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Is it Possible to Have Episodic Memories During Non-Lucid Dreams?

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Abstract

The purpose of this paper is not to show that the answer to the question in the title is ‘no’, but to show that it is ‘probably not’, at least on one particular theory of memory. Assuming that an experience will only be an episodic memory if we are ‘disposed to take the relevant experience into account when judging about the past’ (Debus 2010, p. 25), there are many obstacles to answering the question in the affirmative. If one holds that it is possible to have episodic memories during dreams, they will have to accept more implications than may be palatable. Specifically, they will have to believe, contra Sosa (2007), that we can actually make judgments during dreams and not just imagine doing so; that we retain a fairly high degree of rationality during dreams; and that there is a respectable sense in which we can refer to *the past* at all when we dream.

1 Introduction

Suppose that you have an experience during wakefulness which is personally significant for you. Perhaps you see your daughter walking across a stage to shake the school principal’s hand as she graduates from high school. Suppose that you later have a dream in which you have an experience very closely corresponding to the earlier experience. What you seem to see and hear in the dream resembles very closely what you saw and heard when you actually saw your daughter walking across the stage. Is this an episodic memory?

Intuitively, the answer is yes, but I think the matter is actually not straightforward. This dream experience is certainly a ‘memory’ in at least a loose sense, but I think that we should be reluctant to say that dream experiences can be memories in quite the same way as the paradigmatic memories which we often experience during wakefulness. In a word, the reason is that, as Dorothea Debus (2010) has argued, a mental state can only be an episodic memory,¹ at least in the paradigmatic sense, if, among other things, ‘one is disposed to take it into account in making judgments about the past’ (p. 25). It is doubtful that this condition can be satisfied in a dream.

I do not aim to show that the view that we can have dream experiences which are episodic memories (in other than a loose sense) is hopeless, but I do want to make apparent some reasons to doubt the view. Specifically, I want to highlight a particular background theory that one would have to endorse, and highlight two consequences one would need to accept, if they claim that dream experiences can be episodic memories. I think it is unlikely that there are many who would want to hold such a position, once all of this is brought to the surface.

Already, several clarifications are called for. First, when we have episodic memories during wakefulness, they are in a sense distinct from the other sensory experiences we are having at the time, such as our perception of our present environment. My question is not whether we can have episodic memories during dreams which are distinct from other sensory

¹ Debus actually uses the term, ‘experiential memory’, rather than ‘episodic memory’. I will say something about this at the end of section 2.

experiences which we are having at the same time during the dream, in a way corresponding to episodic memories experienced during wakefulness. I actually think it is very doubtful that we can simultaneously have two distinct sensory experiences in a dream, even setting aside whether one should be considered an episodic memory. I think that an individual can probably only have one sensory experience at a time during a dream, a sensory experience in which they are fully immersed (Gregory, forthcoming). My question is whether that immersive sensory experience can be an episodic memory. To make things more concrete: In the case in which you have a dream experience corresponding to your earlier, wakeful experience of seeing your daughter walking across the stage to shake the principal's hand at her graduation, that would be the totality of your dream experience at that time. I want to explore whether that experience is—or can be—an episodic memory.

Second, it is now well established that sleep plays a role in longer-term memory consolidation (Diekelmann & Born 2010). I am not concerned with the issue of whether dreams contribute to this. Perhaps a dream in which you experience a replay of a past event, or which incorporates features of that past event, consolidates longer-term memory of it, but that does not in itself mean that the dream experience is an episodic memory. Many things might play a role in longer-term memory consolidation, including subconscious processes. What I will address in this paper is just the matter of whether a dream experience itself can be an episodic memory, regardless of any role that it may play in longer-term memory consolidation or any other process.

Third, when I speak of 'episodic memories', I will be referring to memories of experiences. We can have conscious mental states which involve, for example, remembering what a person or an object looks like, without remembering a particular experience of seeing that person or object. I suspect that much of what I say in the following is transferable to memories of this latter kind, perhaps with some slight modifications, but I will not take this up in the present paper.

In the next section of this paper, I will properly introduce what Debus calls the 'Epistemic-Relevance-Condition' and the more refined 'Modified-Epistemic-Relevance-Condition'. In the third section, I will show why three of the concepts which feature in the Modified-Epistemic-Relevance-Condition create obstacles for that condition being satisfied by a dream experience.

My discussion will be restricted to non-lucid dreams. I think that there is no particular obstacle to concluding that we can have episodic memories during lucid dreams. If you have a dream experience which corresponds to a past experience; if you know that you are dreaming; and if you would treat the experience as relevant in making judgments about the past, there would seem to be no reason for anyone to deny that you are having an episodic memory. But this is not so interesting. The open question—the one which is not easy to answer—is whether it is possible to have episodic memories during non-lucid dreams.

2 Epistemic Relevance

Debus (2010) argues that the well-known causal theory of memory, which is most closely associated with Martin & Deutscher (1966),² suffers from a serious oversight. Martin & Deutscher stated the theory succinctly:

If someone remembers something, whether it be 'public,' such as a car accident, or 'private,' such as an itch, then the following criteria must be fulfilled:

1. Within certain limits of accuracy he represents that past thing.
2. If the thing was 'public,' then he observed what he now represents. If the thing was 'private,' then it was his.

² Though it has forerunners. Aspects of it can be found, for example, in James (1890).

3. His past experience of the thing was operative in producing a state or successive states in him finally operative in producing his representation.

These three statements express the conditions which we consider to be separately necessary and jointly sufficient, if an event is to be an instance of remembering. (p. 166)

The causal theory has been discussed extensively in the philosophical literature on memory and I will not review its merits here. What Debus highlights is that the theory is incomplete, at least regarding experiential memories.³ A critical feature of experiential memories is that they must be capable of informing our judgments about the past. Debus makes her point with a forceful thought experiment:

Apart from certain oddities which we will describe in a moment, John has a very normal and average psychological life. In particular, he has all sorts of beliefs about past objects and events, some of which he witnessed himself. He also frequently has experiences which present him with objects and events which he encountered in the past. Sometimes the content of the relevant experiences is related to the content of some of the beliefs about the past which John endorses. However, John is never disposed to make any epistemological use of those experiences that present him with objects and events which he encountered in the past. Indeed, he is never aware of the fact that the relevant experiences present him with objects or events which he encountered in the past, and he is never aware of the fact that he has reason to take the relevant experiences into account when judging about the past. He is oblivious to the fact that he might use the relevant experiences in support of the beliefs which he already holds about the past, and he is similarly oblivious to the fact that the relevant experiences sometimes provide him with a good reason to form certain new beliefs about the past. At no point is John disposed to make any epistemological use of the relevant experiences. Thus, as far as John's judgements about the past are concerned, these experiences simply do not play any role whatsoever. (p. 21).

Most people will likely accept that those 'experiences which present [John] with objects and events which he encountered in the past' are not memories, notwithstanding that they may satisfy the three conditions of Martin & Deutscher's causal theory. Debus's proposal is that a further condition must be added to the causal theory, at least insofar as it applies to experiential memories. The condition, which she calls the 'Epistemic-Relevance-Condition', is as follows:

in order for an experience to count as an instance of remembering, it is necessary that the relevant experience have epistemic relevance for the subject when judging about the past; that is, it is necessary that the subject be disposed to take the relevant experience into account when judging about the past. (pp. 21, 22, 25)

Clearly, John's experiences would not satisfy the Epistemic-Relevance-Condition, because he is not disposed to take them into account when judging about the past. So, they would not qualify as experiential memories on a version of the causal theory supplemented with such a condition.

One thing to emphasize is that, in proposing the Epistemic-Relevance-Condition, Debus is seeking to show that Martin & Deutscher's claim about sufficiency fails—again, at least regarding experiential memories. That is, she is seeking to show that the three conditions which Martin & Deutscher propose are not jointly sufficient for a mental state to be an experiential memory (pp. 17, 28 (endnote 26)). A mental state could satisfy Martin & Deutscher's three conditions but fail to be an experiential memory because it does not have epistemic relevance for a subject in the way Debus describes. In this respect, as Debus

³ Further to footnote 1, we will see at the end of this section why Debus uses the broader term, 'experiential memory', rather than the narrower one, 'episodic memory', which I used in the Introduction and will later revert to.

observes, her discussion differs from a lot of philosophical discussion about Martin & Deutscher's theory, which has been about whether each of the conditions is necessary—especially the third condition, i.e., the causal condition (pp. 17, 26 (endnotes 3 and 4)). However, she is explicit that she is not claiming that Martin & Deutscher's three conditions, plus a condition requiring epistemic relevance, are sufficient for a mental state to be a memory. It may be that other conditions need to be satisfied as well (p. 28 (endnote 26)).

Debus realizes that there is some arbitrariness in adding the Epistemic-Relevance-Condition. She allows that, if someone insisted that those experiences John has which present him with objects and events which he encountered in the past really are experiential memories, we may not be able to give them a conclusive reason to abandon this position. They would simply have a broader notion of experiential memory than the rest of us. But even those operating with a notion of experiential memory broad enough to include John's experiences would accept that those experiences are not typical of the phenomenon. Accordingly, everyone should be able to agree that *paradigm* examples of experiential memories will have the property that we are disposed to take them into account when making judgments about the past. So Debus proposes a slightly weaker 'Modified-Epistemic-Relevance-Condition':

In order for an experience to count as a *paradigmatic* instance of experiential memory, it is necessary that the relevant experience have epistemic relevance for the subject when judging about the past; that is, it is necessary that the subject be disposed to take the relevant experience into account when judging about the past. (p. 25, Debus's emphasis)

Contra Debus, perhaps there is actually an argument which can be given for the view that John's experiences are not even non-paradigmatic experiential memories. Plausibly, the purpose or function of an experiential memory is to provide one with information about their past. If so, then a mental state without this property could be excluded from categorization as an experiential memory for a principled reason.⁴ But this does not settle the matter. In some cases, an instance of a kind can fail to perform its function yet still be an instance of the kind: A broken-down car is certainly still a car, even though cars are surely identified at least in part by the function which they ordinarily serve. So it looks like the question whether John's experiences should be considered non-paradigmatic memories, or whether they should not be considered memories at all, might be a substantive one which can be meaningfully debated. But it is not a substantive question which I will seek to answer. When I turn to assessing whether it is possible to have episodic memories during dreams, it will be the Modified-Epistemic-Relevance-Condition which plays a role. The reason for this will become clear at the beginning of the next section. For convenience, I will from here on refer to the Modified-Epistemic-Relevance-Condition as 'MERC'.

A clarification is due here. The major difference between MERC and the original Epistemic-Relevance-Condition is obviously that MERC applies only to paradigmatic experiential memories. But there is another, less obvious one. The term, 'instance of remembering', in the original Epistemic-Relevance-Condition is replaced with 'instance of experiential memory' in MERC. It is not clear to me why this amendment is made in the way that it is. Although Martin & Deutscher were concerned with memories of various kinds, Debus's discussion in general, including with respect to the original version of the Epistemic-Relevance-Condition, is about experiential memories, as will be apparent from this summary (and see Debus (2010, p. 27, endnote 20) where she is explicit about this with respect to the original version of the condition in particular). So the restriction to experiential memories could probably have been included in the original version of the Epistemic-Relevance-Condition

⁴ Thanks to a reviewer for this.

(though perhaps it is implied by the words, ‘[i]n order for an *experience* to count as an instance of remembering’ (my emphasis), in the original version anyway).

The restriction to experiential memories in MERC (and, perhaps, in the original version of the condition) is relevant to the fact that Debus does not make a claim about sufficiency parallel to the claim which Martin & Deutscher made. That is, it is relevant to why she does not claim that Martin & Deutscher’s three conditions plus a condition about epistemic relevance are jointly sufficient for a mental state to be a paradigmatic experiential memory (or, perhaps, an experiential memory at all). A list of jointly sufficient conditions would need to include at least one more condition in order to exclude other kinds of memories which are not experiential, e.g., that the mental state is phenomenally conscious.⁵ (Debus indicates in an endnote that a condition about epistemic relevance may also be necessary for factual memories, but does not seek to elaborate the point (p. 27, endnote 20). Presumably, Martin & Deutscher’s three conditions plus a condition about epistemic relevance would also need to be supplemented by one or more other conditions about the nature of the mental state involved in that context too, in order to exclude, e.g., experiential memories.)

And now I am going to make a terminological adjustment too, and speak of ‘episodic’ rather than ‘experiential’ memories. Debus uses the broad notion of ‘experiential’ memory because her discussion is intended to include all memories which are consciously experienced, including, for example, memories of people or objects, which one may have encountered on multiple occasions. This is clear from the thought experiment about John, quoted above, who ‘frequently has experiences which present him with *objects* and events which he encountered in the past’ (p. 21, emphasis added). As indicated in the Introduction, I am only concerned with the smaller category of memories of events which one experiences as episodes unfolding across time, and thus use the term, ‘episodic’ memory. I expect that my discussion would extend to memories in the broader category of experiential memory—though maybe not to other kinds of memory, such as factual memory—but I do not explore that here.

To my mind, the insight that (at least) paradigmatic episodic memories (and, indeed, paradigmatic experiential memories more generally) have a certain kind of epistemic relevance for us is a valuable one. I do not purport to speak for any community of philosophers in endorsing MERC. I am also not going to offer any further argument for it. It is one very respectable way of thinking about the relationship between episodic memories and judgments about the past, and certainly one with a great deal of intuitive appeal pre-theoretically. It is as good a point of departure as any other to commence an investigation about memory-like states in dreams. For the purposes of this paper, I am going to assume that MERC is a condition which paradigmatic episodic memories must satisfy.

3 Can Dream Experiences Satisfy the Modified-Episodic-Relevance-Condition?

It might already be apparent why it is MERC, rather than the original version of the Epistemic-Relevance-Condition, which will be at the center of my discussion. There are dreams which incorporate aspects of past experiences and, sometimes, incorporate many elements, so that they might resemble those past experiences closely (Fosse et al. 2003, Schwartz 2003, Malinowski & Horton 2014). The dream in which you have the experience closely corresponding to your daughter’s graduation is certainly possible. And, as I said at the beginning of this paper, we should certainly allow that it is an episodic memory in some sense. One might wish deny that *John’s* experiences are episodic memories in any sense because they do not provide him with information about the past, which is plausibly the purpose or function of episodic memory. However, it would be dogmatic to deny that a dream experience closely

⁵ This is obviously an interpretation of the text, not a speculation about Debus’s own reasons for not making such a claim.

resembling an experience one had in the past is an episodic memory in any sense because it does not serve the purpose or function of episodic memory, rather like denying that the sensory experiences which we have in dreams are instances of sensory imagination on the basis that they do not serve the ordinary purpose or function of sensory imagination. The sensory experiences in dreams may or may not be instances of sensory imagination—that is a matter of dispute; see Windt (2021, sec 2.4–2.6) for an overview—but, if they are not instances of sensory imagination, it is not because they do not serve the purpose or function of sensory imagination, whatever that may be. The mental states which we have in dreams generally do not serve their ordinary purposes or functions. However, there is an interesting question as to whether dream experiences closely resembling previous experiences are episodic memories in as strong a sense as certain mental states which we have during wakefulness are episodic memories. That is, there is an interesting question as to whether dream experiences can be paradigmatic episodic memories. Applying MERC allows us to investigate this. From here on, though, I will largely drop the word, ‘paradigmatic’, from the discussion. When I refer to ‘episodic memories’, I will be referring to ‘paradigmatic episodic memories’, unless there is some indication to the contrary.

So, can experiences in dreams satisfy MERC? I think that there are three issues which arise, each corresponding to particular notions in MERC. The first relates to the notion of *judgment*; the second relates to the notion of *taking into account*; the third relates to the notion of *the past*. Each of the following three subsections explores the issue relating to one of these notions.

3.1 Judgment

Ernest Sosa (2007) conceives of dreaming as a kind of imagining. One aspect of this is that we do not actually make judgments while dreaming; we merely imagine doing so (Sosa actually uses the word, ‘affirmation’ (p. 6), but I take it that this is simply alternative terminology for what I am calling ‘judgment’.) This is in contrast to the standard view, on which dreaming involves hallucinating and, as in the case of waking hallucinations, actually making judgments corresponding to the sensory experiences one is having. One reason Sosa denies that we can actually make judgments in dreams is that it seems implausible that we can form intentions during dreams. For, if we could, then we would have to accept that we can form morally reprehensible intentions when we dream (e.g., the intention to kill someone who appears in a dream)—intentions of a kind which should provoke tremendous guilt, even if being in a dream-state prevents us actually killing anyone. (Sosa is explicitly channeling Augustine’s *Confessions* (1943) here; the example is my own.) But we never feel as if we are morally responsible for what we seemed to intend in a dream and the best explanation is that we did not actually form any intentions—morally reprehensible or otherwise—while dreaming; we merely imagined doing so. After all, merely imagining intending to kill someone is not morally reprehensible. And, if we do not form intentions while dreaming, then it seems highly unlikely that we actually make judgments.

Sosa’s reasoning here may seem a little too quick. Even if we cannot actually intend in dreams but can only imagine doing so, we should not automatically conclude that the same is true of judging. They are, after all, different mental states. This is true; it is not inconceivable that we can merely imagine intending during dreams but that we can actually make judgments. But the argument becomes more forceful if we focus on one particular action which one seems to perform in a dream. If we are convinced that one can only imagine intending to perform an action in a dream, then it would seem odd to hold that one can then actually judge that they are performing that very action in the dream, especially if the imagined intending and the actual judging happen in very quick succession (Ichikawa (2009), summarizing Sosa’s argument). It would involve transitioning from imagining intending to actually judging without there being

anything obvious which would bring about such a transition. So, if we are convinced that we can only imagine intending in a dream, then we can legitimately conclude that the same is true of judging, unless there is a reason not to do so. And none suggests itself.

If we cannot actually make judgments during dreams, and if it is a necessary condition on episodic memory that one is disposed to take an experience into account in making judgments about the past, then there is already good reason to doubt that dream experiences can be episodic memories. There are two reasons one might question this.

First, one might think that it does not matter whether one is disposed to take an experience into account when judging about the past at the time that one is having the experience or *at some later time*. Suppose you have the dream involving the experience closely corresponding to your earlier experience during wakefulness of seeing your daughter graduate from high school. It is only on waking from the dream, however, that you realize that the dream experience closely resembled the experience you had when actually watching your daughter graduate. Moreover, you now settle in your mind something you had been wondering about recently: whether the principal had been wearing a suit or his own academic gown (this is a variant on an example from Debus (2010)). In the dream, he was wearing a suit and, at least partly on the basis of the dream experience, you judge that he was in fact wearing a suit. Would we now want to say that the dream experience was a memory, even if we had not been so inclined before?

This is a weak objection. In all likelihood, it is not the dream experience itself which you have treated as relevant to your judgment about the past, i.e., that the principal was wearing a suit. Rather, you remember the *dream* when you wake and start to think about whether the experience which you are now having as you remember the dream resembles the experience of watching your daughter graduate. And it is this experience of remembering the dream, rather than the dream experience itself, which you treat as relevant when making the judgment about the past.

Second, one might think that, even if one cannot take a dream experience into account when judging about the past (while still dreaming), because one cannot actually make judgments of any kind while dreaming, it is possible to do something near enough. Jonathan Ichikawa (2008) has suggested that, even if we cannot judge during dreams, we can quasi-judge. (Like Sosa, Ichikawa actually uses ‘affirm’ and, correspondingly, ‘quasi-affirm’. I will substitute ‘judge’ and ‘quasi-judge’ when quoting him. Again, I take the terms to be synonymous, and this will allow consistency with Debus’s terminology). Ichikawa writes:

We do not come to believe the contents of our dreams when we dream, so we do not [judge] our dream events while dreaming. But we do engage in another activity that is in some ways similar to [judgment]: we come to imagine. I shall call this activity ‘quasi-[judgment]’. Quasi-[judgment] is not [judgment], but it is in many ways similar to [judgment], just as [propositional] imagination is in many ways similar to belief. From an internal point of view, for the dreamer quasi-[judgment] is importantly like [judgment] and indistinguishable from it. (p. 523)

Even if one cannot take dream experiences into account when judging about the past (while still dreaming), because one cannot actually make judgments of any kind while dreaming, might it not be enough if one takes a dream experience into account when quasi-judging about the past?

The answer is no. First, it is not really clear what Ichikawa is referring to when he says that there are ‘many ways’ that quasi-judgment and judgment are similar and ‘many ways’ that imagination and belief are similar. He mentions only the phenomenological similarity between judgment and quasi-judgment. I think it is doubtful that quasi-judging can be anything other than imagining that one is judging, albeit in a context where one does not realise that they are imagining. There simply does not seem to be any conceptual space between making a judgment

and not making a judgment which quasi-judging could occupy. And, if quasi-judging is just imagining judging, then one gets no closer to the result that a dream experience can satisfy MERC by arguing that we can quasi-judge about the past during dreams.

But let us assume that quasi-judging is a distinct mental state. What follows? At most, presumably, that a dream experience which one takes into account when quasi-judging about the past (while still dreaming) is some kind of *quasi*-memory (I use this term intending no allusion to Shoemaker's (1970) quite different notion of quasi-memory; the term is just a natural parallel to 'quasi-judge'). For it would still not be the case that one takes the dream experience into account in actually judging about the past, as one does with a paradigmatic episodic memory. And that is my question: whether dream experiences can be paradigmatic episodic memories. If one can take a dream experience into account while quasi-judging about the past (while still dreaming), that would be very interesting. Such a dream experience might be an episodic memory in a stronger sense than a dream experience which resembles a past experience but which one does not relate to the past at all. But it would still not be a paradigmatic episodic memory.

It is open to debate whether Sosa is right that we cannot form judgments, and that we can only imagine doing so, in dreams. If he is right, then it is not possible to make judgments about the past during dreams, so MERC cannot be satisfied by a dream experience. But what if he is wrong? For the purposes of the next two subsections, I am going to take it for granted that we can actually make judgments in dreams so that we can investigate the other reasons that we should hesitate to say that MERC can be satisfied by a dream experience.⁶

3.2 Being Disposed to Take into Account

What is required to *take an experience into account* when judging about the past and, whatever it involves, is it possible during a dream? Strictly speaking, on the terms of MERC, it is not necessary that one actually does take an experience into account when judging about the past; it is sufficient that they are disposed to do so. And, in principle, one could have a disposition to take a particular experience into account when judging about the past yet not do so, even if the experience is directly relevant to the judgment. This is so especially if having a very weak disposition is sufficient to satisfy MERC.

Suppose, for example, that someone has a recurrent imagistic experience which they previously took to be a memory of a childhood event. Suppose also that they now know that the supposed childhood event did not happen; they have received very strong evidence to this effect, perhaps in the form of consistent and independent testimony from several people who are in a position to know (e.g., parents and other relatives). If the imagistic experience continues to recur, the individual would no longer take it into account in making judgments about the past, because of a very strong disposition to accept the powerful evidence that the event represented did not occur. Yet they might retain some very weak disposition to take the event into account in making such judgments—indeed, they would take it into account if they forgot about the defeating evidence—but simply never again come close to doing so.

But it will not be very interesting if we can have a disposition to take an experience into account when judging about the past during a dream if we never actually do so. What Debus means by 'being disposed to take [an] experience into account when judging about the past' is presumably that one actually will take the experience into account if they are making a

⁶ I am actually inclined to agree with Sosa, and I offer an argument in Gregory (manuscript) for the view that we do not form new beliefs in dreams but only imagine that certain propositions are true, a position which is closely related to Sosa's position that we only imagine making judgments in dreams. See also Ichikawa (2009, 2016) and (Walton 1990, chapter 1.6). From here, I am simply exploring what follows if one thinks that we can make judgments in dreams.

judgment about the past, or at least that it is extremely likely that they will do so.⁷ So, can someone have the relevant disposition in a non-lucid dream, when it is understood in this robust way?

I think that this cannot be settled conclusively but that there is a strong reason to doubt that it is possible. Taking an experience *into account* when judging about the past seems to imply treating the experience as evidence. In the present context, it would involve taking the experience as evidence that a particular event happened in one's personal past. One might cease to treat an experience as evidence of this kind if, for example, they learn from others that the experience is not a reliable indicator (see the example two paragraphs above). But, for as long as someone takes the experience into account when judging about the past, they treat it as evidence to be evaluated.

The difficulty is that, in non-lucid dreams, our rationality is profoundly compromised. It is compromised in many ways but, most relevantly, our ability to take relevant considerations into account when making judgments is radically diminished. If I have a dream in which I have a sensory experience as of being hosted by King Charles III for morning tea at Buckingham Palace, I will likely form the belief that I am being hosted by King Charles III for morning tea at Buckingham Palace—but this is really only possible if I do not take into account my background belief that I am currently nowhere near London. I can also have a dream in which it seems that I am being attacked by a tiger yet believe that I am entirely safe; this is only possible if I do not take into account aspects of my sensory experience which should be obvious indicators that I am not safe, e.g., seeming to see blood pouring from wounds on my body. It would not be surprising to hear someone claim that they had a dream in which they had visual experiences yet believed they were blind; this would require failing to take into account very many obvious considerations. When one reflects on it, it is quite extraordinary just how much relevant evidence we can disregard when we make judgments during dreams.

It is important to note that the issue here is not about bizarreness (on this issue, see Rosen (2018) and references therein). None of the examples above is bizarre: Being hosted by King Charles III for morning tea at Buckingham Palace and being attacked by a tiger are uncommon experiences but they are not bizarre; they are not experiences which are strange in their nature. And everyone who is not blind has visual experiences. The issue is that, in each case, the dreamer demonstrates extreme irrationality, specifically on account of their failure to take relevant information into account in making judgments.

Now, it is *possible* that, even in such a state, one can be disposed in the relevant sense to take a particular dream experience into account when they are (within the context of the dream) making a related judgment about the past—but it seems very improbable. For, again, one will only have the relevant disposition if they really would take the experience into account or if it is at least extremely likely that they would do so. Even if someone did, as a matter of fact, take a dream experience into account when they were (within the context of the dream) making a related judgment about the past, it seems very doubtful that this is something that they were disposed to do, where having such a disposition requires that there was at least extreme likelihood that they would take the experience into account in this way. If one is in a state of radically compromised rationality, it is surely *unlikely* that they will take relevant evidence into account when making a judgment, even if it eventually transpires that they do so. It is not something that they would *tend* to do.

When it is analysed, the requirement of 'being disposed to take into account' is more demanding than it might initially seem. In the present context, 'being disposed' entails something like a reliable or predictable tendency. 'Taking into account' requires a degree of

⁷ There is, of course, a significant philosophical literature on the nature of dispositions. Debus does not go into this, and nor will I.

rationality, where this involves evaluating relevant evidence in forming beliefs. A reliable or predictable tendency to evaluate relevant evidence when forming beliefs is hardly characteristic of dreaming.

One possible objection should be dealt with here. It might be thought that, even if we are irrational in many ways during dreams, we remain rational in the most relevant way. Specifically, we continue making judgments which are appropriate to the sensory experiences which we are having during the dream. If, in a dream, you seem to see a gazelle standing in front of you, there is a good chance that you will judge that there is a gazelle standing in front of you. In fact, one might think that this happens automatically; that we cannot avoid making judgments appropriate to our sensory experiences in dreams. If so, it may be that we automatically make appropriate judgments about the past when we have sensory experiences during dreams which closely resemble past experiences which we actually had.

But the premise here has already been shown to be false. We are quite capable of making judgments in dreams which are inappropriate to the sensory experiences we are having. This happens in each of the examples given above: the dream involving King Charles III; the dream involving being attacked by a tiger; and the dream involving being blind. In fact, if you do not live anywhere near an area where gazelles are usually found, then forming the belief that there is a gazelle standing in front of you, even if this seems to be the case in a dream, might also be irrational, for the same reason that forming the belief that King Charles III is hosting you for morning tea in Buckingham Palace is irrational, if you are nowhere near London. It seems extremely unlikely that we would tend to form judgments appropriate to dream experiences closely resembling experiences which we have actually had in the past if we do not tend to form judgments appropriate to dream experiences in which it seems that events are taking place in the present.⁸

3.3 The Past

If someone says that they had a dream in which they remembered something which had actually happened in the past, what exactly would they mean? On the face of it, there are two ways of interpreting the claim. On one of the interpretations, the question of whether the individual's seeming to remember something during the dream satisfies MERC is moot. On the other, it is at least a reasonable position that they have not made a judgment about the past at all.

Here are the two possible interpretations:

1. The individual might mean that they had a dream in which they remembered an event which actually happened during wakefulness, in contrast to the dream which they knew they were having at the time. That is, they knew they were dreaming and they took the experience to be a representation of something which happened at an earlier time when they were awake.
2. The individual might mean that they had a dream in which they remembered an event which actually happened during wakefulness, but without realizing that they were now not awake but dreaming. That is, they thought they were awake and they thought they were remembering another event which occurred earlier in their waking life.

⁸ It may be more likely that one would be disposed to take a dream experience into account in the relevant way if the dream experience involved autooetic consciousness, i.e., 'the feeling of truly re-experiencing or reliving a past event' (Malinowski & Horton 2014, p. 1). Are there dream experiences involving autooetic consciousness? Malinowski & Horton (2014) detected it in one dream out of 186. Given the challenges involved in dream research and its reliance on dream reports, this is, I submit, not sufficient to conclude that there really are such experiences. I will set aside the question of whether dreams involving autooetic consciousness might create complications for what I have said in this section, on the basis that they are extremely uncommon—if they occur at all. At most, they would make for some very rare exceptions to what I have claimed, though that would itself require some investigation.

Let us analyze these in turn. Regarding the first case: If someone realizes that they are dreaming and, within this context, remembers a previous wakeful experience and correctly takes it to have been a wakeful experience, they are having a lucid dream. Their experience is thus outside the scope of this paper. This is not an evasion: Excluding lucid dreams from the discussion is not arbitrary. Again, there need not be any particular controversy as to whether MERC can be satisfied during lucid dreams. It can. But this is not surprising. The more interesting—and difficult—question, being investigated here, is whether MERC can be satisfied during non-lucid dreams.

Regarding the second case: Reasonable minds might differ here, but I think there is good reason to doubt that MERC would be satisfied. During the dream, the individual judged⁹ 1) that they were awake; and 2) that the event they were remembering happened earlier during their waking life. They were mistaken in judging that they were currently awake. But this was not the extent of their error. To show why, I first need to introduce a notion which I will call ‘continuity’.

For present purposes, I will say that a wakeful experience which an individual has is continuous with any other wakeful experience which they have, and a dream experience which they have is continuous with any other dream experience which they have. Wakeful experiences and dream experiences, however, are discontinuous. To say that wakeful experiences are continuous, as I am using the term here, is *not* to say that they form part of a series which is temporally unbroken. The series of wakeful experiences which each individual has is temporally broken every time they go to sleep (*mutatis mutandis* for dream experiences). As I am using the term, all of our wakeful experiences are continuous in the sense of being experiences of the same kind. They are all wakeful experiences, as opposed to dream experiences.

Now, let us return to the dreamer who judged, during a dream, 1) that they were awake; and 2) that they were remembering an event which happened earlier during their waking life. The second error which the individual made, in addition to judging that they were awake, is as follows. Insofar as they took the previous experience (the one they took themselves to be remembering) to have happened earlier in a series of wakeful experiences continuous with the experience which they were having while dreaming, they took the previous experience to have occurred earlier in a series of experiences which simply does not exist. For there was no series of wakeful experiences continuous with the wakeful experience which they were now having—simply because they were not actually having a wakeful experience when they were dreaming. The past which they took to be continuous with their present simply does not exist.

The point here is perhaps abstruse but I think it is important. A very loose analogy might assist. A Boltzmann Brain—a brain exactly like the brain of an adult human but which emerged spontaneously due to fluctuations in a void—would seem to remember certain things happening in its past. It would be wrong, because those things did not actually happen. But it would also be wrong for a second reason: It does not actually have a personal past. It did not exist before it formed instantaneously, complete with false memories. There was no series of experiences continuous with (i.e., of the same kind as) the experiences which it is now having (in fact, there was no series of past experiences at all). If a non-lucid dreamer takes themselves to remember something happening in a past which is, as it were, continuous with the present they are now experiencing, they are wrong in a way which is similar to the second way that the Boltzmann Brain would be wrong. There is no series of experiences continuous (in the relevant sense) with their present experience.

⁹ Again, as indicated at the end of section 3.1, for the purposes of this discussion, I am assuming that we can actually make judgments in dreams, and not merely imagine doing so.

There is a lot here which is contentious. One might ask, for example, why we should think that we can only remember experiences which are, in the relevant sense, continuous with experiences which we are having presently. After all, we can remember dreams when we are awake, even though there is discontinuity between the dream experience and the wakeful experience.¹⁰ I think there is an important difference here, arising from the fact that someone who recalls a dream during wakefulness is aware of the discontinuity. The situation of someone who is awake and who realizes that they are recalling a dream experience is akin to the situation of the lucid dreamer recalling a wakeful experience. In both cases, the individual is remembering experiences which they really had, in a past which does exist, albeit experiences which are discontinuous with their current experience. It is different from the situation of the non-lucid dreamer who purports to remember a wakeful experience which is continuous with their present experience, because there simply are no previous wakeful experiences which are continuous with their present dream experience. The matter will become more complicated still regarding those cases when one is not sure if they are remembering a dream experience or a wakeful experience. The issues are subtle and, as I said, I think reasonable minds can differ. What is relevant for present purposes, though, is that it is a reasonable position that the dreamer who purports to remember an experience is not remembering the past at all, because the past they take themselves to remember simply does not exist.¹¹

4 Conclusion

So, can MERC be satisfied during a dream? Perhaps, but there is good reason to be skeptical. An affirmative answer to the question will only be possible if 1) contrary to Sosa's conclusion, we really can make judgments in dreams; 2) we are considerably more rational when making judgments about the past during dreams than we are when making other kinds of judgments during dreams; and 3) there is a respectable sense in which one can make judgments about *the past* during dreams. It is certainly possible that all three of these obstacles can be cleared, but no one would bet on it.

One final remark. I have relied heavily in this paper on Debus's MERC. But, as the contributions to this volume demonstrate, there are very many ways of conceiving of memory. If one denies that anything in the vicinity of MERC is a condition on episodic memory, then they will presumably take much of the above to be irrelevant to the question of whether it is possible to have episodic memories during non-lucid dreams, but some of it might not easily be set aside. The matter of how appropriately a dreamer, qua dreamer, can be said to have memories of a past at all will presumably warrant some attention, on almost any approach to the question.

Is it possible to have episodic memories during non-lucid dreams? If a theory of memory must incorporate anything like Debus's MERC, then probably not. It is not impossible, but it is only possible if much of the above is wrong.

¹⁰ Thanks to a referee for this.

¹¹ A referee suggests that there may be a third way to interpret someone's claim that they had a dream in which they remembered something which had actually happened in the past. This is that, while dreaming, the individual took the dream experience to be an experience of an event currently taking place and realised after waking that the experience resembled an experience which they had previously had. I am not sure if this is a natural interpretation of the claim, but it is not necessary to decide that. Interpreted in this third way, the case would be the same as the one considered in responding to the first possible objection reviewed in section 3.1. Even if one settled some question they had been pondering with reference to the dream experience—e.g., whether the school principal had been wearing a suit or his own academic gown—it seems like it would now be the experience of remembering the dream, rather than the dream experience itself, which they take into account in judging about their actual, personal past. So, this interpretation still would not provide a reason to think that dream experiences themselves can inform judgments about the past.

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