it was Victorian era house.
- (6) This isn’t unusual to me. A lot of my dreams, a lot of lucid dreams take place in this era.
- (7) I went to the house, I went upstairs, and my step-father was there so it was my mother and they said something which was odd,

Table 1 Demographic questions, lifestyle, sleep quality and dream experiences

ID	Currently taking meditation?	Frequency meditation	Meditation type	Frequency alcohol consumption	Frequency recreational drugs	Sleep quality	Problems falling sleep?	Dream recall	Frequency dream recall	Lucid recall	Frequency lucid recall
#1	NA	<5 days per week	Vipassana (body scanning)	2 days per week	1 day per week (Cannabis)	Good	No, I usually don't	Yes, I usually do	Every day	Yes	<5 days per week
#2	NA	Every day	Samatha and Vipassana	NA	NA	Good	No, I usually don't	Yes, I usually do	Every day	Yes	<5 days per week
#3	NA	Very rarely	Breath meditation, concentrating on the breath coming in and out through the nose, watching thoughts float in and out	About 4 glasses p/month	NA	Excellent	No, I usually don't	Yes, I usually do	Every day	Yes	<5 days per week

Table 1 (continued)

ID	Currently taking medication?	Frequency meditation	Meditation type	Frequency alcohol consumption	Frequency recreational drugs	Sleep quality	Problems falling sleep?	Dream recall	Frequency dream recall	Lucid recall	Frequency lucid recall
#4	NA	Every day	Other: Every time I close my eyes I relax and engage with thoughts and or visuals. This is either quietly pushing thoughts away or playing with the image stream that can often be there	Less than once a week	NA	Good	No, I usually don't	Yes, I usually do	> 5 times per week	Yes	> 5 times per week
#6	Ramipril and Bisoprolol	Every day	Open meditation (Buddhist)	1–2 units week	NA	Good	Occasionally	Yes, I usually do	< 5 times a week	Yes	< 5 times per week

Table 2 Sleep onset and dreamless sleep

ID	"Do you recall any sort of mental phenomena when you fall asleep? (e.g. images, sounds, thoughts)?"	Description sleep-onset mentation	"Are you usually aware when you are falling asleep?"	Description of awareness falling asleep	"Can you describe an episode of awareness during sleep in absence of dream content?"
#1	Yes	I often see my thoughts become images, and bizarre intrusions into the thoughts/images, while falling asleep	Yes, I usually do	Similar to above, while lying in bed thinking before sleep, I will notice the very clear sensation that sleep will soon arrive. A release/relaxation of my mind, which soon thereafter is accompanied by changes/discontinuity in thought patterns and more imagery. It also feels like I have less access to working memory, so I can't hold on to my own thought process (or if I tried to it would force me back into wake). It can be a bit disconcerting to lose that access to memory, but I enjoy it now	This has happened to me several times in close association (before or after) a lucid dream with content. For example, in one instance I became lucid in dreamless sleep, but still, I felt I was 'myself'... there was just no visual or audio or bodily imagery. I just hung out in this black space for some time until soon dream imagery began to appear. I started to sing and the imagery became more vivid and full. In other cases, I have been in a lucid dream, and the dream imagery gradually fades away into nothing. But in all these cases I still feel a sense of self, despite having no body or sensory experience
#2	Yes	images, sometimes odd sounds or vibratory sensations or feeling of movement, discursive thoughts fade	No, I usually don't	when I am aware I do notice an "opening up" into dream space	I typically have these experiences at least once per week –sometimes many within a period, or extending for periods of up to an hour. I notice transitioning to/entering a space which dreams arise from and fade into – a lucid space prior to, in between and post dreams. Still have access to cognitive abilities – though typical thinking is greatly subdued. Strong qualities of clarity, "brightness", presence and calm. Sometimes blissful, sometimes more equanimous. Like awareness being aware of itself

Table 2 (continued)

ID	"Do you recall any sort of mental phenomena when you fall asleep? (e.g. images, sounds, thoughts)?"	"Are you usually aware when you are falling asleep?"	Description of awareness falling asleep	"Can you describe an episode of awareness during sleep in absence of dream content?"
#3	Yes	Yes, I usually do	I sometimes catch well-formed images as I'm falling into sleep. Last night it was as if I was behind a wall with a thin viewing strip cut out of it so I could peer in at part of a dream as it came towards me. The closer to actual sleep I got, the more the viewing strip widened and the more I could see of people sitting in a well-lit cafe	I became lucid in a dream by jumping upwards and was so surprised that I 'fell out' of the dream very fast and into a space that was completely dark. There were no images anywhere or any form of me that I could perceive, the space I was in was limitless in size. I was aware that I was still asleep and it had the same expansive and free-ing sensation I experience in a lucid dream. It was like being in a studio where dreams are painted before the paint gets there. I began to sink down into a more physically perceivable state and be aware that I must be in bed. I passed by hand between my back and the mattress to see if I could feel anything of my physicality but just found more space like there was a gap between my body and the bed. I realised I was still asleep and aware and not actually moving my physical body in any way

Table 2 (continued)

ID	"Do you recall any sort of mental phenomena when you fall asleep? (e.g. images, sounds, thoughts)?"	Description sleep-onset mentation	"Are you usually aware when you are falling asleep?"	Description of awareness falling asleep	"Can you describe an episode of awareness during sleep in absence of dream content?"
#4	Yes	<p>Relaxing and looking for images in my eyes and then putting a sense of motion in there. This can lead to being lucid in the dream as what is called a WILD. On sleep, I will often have two sleeps each night. Got to bed at 2000 to 0100 and then up for an hour. The second sleep is very good for lucid dreaming</p>	<p>Yes, I usually do</p>	<p>First up is the drop to a quiet place that I think is light sleep. This can lead to varying degrees of HI, geometric patterns and then these will lead to a deeper state and often lucid</p>	<p>Yes. What I call the void. A body-less state that exists in what I call the gap between dreams. You can find this if you look for it and by going through walls and not asking for or intending for a normal lucid dream. There is also a state I call the field. This was a mind-blowing state where i became (felt as if) pure energy</p>

Table 2 (continued)

ID	"Do you recall any sort of mental phenomena when you fall asleep? (e.g. images, sounds, thoughts)?"	Description sleep-onset mentation	"Are you usually aware when you are falling asleep?"	Description of awareness falling asleep	"Can you describe an episode of awareness during sleep in absence of dream content?"
#6	Yes	Hypnagogic imagery. I have felt a strong tingling sensation in my legs on one occasion	NA	NA	<p>Since June 2017 I have used some of my dreams to try to become consciously aware in dreamless sleep. Within Tibetan Buddhism, this state of awareness is called the "clear light" or the "natural light" and is considered to be the fundamental nature of the mind itself. Tibetan Buddhism includes a practice called sleep yoga in which the practitioner aims to remain conscious whilst falling into dreamless sleep. That is the usual way of experiencing the clear light. However, for various reasons including my personal circumstances, I am not able to practice sleep yoga in this way. Instead, I try to enter "the clear light" from the lucid dream state. Generally speaking, my technique, once I'm lucid, is to call out "Transform this dream into the ultimate state". The Phrase "ultimate state" is a synonym for the "clear light". I have had some success at dissolving the dream into the uptime state but am still very much a novice!</p>

- (8) and I had a previous dream that night which wasn't lucid but involved hockey equipment.
- (9) I don't play hockey, doesn't really have any significance for me but I know what it is.
- (10) I was upstairs, and I looked around and this hockey equipment was in a corner by the door.
- (11) I think that what happened was that I saw the hockey equipment and I thought: 'that it's from my dream'
- (12) and then I thought: 'hang on, if this is from my previous dream that means that I'm still dreaming'.
- (13) As I said, at this time I was trying very much to induce this experience of awareness in non-dreaming sleep.
- (14) I realised I was dreaming, and I went to another room in the house
- (15) because I remembered what my dream goal was, my dream plan and
- (16) I went to another room and
- (17) I shouted out the dream 'dissolve this dream in the ultimate state'.
- (18) It might have been different wording but that was the essence of it.
- (19) Nothing happened. The dream remained precisely as it was.
- (20) So, I said: I try again.
- (21) So, I shouted out the same phrase and
- (22) the room started to spin, it started to move but it never got that far.
- (23) I was in the middle
- (24) and everything was moving around like a carousel.
- (25) It went from right to left but never went very far, maybe a quarter of the way round or something like that.
- (26) At this point everything faded into white light, as you would see in a film, you know.
- (27) But that again didn't last very long,
- (28) was momentary,
- (29) and then it faded into blackness.
- (30) I was in space,
- (31) there were no visual images,
- (32) there was a light and it was white in colour.
- (33) There was nothing to see,
- (34) but there was a kind of radiance.
- (35) The radiance wasn't coming from anywhere.
- (36) The light source was to my right or my left or in front of me, it was just there.
- (37) And then I realised that this was the nature of mind.
- (38) It was very peaceful.
- (39) I was very relaxed.
- (40) Then smoothly this image appeared of two hands
- (41) in front of me.
- (42) Palm up. Level of my belly button or whereabouts.
- (43) And behind them, in the ground, which I was looking down, there was grass.
- (44) This image didn't last for very long,
- (45) but I remember thinking, 'this is a dream'.

- (46) So, in other words, what it was formed out of this experience of former awareness was a lucid dream, which I already knew when all this started.
- (47) And this image lasted for a couple of seconds and then I woke up.
- (48) I: You realise you are dreaming, and you want to carry out this plan and then you shout out something like: 'this is the ultimate state'?
- (49) P: Dissolve this dream into the ultimate state.
- (50) I: You shout, 'dissolve this into the ultimate state' and then nothing happens and then you try again, and the room starts to spin from right to left. It's like being in the middle of a carousel because you aren't moving but everything is moving.
- (51) P: Didn't go very far, just a quarter of the way.
- (52) I: then you describe a white light.
- (53) P: Everything dissolves into the white light.
- (54) I don't know if you have seen the Lord of the Rings film, but there's a couple of moments towards the end of the last one in which you think the movie it's about to end because everything becomes white light; it's light that.
- (55) I: What was momentary, the thing that everything was spinning or the dissolving?
- (56) P: Both. The spinning was momentary
- (57) and the white light was momentary.
- (58) The next moment was a bit longer.
- (59) I: Where are you in that moment when you go into the other room and you shout: 'dissolve the dream into the ultimate state'.
- (60) P: I was in a room at the back of the house. I don't remember much detail. I have a vague impression that there was a Turkish rug on the floor. Again, I think there was a window on the other side of the room and the walls were white. My impression is that it was vague.
- (61) I: You are in this room at the back of the house that has a Turkish rug on the floor and white walls. Can you see yourself?
- (62) P: No, I can't recall what I was wearing or my dream body.
- (63) When I was in this dream I was looking outwards. I wasn't interested in what I looked like or in my body or something like that. I was interested in carrying out a dream plan.
- (64) I: Why do you mean by looking outwards?
- (65) P: for instance, now, if I'm looking into the screen, I'm not interested in what I'm wearing.
- (66) In that, I wasn't focused on what I was wearing.
- (67) I remember though that went I moved from one room to another I wasn't flying.
- (68) I have the feeling I walked.
- (69) I had a dream body, but I wasn't paying attention to it.
- (70) I: Do you have the feeling of you shouting, 'dissolve the dream into the ultimate state'?
- (71) P: I shouted very loudly.
- (72) It wasn't like shouting it in my head,
- (73) but shouting it out loud.
- (74) I: and can you hear yourself?

- (75) P: I'm not sure what you mean by that.
- (76) I shouted the words; they didn't echo back or something like that.
- (77) I shouted and nothing happened. Very briefly because I didn't wait to shout again.
- (78) I: You shouted out loudly, nothing happened and then immediately after you shouted again.
- (79) P: Then it's when the spinning start to happened. The room moved from right to left and it might also the spinning going downwards.
- (80) In terms of my reaction, this was so quick that I didn't feel any emotion.
- (81) I: What is the next thing you can remember?
- (82) P: The next thing that happened is that there's empty space.
- (83) There are no shapes or anything.
- (84) On the other hand, is very luminous,
- (85) there's this light. Isn't red or green or yellow.
- (86) It's just there and it's all-pervasive.
- (87) And I don't think I had a body in this moment.
- (88) I wasn't standing or sitting or laying down.
- (89) It was... I didn't have a body.
- (90) I: So you go into the empty space, which there's no much. You don't have a body. What happened after? You were telling me that this lasted longer than what it normally does.
- (91) P: This was the first time that happened.
- (92) There was no other impression that what I said really except two things. I was conscious
- (93) and I was aware.
- (94) I might have thought, 'Do I have a body?' or some other sort of thing.
- (95) But it was very peaceful.
- (96) I: How was this experience that this was very peaceful?
- (97) P: It was peaceful. That was it.
- (98) I: Imagine I'm someone I have never experience what peace is.
- (99) P: No struggle.
- (100) No need to go anywhere or do anything.
- (101) No worries or concerns.
- (102) Nothing to aim for or strive for.
- (103) But at the same time, being aware. Being present.
- (104) I: When you say that two things were happening in that stage; Everything is black. You don't have a body. Nevertheless, you know that you are aware; that you might have had some thoughts during that moment. Everything is peaceful. And at the same time, you are aware of being present. What do you mean by this?
- (105) P: There was no intellectual content of awareness like 'I'm [name], I'm here'.
- (106) It was open, without being focus on anything.
- (107) It's quite difficult for me to separate... the experience I had, I also read a lot. I can certainly use words that I found in these texts that describe it accurately, but I want to use my own impression. I want to avoid using those phrases.
- (108) The awareness it's... It was just unbounded.

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