Selfless Memories

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Abstract

Many authors claim that being conscious constitutively involves being self-conscious, or conscious *of oneself*. This claim appears to be threatened by reports of 'selfless' episodes, or conscious episodes lacking self-consciousness, recently described in a number of pathological and nonpathological conditions. However, the credibility of these reports has in turn been challenged on the following grounds: remembering and reporting a past conscious episode as an episode that one went through is only possible if one was conscious *of oneself* while undergoing it. Call this the Memory Challenge. This paper argues that the Memory Challenge fails to undermine the credibility to reports of selfless episodes, because it rests on problematic assumptions about episodic memory. The paper further argues that we should distinguish between several kinds of self-representation that may be involved in the process of episodic remembering, and that once we do so, it is no longer mysterious how one could accurately remember and report a selfless episode as an episode that one went through. Thus, we should take reports of this kind seriously, and view them as credible counter-examples to the claim that consciousness constitutively involves self-consciousness.

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1. Introduction

Self-consciousness is a central feature of conscious experience. But is it *constitutive* of all conscious experiences? Is it impossible to be conscious without being self-conscious in any way? A number of authors answer these questions in the affirmative (e.g., Damasio, 1999; Duncan, 2019; Gallagher, 2010; Zahavi, 1999, 2005, 2014). On their view, whenever a subject is conscious, she is thereby self-conscious (or conscious of herself) in some way. Let us call this view the Ubiquity Thesis.[1] A number of conditions have been characterized as potential counter-examples to the Ubiquity Thesis, on the ground that they may involve *selfless conscious states*.[2] These are not meant to be conscious states lacking a *subject*, for any experience has a subject of experience; rather, they are conscious states lacking *self-consciousness* – that is, conscious states whose subject is not conscious of herself in any way.[3] Such conditions include, among others, severe depersonalization disorder (Billon, 2017a), the Cotard syndrome (Billon, 2016; Gennaro, 2020), some drug-induced states (Letheby, 2020; Letheby and Gerrans, 2017; Millière, 2017), some meditation-induced states (Metzinger, 2020; Millière et al., 2018), and – more speculatively – conscious episodes in dreamless sleep (Thompson, 2015; Windt, 2015; Windt et al., 2016). Some authors have also argued that there are ordinary, non-pathological conditions in which human subjects (and non-human animals) might have conscious experiences lacking self-consciousness (e.g., Peacocke, 2014; Schellenberg, 2016).

In order to argue that these are counter-examples to the Ubiquity Thesis, one must provide convincing evidence that subjects in these conditions are not self-conscious, which is typically found in retrospective first-person reports. However, the reliance of critics of the Ubiquity Thesis on retrospective reports raises its own challenge: to what extent can such reports be taken to provide reliable evidence that reporting subjects did experience selfless conscious states? If this challenge cannot be met, the empirical argument against the Ubiquity Thesis is deemed to fail. The most common version of this challenge builds upon the idea that retrospective reports of allegedly selfless conscious states must be grounded in episodic memories of the relevant states. If one can remember and report a conscious episode as one that one has undergone – the objection goes – this episode must have involved some form of self-consciousness. Let us call this the Memory Challenge to critics of the Ubiquity Thesis.

In this article, we take a closer look at the Memory Challenge, and argue that it does not stand up to scrutiny – and consequently does not threaten the empirical line of objection to the Ubiquity Thesis. First, we discuss the place of episodic remembering within

[1] Some authors use the term "self-consciousness" to refer to the subject's consciousness *of her ongoing experience*, rather than *of herself* (e.g., Kriegel, 2009). We are only concerned with the second notion of self-consciousness here.

[2] See Millière and Metzinger (2020) and Millière (2020) for a review.

[3] See Peacocke (2014) for a theoretical defense of the claim that subjects can be conscious without being self-conscious (what he calls 'Degree 0' of self-representation).

the standard taxonomy of memory, and outline the view of episodic memory that our argument builds upon (§2). After clarifying the Memory Challenge (§3), we discuss the role of the first-person pronoun in reports of selfless episodes (§4). We then distinguish between different forms of self-representation that can come into play during episodic recall, and argue that this distinction undermines the core assumption of the Memory Challenge (§5). Finally, we present a revised version of the challenge that takes the aforementioned distinction into account, and argue that it does not fare any better at undermining the plausibility of reports of selfless episodes (§6). Thus, we should take such reports seriously, at least in good reporting conditions, and view them as posing a credible challenge to the Ubiquity Thesis.

2. Preliminary clarifications

2.1 The standard taxonomy of memory

Before delving further into the formulation of the Memory Challenge, it is useful to clarify the definition of the kinds of memory distinguished in the taxonomy generally adopted in the recent literature (e.g., Squire, 2009). At the most general level, one can trace a broad distinction between *declarative* and *non-declarative* forms of memory. A memory is declarative if and only if it is easy to consciously access and verbally report for a linguistically competent person. By contrast, a memory is non-declarative if and only if it is difficult or impossible to consciously access and verbally report.

Declarative memory can be further divided into two subcategories: *semantic* and *episodic* memory (Tulving, 1972). To a first approximation, semantic memory refers to the memory of states of affairs normally expressed by propositions, such as remembering *that Berlin is the capital of Germany*. By contrast, episodic memory refers to the memory of specific episodes from one's own past – experiences that one has lived through. The exact criteria used for demarcation between semantic and episodic memory are debated.[4] A common suggestion is that episodic remembering differs from semantic remembering insofar as it comes with a distinctive phenomenology (Tulving, 1983, 1985, 2002b). For example, it has been argued that episodic remembering involves a 'feeling of pastness' (Dokic, 2001; Russell, 1921/1995). By contrast, recalling a state of affairs – even one that involves an event from one's own past – would lack such phenomenology. The details of the distinction between episodic and semantic memory need not detain us for now; in what follows, we will focus on the former kind of memory, and endorse

[4] In Endel Tulving's early work, episodic memory was said to convey information about *what* happened, *where* it happened, and *when* it happened – by opposition with semantic memory (Tulving, 1972). However, semantic memory can and often does also convey such information. For example, the memory of the fact that France won the 2018 FIFA World Cup in Russia appears to satisfy the *what*, *where*, *when* criterion. Consequently, many authors (including Tulving himself) have sought to find alternative criteria for the distinction.

the broad assumption that episodic remembering involves a distinctive phenomenology that semantic remembering lacks.

Finally, a third notion often discussed as a form of declarative memory is *autobiographical* memory. Unfortunately, there is no consensus on how to define this category, beyond the general idea that autobiographical memories are memories *about oneself*. Some authors stipulate that all autobiographical memories are episodic (e.g., Bermúdez, 2017). However, it seems more appropriate to think of autobiographical memory as including the subsets of both episodic and semantic memories that are about oneself (Conway, 2005). Indeed, semantic memories may include general knowledge about oneself – such as knowledge of one's name, date of birth, and physical or character traits – which seems just as deserving of the attribute 'autobiographical' as memories of one's past experiences.

2.2 Episodic memory as scenario construction

There are two main accounts of episodic memory. According to the 'archival' view, episodic memory is fundamentally a preservative process that consists in encoding a particular event into a discrete representation stored in a memory trace, and retrieving information about the event from that memory trace. On this view, the content of the representation retrieved from a memory trace does not normally differ from the content of the original representation of the corresponding past event.

In recent years, the archival view has come under pressure from empirical work about the prevalence of false memories and memory errors both in everyday life and after exceptional events (e.g. Gallo, 2010; Lacy & Stark, 2013; Scully et al., 2017; Wagoner, 2017). Such errors seem too pervasive and consistent to be considered mere malfunctions of an otherwise preservative process. This observation has led many researchers to propose an alternative view of episodic memory. On the 'constructive' view, episodic memory is an active process that does not merely preserve the original representation of an event, but involves a generative component that bears some similarity to imagination (De Brigard, 2014; Hassabis & Maguire, 2007; Michaelian, 2011, 2016; Schacter & Addis, 2007; Sutton, 1998).

Importantly, memory errors include not only *confabulation*, or wholly inaccurate memories, but also *misremembering*, or partially inaccurate memories (Robins, 2016). Cases of misremembering, in which the content of the original episode is only partially preserved, are challenging for both purely archival views (according to which the content of the memory is entirely inherited from that of the original episode) and for purely constructive views (according to which the content of the memory is entirely constructed). Consequently, most current theories of episodic memory are neither purely archival nor purely constructive, but somewhere in between. These 'hybrid' views retain the archival commitment to the retention of some information about the original episode in a discrete memory trace, as well as the constructive commitment to a modification or enrichment

of that information during the process of retrieval. For example, there is increasing evidence suggesting that episodic retrieval is a form of scenario construction initiated by a triggering cue; this cue activates not only a discrete memory trace containing the sparse gist of a past episode, but also semantic information associated with (or relevant to) the cue and activated gist (Cheng et al., 2016; Cheng and Werning, 2016).[5]

In what follows, we adopt a hybrid view of episodic memory broadly inspired from this scenario construction framework, without further commitment to a specific version of it. On this view, the episodic memory trace is normally integrated with relevant semantic information to enrich the gist into a full scenario that is experienced as an instance of episodic memory recall. The content of this constructed scenario is what one can report on, and it can further interact with self-related beliefs, especially if it is particularly relevant for the self. This fairly uncontroversial and empirically-grounded model of episodic memory is well-suited to accommodate cases of accurate memory, misremembering, and confabulation.

Thus, there are three central stages in the process that leads from a triggering cue to the report of an episodic memory (see Figure 1):

1. The gist of a past episode is retrieved from a memory trace.

2. This gist is enriched with semantic information to construct a scenario experienced by the subject.

3. The subject reports on the content of the experienced scenario.

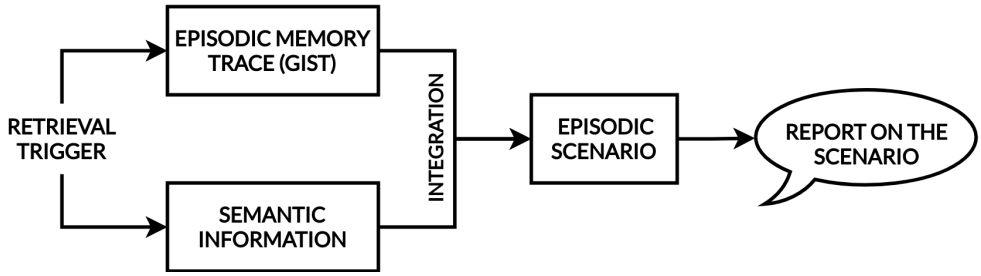

Figure 1: The Scenario Construction Framework.

This framework raises the following question about the relationship between episodic memory recall and self-representation: When one recalls and reports an episodic memory, does (a) the gist, (b) the constructed scenario, and/or (c) the judgment expressed in

[5] In this context, a constructed scenario is the representation of an event (or sequence of events) extending in both space and time, that may contain information about participants, settings, and interactions, and may involve various sensory modalities (e.g., visual and auditory elements).

the report always involve a form of self-representation? We will argue that while both mnemonic judgments expressed in reports of episodic memories and the constructed scenarios reported upon typically do involve *de se* content, this does not entail that the gist retrieved from the corresponding memory traces must also involve such content. Furthermore, there is no inconsistency in the claim that a subject could undergo a conscious episode during which she is not self-conscious in any way, encode the gist of that episode in an episodic memory trace lacking *de se* content, and later recall the episode as one she *herself* has lived through. Once we acknowledge the various ways in which self-representation can be involved in episodic remembering, the Memory Challenge loses its appeal as threat to the empirical line of argument against the Ubiquity Thesis.

It is worth noting from the outset that our argument is not only consistent with hybrid views of episodic memory, but also with purely constructive views such as simulationism, according to which episodic remembering need not draw on discrete memory traces originating in past experiences (Michaelian, 2016). Indeed, our core commitment is to 'content variantism', the widely accepted claim that the content of representations retrieved or constructed in the process of episodic remembering may diverge from the content of the representations they originate in (Brigard, 2014). Both hybrid and purely constructive views endorse content variantism, unlike purely archival views. We will defend a specific kind of content variantism, according to which an episodic memory may involve self-representation even if the episode it originates in did not.

3. Framing the challenge

Before we turn to our positive argument, we need to clarify the core assumptions of the Memory Challenge. The challenge has a long history in philosophy. An early version can arguably be found in the works of the Buddhist philosophers Dignāga and Dharmakīrti (6th century CE). They argue that a subject would not be able to accurately store and retrieve a memory of a past episode if she was not self-conscious at the time when she underwent the relevant episode. Specifically, they claim that when one remembers an object, one does not merely remember the object itself, but one also remembers perceiving the object – and indeed, that one *oneself* perceived the object (see Kriegel, 2019; Thompson, 2010, p. 161).

In recent years, the Memory Challenge has been articulated more precisely as a methodological worry regarding the trustworthiness of retrospective reports of allegedly selfless conscious states. Indeed, a number of authors have argued that if one can remember and report a conscious episode as an episode that one *oneself* has previous lived through, then one must have been conscious *of oneself* – or conscious of the episode *as one's own* – at the time when one lived through it (e.g., Metzinger, 2003, p. 566; 2018, p. 12; 2020, p. 15; Gamma and Metzinger, 2021, p. 36; Gennaro, 2008, p. 13; Prebble et al., 2013, pp. 5-8; Fink, 2020, p. 19). Thus, Thomas Metzinger argues that reporting an episodic

memory of a selfless conscious state involves a form of performative contradiction:

> Autophenomenological reports given by human beings about selfless states [...] will typically not impress philosophers much, because they contain an inherent logical fallacy: How can you coherently report about a selfless state of consciousness from your *own*, autobiographical memory? How could this episode ever constitute an element of your *own* mental life? Such reports generate a performative self-contradiction, because you deny something that is presupposed by what you are currently doing. (Metzinger, 2003, p. 566)

It is not immediately clear how reports of selfless conscious states might resemble performative contradictions such as 'I do not exist'. As we noted in the introduction, the phrase 'selfless state' is a bit ambiguous: it might suggest, *per impossibile*, that the relevant states lack a subject of experience. But if these states are conscious, they are undergone by a subject – the very same subject who later reports the episode. Retrospective reports of selfless conscious states imply neither that this subject does not exist at the time of the report, nor that she did not exist at the time when the reported episode was undergone. They merely imply that the subject was not conscious of herself during the reported episode.

In what sense, then, could reports of selfless states involve a performative contradiction? The Memory Challenge appears to be premised upon the following *Self-Consciousness Hypothesis* (SCH):

(SCH) If a subject S undergoes a conscious experience E at time t_1, then, at time t_2 (where $t_2 > t_1$), S can only accurately recall and report E as an experience that she *herself* has undergone if S was self-conscious at t_1.

Given that reports of selfless conscious states describe the recollected experiences as *lacking* any form of self-consciousness, this entails that these reports (and the associated episodic memories, if they match the reports) cannot be accurate: by hypothesis, if the relevant experiences really lacked any form of self-consciousness, they could not be accurately recalled and reported. One can see how endorsing (SCH) does give reports of selfless states an air of performative contradiction: the very ability to recall and report such experiences as experiences that one has undergone contradicts the content of the reports, which describe them as lacking self-consciousness. Given (SCH), there are two ways to make sense of the relevant reports: either the reporting subjects do recall and report experiences that they really underwent, in which case their reports (and perhaps the associated memories) must be at least partly inaccurate, since such experiences must have involved a form of self-consciousness; or the reports (and perhaps the associated memories) are wholly inaccurate (or confabulatory), insofar as they are not really grounded in past experiences that reporting subjects actually underwent. Either way, we cannot take reports of selfless conscious states at face value.

The Memory Challenge can be spelled out more precisely as follows:

(1) Retrospective reports of selfless conscious states are reports of past conscious experiences that describe such experiences as (a) experiences that the reporting subject underwent in the past and (b) experiences lacking any kind of self-consciousness.

(2) A subject can only accurately recall and report a past conscious experience as an experience that she underwent if she was self-conscious when she underwent it (SCH).

(3) If a subject undergoes a conscious experience lacking any kind of self-consciousness, then she cannot accurately recall and report it at a later time (by 2).

(4) Therefore, retrospective reports of selfless conscious states are partly or wholly inaccurate and cannot be trusted (by 1, 3).

Note that the conclusion of this argument is not inconsistent with the claim that selfless conscious states can and do occur. Rather, (SCH) entails that if such states did exist, they could not be accurately recalled and reported, so we would have no way to know about them through testimony. Given that reports of selfless conscious states are our main source of evidence in favor of the claim that such states do occur, the Memory Challenge calls this claim into question, and with it the empirical line of argument against the Ubiquity Thesis.

Some formulations from proponents of the Memory Challenge may invite a slightly stronger interpretation, according to which a subject cannot store or recall a conscious episode *at all* – not even inaccurately – if she was not self-conscious while she experienced it. On this reading, any retrospective report of a selfless episode must be an instance of full-blown confabulation. By contrast, (SCH) is compatible with the weaker suggestion that a subject may experience a selfless episode, store it in memory, and later recall it, but only *inaccurately*: as an episode during which she was, in fact, self-conscious. On this reading of the challenge, a retrospective report of a selfless episode could be a case of misremembering, rather than a case of full-blown confabulation.[6]

The stronger interpretation is not needed to get the Memory Challenge off the ground: it is sufficient for the Challenge to call into question the accuracy of retrospective reports of selfless states, by suggesting that all such reports are, at a *minimum*, instances of misremembering. Consequently, we will not assume that all proponents of the Challenge are committed to the stronger claim that selfless episodes, if they do exist, could never be stored in memory or recalled (even partially and inaccurately).

Nonetheless, the remainder of this article will target both interpretations of the Memory Challenge. Indeed, we will argue that (SCH), compatible even with the weaker interpretation, is undermotivated. Our argument will be conditional: if selfless conscious

[6]We are grateful to an anonymous referee for prompting us to elaborate on the slightly distinct implications of these two interpretations.

states do occur, then it should be possible – at least in principle – for subjects who underwent such states to recall and report them at a later time as conscious episodes that they *themselves* lived through. Furthermore, given certain additional assumptions, we will suggest that those reports can be taken to be accurate, and therefore should be taken seriously. They need neither be instances of confabulation, nor even instances of misremembering. Thus, we will conclude that the empirical line of argument against the Ubiquity Thesis can survive the Memory Challenge.

4. Interpreting reports of selfless states

Let us take a look at actual examples of retrospective reports that appear to describe experiences lacking self-consciousness. Consider the following excepts from reports of experiences induced by psychoactive compounds and by severe depersonalization disorder:[7]

> At the peak was a total loss of ego. [...] By 'losing my ego' I mean I lost all my memories, who I was, what even is a human, any sense I have or once had a body, the concept of a body was unknown to me. I had no concept of vision or any other senses, I had no idea what was geometry or even causality. I had no idea there could be other conscious beings. I was a totally blank slate of experience. Also, there was no feeling of being located in space. What I mean is the feeling I have of being behind my eyes and being a passenger in my body didn't exist. [...] Everything just was. [...] A void of absolute nothing. A strange indescribable dark void that was everything and one. There was no 'time'. Just 'now', and there was no concept of something being before. It was eternal. (Report #113995, compound: psilocybin)
>
> My ego was nothing, I was nothing. [...] It is a complete annihilation of self [...]. I was absolutely nothing but a sensory perceiver, stuck within the split seconds that were eternity. (Report #18198, compound: 5-MeO-DMT)
>
> I wasn't me any longer. There was no me. There was no ego. (Report #27601, compound: 5-MeO-DMT)
>
> There was literally no more experience of a 'me' at all. The experience of personal identity switched off and was never to appear again [...]. The body, mind, speech, thoughts, and emotions were all empty; they had no ownership, no person behind them. (Simeon and Abugel, 2006, pp. 143–4, cited in Billon, 2017a, p. 750)

[7] All reports of drug-induced states cited in this paper are taken from a curated database of such experiences available online (https://erowid.org/experiences). Each report is identified by a unique number provided in the quotes.

How should we interpret such reports? As we mentioned in the previous section, they are clearly not intended to suggest that the reported experiences literally lack a subject of experience. In phrases such as 'I felt like I'd forgotten that I existed', the first-person pronoun still refers to the subject undergoing the experience. It is important to draw a clear distinction between an experience having (being undergone by) a subject of experience, and an experience being such that its subject is conscious of herself. Experiences are not, as it were, *free-floating*; as Frege puts it, 'there is no experience without a subject of experience' (Frege, 1921/1956, p. 299, translation modified; see also Peacocke, 2014, pp. 40 sq.). This is a conceptual truth that does not involve further commitments regarding the metaphysics of subjects of experience, such as the identification of the subject with a whole organism, a proper part of an organism, a stream of experience, or a moment-to-moment component of each experience. Whatever the subject is taken to be, one has to be able to refer to that which experiences an experience with a pronoun, and when one refers to oneself as the subject of an experience the first-person pronoun is most appropriate.

Referring to oneself as the subject of a past experience with the first-pronoun does not imply that one was *conscious of oneself* in any way while undergoing the experience. It is at least conceptually possible for a subject to undergo an experience without thereby being self-conscious. This is indeed the gist of the conceptual objection to the Ubiquity Thesis, according to which consciousness does not constitutively involve self-consciousness (consciousness *of oneself*) as a matter of conceptual analysis of both notions. Importantly, in the reports quoted above, some instances of the first-pronoun are used *not* to refer to the *subject* of the experience, but to a specific phenomenal feature that is deemed missing in such experiences – namely, consciousness of oneself. Thus, phrases such as 'There was no me' are used to suggest that the subject of these experiences was not self-conscious while undergoing them. Similarly, the term 'self' can be used as shorthand for 'sense of self', such that the phrase 'It is a complete annihilation of self' does not mean that the experience has no subject or that the person undergoing it is physically annihilated.

This ambiguity in the reference of the first-person pronoun in these reports becomes clear if one tries to replace it with a proper noun rigidly denoting the subject of the experience. Suppose that after a session of deep meditation, Mary describes her experience by saying: 'When I was meditating, I was no longer conscious of myself'. This report would be just as intelligible if Mary had the Caesarean habit of speaking of herself in the third-person, and said: 'When Mary was meditating, Mary was no longer conscious of Mary'. But if Mary's first-person report was instead 'When I was meditating, I did not exist', the third-person version would seem particularly odd: 'When Mary was meditating, Mary did not exist'. If Mary was meditating, Mary was there – she lived through that experience. Her report makes more sense if the second instance of the first-person pronoun is intended to refer not to Mary as the *subject* undergoing the meditation experience, but to Mary's *sense of self* (or consciousness of herself) that went missing during

that experience.[8]

While it is important to keep in mind that the first-person pronoun can be used in different ways in reports of selfless conscious states, these uses are not completely independent. Indeed, a subject that lacks any consciousness of herself would presumably no longer be able to refer to herself with the first-person pronoun *while she is in that state*. It is only *retrospectively* that subjects are able to refer to their past selves – to themselves as they underwent the selfless episodes – with the first-person pronoun. Interestingly, some depersonalized patients avoid using the first-person pronoun when they talk about themselves (Billon, 2016, p. 377). Likewise, a number of reports of similar experiences induced by psychoactive compounds use the first-person pronoun with scare quotes, and many explicitly emphasize its inadequacy or even avoid using it altogether:

> For a few moments, I felt like I'd forgotten that I existed. There were various points where I felt like I wasn't really there. When you're sober your senses take in information, and there is a 'you' there to process it. Here, it was like my senses were taking in information but 'I' wasn't there to process it. (Report #108917, compound: 1P-LSD)
>
> There existed no one, not even me... so would it be proper to still speak of 'I', even as the notion of 'I' seemed so palpably illusory? (Report #42740, compound: psilocybin)
>
> I'm going to stop using the pronoun 'I' temporarily, as it seems inappropriate to this part of the trip. [...] It has no self [...]. It has no past; that's dissolved away into the rush of sensation. (Report #102625, compound: O-Acetylpsilocin)

This reluctance to use the first-person pronoun can be explained by the fact that subjects are trying to render what undergoing these experiences is like. Part of what this is like, according to the relevant reports, involves a complete lack of awareness of oneself, and hence the inability to refer to oneself with the first-person pronoun. When subjects are back to their ordinary sense of self, they regain the ability to self-ascribe the experience they have lived through, provided that they can remember it as an experience they have lived through. One can see why using scare quotes around the first-person pronoun, or avoiding it altogether, might be a useful linguistic strategy in a retrospective report to convey the phenomenology of the relevant experiences.

[8] In the same vein, compare the report 'There was no self' to the report 'There was no time', as given by a meditator to describe a past contemplative experience. The latter does not mean that time literally stopped passing during the experience, but rather that the subject stopped *feeling* the passage of time; in that context, 'time' is shorthand for 'sense of time' (or 'sense of the passage of time'). Similarly, the former report does not mean that the subject literally stopped existing during the experience, but rather that she stopped being conscious of herself; in that context, 'self' is shorthand for 'sense of self'.

Consequently, the occurrence of the first-person pronoun in some reports of allegedly selfless conscious states does not entail that the original episode did involve some form of conscious self-representation. Nor does it straightforwardly entail, as we shall see, that the gist of the episode retrieved from the episodic memory trace involves some form of self-representation. Rather, it might merely be a feature of *post hoc* self-ascription: reporting any experience as an experience that one *oneself* has undergone warrants the use of the first-person pronoun, regardless of whether or not one would have been able to self-ascribe the experience while it was unfolding.

5. Self-representation in episodic memory recall

We have argued so far that the (often reluctant) use of the first-person pronoun in retrospective reports of allegedly selfless episodes does not provide evidence that such episodes involved a form of conscious self-representation. We will now consider whether the episodic memories in which the relevant reports are grounded might themselves plausibly be taken to involve some form of self-representation.

5.1 First-order and second-order self-representation

It is widely claimed that episodic memory often or always involves a form of self-representation. This idea can already be found in William James' reflections on memory (although they predate, of course, the distinction between episodic and semantic memory):

> Memory requires more than mere dating of a fact in the past. It must be dated in *my* past. In other words, I must think that I directly experienced its occurrence. It must have that 'warmth and intimacy' [...] characterizing all experiences 'appropriated' by the thinker as his own. (James, 1890, p. 650)

On Tulving's influential account, episodic remembering is characterized by 'autonoetic consciousness' ('autonoesis' for short), which broadly refers to 'the kind of consciousness that mediates an individual's awareness of his or her existence and identity in subjective time extending from the personal past through the present to the personal future' (Tulving, 1985, p. 1). Tulving's notion of autonoesis is complex and somewhat ambiguous. Some definitions of the notion focus on the feeling of mentally traveling through time to 're-experience' an event from one's own past (Tulving, 1993, 2002a, 2002b, 2005), while others associate it with a form of self-awareness characteristic of episodic simulation more generally – including mental time travel to the past (episodic remembering) and to the future (episodic future thinking) (e.g., Rosenbaum et al., 2007; see Perrin, 2016 and Mahr, 2020 for a discussion of this ambiguity). Since our present focus is on episodic memory rather than mental time travel in general, we shall simply

define autonoesis as the awareness of having personally experienced a past episode as one recalls it. So understood, autonoesis clearly involves a form of self-representation, or *de se* content,[9] that binds the recalled episode to one's personal history.

We can further disambiguate the kinds of self-representation or *de se* content that might be associated with episodic remembering. One proposal is that episodic memories are 'self-involving', in so far as they are presented as belonging to one's personal past (Boyle, 2019). Accordingly, when a subject recalls a past episode, she is thereby aware that the episode involves herself. Suppose that you recall giving a lecture a few days ago. You mentally conjure up some of the details of the scene, such as the spatial layout of the lecture hall, the students sitting down, and the title slide on the laptop screen. While recalling such an episode, you are not merely aware that *someone* is giving a lecture; presumably, you are also aware that the person giving the lecture – the person who is standing in front of the laptop screen and at whom students are looking – is *you*.

But there is more: episodic memories also typically come with the sense that the recalled episode is – or originates in – an experience that one oneself had. In other words, episodic memories typically involve a *sense of ownership* over the experience one remembers (Boyle, 2019; Klein & Nichols, 2012).[10] This sense of ownership can be distinguished from the self-involving nature of episodic memories, insofar as being aware that a recalled event involves oneself (as a protagonist or secondary character) and having a feeling that one's memory of the event originates in an experience that one *oneself* had are two different things. In fact, there is plausible evidence that the latter can be empirically dissociated from the former. For example, Klein and Nichols (2012) describe the case of patient R.B., who suffered a traumatic head injury after which he could still accurately recall episodes of his personal past, including his own involvement in the relevant episodes, yet felt as if these memories did not really belong to him.

R.B. is explicit about the fact that he can recall these past episodes in vivid details, and is fully aware that he was involved in the events they represent. Yet it does not *feel* to him like these are events he personally went through: 'when I remember scenes from before the injury, they do not feel as if they happened to me – though intellectually I know that they did – they felt as if they happened to someone else' (*ibid.*, p. 11).

Aside from pathological cases like patient R.B.'s memory disorder, there might be more mundane cases in which one can experience an episodic scenario as self-involving without feeling like one personally went through the corresponding episode. Many early

[9] By "*de se* content", we do not refer in this context to the kind of linguistic content associated with the use of the first-person pronoun, but to the – nonlinguistic and presumably nonconceptual – content of conscious mental states by virtue of which they represent the subject as such (Peacocke, 2015).

[10] Some have argued that ongoing experiences also involve a sense of ownership, such that one normally has a sense that one's experiences are one's own (Billon, 2017b; Zahavi, 2005). The sense of ownership over episodic memories should be distinguished from the putative sense of ownership over the experiences in which these memories originate: the latter is instantiated when the original experience unfolds, while the former is instantiated later on during memory recall.

childhood memories seem to fit this characterization: it is often difficult to determine whether one merely recalls a description of the event given by a third party (e.g. a parent), or whether one actually remembers living through it. The former possibility would be an example of source confusion, in which the constructed scenario is only propped up by semantic information, rather than a gist of the episode retrieved from an episodic memory trace. Suppose, for example, that you remember taking your first steps at twelve months. As you recall that scene, you presumably represent it as involving yourself – you are, indeed, the toddler taking their first steps. But the constructed scenario may not draw upon an actual episodic memory trace, if that scene has been recounted to you by your parents, because you were in fact too young to remember it first-hand. In such a case, you may have a misleading sense that the memory does originate in your personal experience, which does happen quite often for early childhood memories. But you may also lack a sense of ownership over the memory, because you are aware that it was passed on by your parents. This would be an non-pathological example of representing an episodic scenario as involving oneself without representing it as originating in one's own experience.

The idea that episodic remembering normally comes with a sense that one's memories originates in one's own experience is reminiscent of William James' comments about the 'warmth and intimacy' of (episodic) memories. It also resonates with what Dokic (2014) calls the feeling of 'first-handedness' that normally accompanies episodic remembering. When R.B. remembers episodes that predate his traumatic injury, it does not feel to him that he experienced these episodes *first-hand* – although he knows that to be the case. This fits with the suggestion that the sense of ownership is grounded in a 'source monitoring' mechanism whose goal is to determine whether the information conveyed by the memory has been acquired first-hand or second-hand (Boyle, 2019; Mahr & Csibra, 2018; Michaelian, 2016).

The examples of R.B. and early childhood memories suggest that episodic memories need not come with a sense of ownership, even when they are self-involving. On the other hand, it is difficult to see how an episodic memory could be accompanied by a sense of ownership without being thereby self-involving. Indeed, if it feels like an episodic scenario originates in an experience that one had in the past, then that scenario must be represented as involving oneself, if only as a passive observer of the scene. However, there might be examples of episodic memories that are *neither* self-involving *nor* accompanied by a sense of ownership. Consider the following case, adapted from Bermúdez (2017): suppose that several months after watching the final of the 2018 FIFA World Cup on television, a conversation about football brings to mind the image of the French team celebrating on the field. On the basis of that mental image, you form the memory belief that France won the World Cup. When the image pops into your mind, you might not realize that it originates in an episode of your own personal history, namely watching the French team win the World Cup on television; for all you know, you might have been remembering a headline about France's victory, and merely picturing the play-

ers' celebration on the basis of this (semantic) information. Importantly, in such a case, the constructed episodic scenario representing the French team celebrating on the field might not involve a sense that you experienced the scene first-hand (even by watching it on a television screen). Furthermore, it might not even be self-involving, in so far as you are not a character in this scene of celebration. Bermúdez (2017) uses a similar example to argue that episodic memories need not be autobiographical, which seems correct insofar as memories are autobiographical if and only if they are self-involving.[11] More precisely, it suggests that *neither* self-involvement *nor* a sense of ownership are necessary features of episodic memory, although they are both features of most episodic memories in healthy individuals.

The self-involving nature of episodic memories and the sense of ownership over such memories share an important characteristic: they pertain to the relationship between the episodic scenario and the remembering subject, rather than to the intentional content of the scenario *per se*. As such, they are both grounded in a form of metacognition, the monitoring and control of mental processes. More specifically, they are instances of metamemory – the monitoring and control of memory processes (Michaelian, 2016, p. 149-200). Thus, an episodic memory is self-involving if it is represented as involving oneself, as opposed to involving only other agents or objects; likewise, it involves a sense of ownership if it is represented as originating in one's own past experience, as opposed to being generated from another source. One might say, in that respect, that both features pertain the *second-order* content of episodic memories, rather than the first-order content carried over from the gist of the original episode retrieved from the memory trace. There is, however, a third and more basic way in which self-representation may come into play during the process of episodic remembering, namely when the *first-order* content of the recalled episode includes some form of self-representation.

There can be as many varieties of first-order self-representation in episodic remembering as there are varieties of conscious self-representation (or self-consciousness) in ordinary experience. For example, a number of philosophers argue that ordinary experience often or always involves a sense of body ownership, namely a conscious awareness of one's body or body part as one's own (de Vignemont, 2018; Martin, 1995). If a given conscious episode involves a sense of body ownership, and if the subject later recalls the episode in some detail, *including* this sense body ownership, then the relevant memory will thereby involve first-order self-representation.[12] Similarly, many philosophers believe that ordinary visual experience often or always involves a sense of one's location with respect to one's perceived environment (Bermudez, 1998; Schwenkler, 2014). Accordingly, when a subject remembers a visual episode, her memory of the episode is

[11] Since we previously argued – *pace* Bermúdez – that autobiographical memories need not be episodic, this entails that there is a double dissociation between episodic memory and autobiographical memory; both semantic and episodic memories can be autobiographical (or self-involving), or not.

[12] The sense of body ownership that is part of the *first-order* content of the recalled episode should not be confused with the sense of ownership *over the memory itself*.

likely to encompass this sense of self-location, which would be yet another way in which episodic memory may feature first-order self-representation. Generally, for any memory M of a past experience E, if E had *de se* content, and if that content is preserved in M's first-order content, then M has first-order *de se* content.

5.2 Self-representation in scenario construction

We have distinguished between three broad kinds of self-representation or *de se* content in episodic memory: (i) the first-order *de se* content inherited from the original episode (which may come in several varieties), as well as (ii) two kinds of second-order *de se* content pertaining respectively to (a) one's involvement in the event (self-involvement) and (b) one's first-hand ownership of the memory (sense of ownership). This trichotomy fits well within the hybrid view of episodic memory outlined in section 2.2. While the first-order *de se* content of a memory should normally be grounded in the gist of the episode retrieved from the memory trace, both kinds of second-order *de se* content are plausibly added to the constructed scenario through the enrichment of the gist with semantic information.

More specifically, it is plausible that, at least in ordinary circumstances, the process of scenario construction systematically enriches the episodic gist with self-referential information about (a) the subject's involvement in the episode (be it as a protagonist or bystander), and (b) the fact that the subject experienced the episode first-hand. As previously noted, this is a form of 'content variantism', the view that the content of episodic memories may diverge from the content of the episodes they originate in (Brigard, 2014). Without such addition to the (second-order) content of the constructed scenario, it would be difficult to discriminate episodic memories from imaginary scenarios that are not grounded in an episodic gist.

This constructive process may be disrupted in specific conditions, such as in the case of patient R.B. whose pretraumatic memories were not accompanied by a sense of ownership. However, this does not appear to be the case for memories associated with reports of allegedly selfless episodes. Indeed, such reports do not suggest that the relevant memories feel as if they were someone else's, or that the subject did not experience the recalled episode first-hand. Consequently, it is plausible that memories of allegedly selfless episodes, like normal episodic memories, have second-order *de se* content: they are both self-involving and accompanied by a sense of ownership. This explains the subjects' ability to refer to selfless episodes as experiences they have personally lived through.

Importantly, the systematic enrichment of the episodic gist with second-order *de se* content does not have any implication regarding the *de se* content of the original episode, or lack thereof. This observation undermines the *Self-Consciousness Hypothesis* (SCH) at the heart of the Memory Challenge. According to (SCH), a subject can only accurately recall and report a past conscious experience as an experience that she *herself* has undergone if that experience involved a form of conscious self-representation. The distinction

between first-order and second-order self-representation in episodic remembering suggests that this hypothesis is too strong: the episodic scenario having second-order *de se* content does not require the original episode to have *de se* content. A more plausible and weaker hypothesis would be that recalling and reporting a past episode (accurately or not) as an episode that one has undergone only requires the memory of the episode to have second-order *de se* content – regardless of whether the original episode had *de se* content. More specifically, it is plausible that the subject's memory of a given episode must be at least *self-involving* for her to be able to *report* it as an episode of her personal past.[13] Unlike (SCH), this hypothesis does not offer a clear path to the conclusion of the Memory Challenge – namely, that retrospective reports of allegedly selfless episodes are inaccurate and cannot be trusted.

Note that the first-order *de se* content of the constructed scenario need not always be inherited from the episodic gist, but might itself be added at least in some cases. In such cases, the gist would be enriched not only with *second-order* but also with *first-order de se* content. Suppose, for example, that you remember experiencing a muscle twitch in your right leg. You might incorrectly remember this experience as involving a sense of agency over the sensation of muscle contraction in your right leg, such that you remember it as an experience of voluntarily contracting the relevant muscle. The sense of agency is a kind of self-representation, namely a representation of a bodily movement as originating in one's own action. Furthermore, it is part of the first-order content of the memory, namely what the past experience is remembered as being like. This would thus be an example of misremembering an episode in such a way that the gist is incorrectly enriched with first-order *de se* content (in this case, a sense of agency), in addition to second-order *de se* content. If such cases can occur, then the fact that an episodic memory has first-order *de se* content – and is reported as such – cannot always be taken as evidence that the original episode itself has *de se* content.

In any case, reports of allegedly selfless episodes deny that these episodes involved any kind of *de se* content, suggesting that the constructed scenario itself lacks first-order *de se* content. As we emphasized in section 4, the use of the first-person pronoun in some of these reports is perfectly consistent with this interpretation. We can now see why: the use of the first-person pronoun in these reports is grounded in the *second-order de se* content of the episodic memories they describe, in so far as subjects are aware that *they themselves* underwent an episode lacking *de se* content. Thus, a report such as 'I had an experience in which I was not there' is plausibly interpreted as describing an episodic scenario with second-order *de se* content, but no first-order *de se* content (fig. 2).

[13] Depending on how strong of an emphasis one puts on the subject's ability to *recall* the past episode as one she has personally undergone, one might add the additional requirement that the relevant memory must be accompanied by a sense of ownership. Patient R.B. could certainly *report* episodes that predated his injury as episodes that he was involved in. However, one might say that he did not *recall* them as episodes that he lived through, in so far his memories of these episodes felt as if they were someone else's memories.

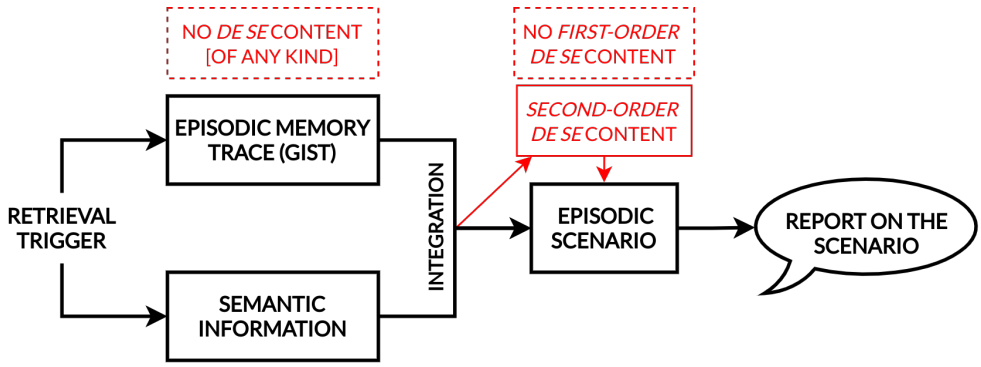

Figure 2: Self-representation in episodic recall of selfless episodes.

There is no reason to think reports of selfless episodes lack credibility simply because they describe an episodic scenario with second-order *de se* content. While such content is added during the process of scenario construction, which does not merely preserve the content of the episodic gist, this holds true of most episodic memories – not just the memories of selfless episodes. The enrichment of the gist with second-order *de se* content is the result of a systematic mechanism that only fails in rare cases, such as R.B.'s post-traumatic memories. Furthermore, unlike other aspects of scenario construction, it does not introduce incorrect information regarding the original episode: if one stored the episodic gist of an event, it is almost always the case that one was involved in that event, and that the gist originates in one's first-hand experience of the event. Consequently, there is no reason to believe that reports of selfless episodes should be particularly inaccurate simply because they describe a scenario involving second-order *de se* content.

6. The revised challenge

The Memory Challenge can be revised in light of the distinction between first-order and second-order *de se* content in episodic recall. The revised challenge would start with the rather plausible claim that recalling and reporting a past episode as an episode that one *oneself* has undergone requires the memory of the episode to have second-order *de se* content (at the very least, self-involving content). It would then introduce the further claim that an episodic memory can only have second-order *de se* content by virtue of having first-order *de se* content. More specifically, one might assume that the constructive process that flags the memory as self-involving and grounded in a past personal experience requires the episodic gist to have first-order *de se* content. Since reports of allegedly selfless episodes deny that such episodes had *de se* content, the corresponding episodic memories should lack first-order *de se* content, although they have second-order *de se* content. One would conclude that these reports must be inaccurate, insofar as the second-

order *de se* content of episodic memories is always grounded in first-order *de se* content.

This revised challenge raises the following question: where do episodic memories of allegedly selfless episodes get their second-order *de se* content from, if not from the first-order *de se* content of the episodic gist? To defend the reliability of these memories (and of the reports that describe them), one ought to give an alternative account of the origin of their second-order *de se* content. Such an account is readily available within hybrid and constructive views of episodic memory. Indeed, on these views, the sense of ownership over episodic memories stems from a source monitoring process that traces the origin of the constructed scenario back to one's personal past, thereby confirming its reliability. The outcome of this source monitoring process does not depend on the presence or absence of first-order *de se* content in the scenario, since such content can also feature in imaginary scenarios that do not originate in a past experience. Rather, the relevant source monitoring process plausibly tracks available information about the cognitive operations that produced the episodic scenario: when an episodic scenario stems from imagination rather than experience, one can typically remember the imaginative process that produced this scenario; by contrast, when an episodic scenario originates in experience, one only remembers the episode itself (see Michaelian, 2016, p. 231)

This source monitoring mechanism presumably involves a further component that plays a significant role in the case of memories of selfless episodes. Indeed, these memories are almost never reported as discrete events chronologically isolated from other episodic memories. Instead, they are integrated within a relatively well-ordered chronology involving a succession of episodes, such that it might even be difficult to individuate particular episodes within the whole sequence. In this chronological ordering, memories of conscious episodes lacking self-consciousness are surrounded by memories of what happened before and after. In fact, many reports explicitly describe the transition phases *into* and *out of* the selfless episode. Consider, for example, the passages that immediately precede and follow the first report of a selfless episode quoted in section 4 (induced by psilocybin):

> I was losing my 'ego' one part at a time. I did not realize this at the time. I was too busy being overwhelmed by the changes that were happening to my conscious experience. I had also lost any ability to record and comment. I had started to lose the concepts of speaking and recording. At the peak was a total loss of ego. It really did sneak up on me. [...]
>
> When I started 'returning' from this state I started having flashbacks in this void of pure consciousness. Objects like memories sensations and thoughts started to appear. [...] Remember I had no clue that [...] I had not always been in this egoless state. [...] I did not know what I was. Was this a dream? [...] I started getting more and more of these flashbacks and the fundamental concepts of the normal world like time and geometry started returning part by part. The horror started to wear off when I got closer to normal and I

> remembered I had done this to myself and this state will pass. And there was a 'me' again. (Report #113995, compound: psilocybin)

Insofar as the gist of the selfless episode is properly integrated with the gists of what precedes and follows it into a coherent narrative during the process of scenario construction, it is hardly surprising that it can be traced back to an experience that the remembering subject *herself* had (and, consequently, to an event that she was involved in). In other words, there is no need for the original conscious episode, or indeed the gist of it encoded in a memory trace, to include *de se* content in order for the constructed scenario to be both self-involving and accompanied by a sense of ownership. Thus, the revised Memory Challenge is no more compelling than the original.

7. Conclusion

The claim that one cannot be conscious without being thereby conscious *of oneself* is threatened by reports of conscious episodes lacking self-consciousness. The credibility of these reports has been challenged on the grounds that one cannot recall and report a past experience as one that one *oneself* has undergone if that experience did not involve a form of conscious self-representation in the first place.

We have shown that this challenge overlooks important distinctions between different forms of self-representation involved in episodic remembering. There are good reasons to think that the gist of a conscious episode lacking self-consciousness could be stored in a memory trace, only to be retrieved and enriched by a systematic source monitoring process that represents the episodic scenario as involving the subject *qua* subject of experience, and as originating in the subject's experiential past. The mere observation that reports of selfless conscious episodes are grounded in episodic memory does not undermine their reliability.

Proponents of the Ubiquity Thesis might accept the shortcomings of the Memory Challenge, and seek to replace it with broader skeptical concerns about the reliability of all retrospective first-person reports about altered states of consciousness. The discussion of such concerns lies beyond the scope of this paper. Nonetheless, there are good reasons to believe that similar concerns about the trustworthiness of dream reports, for example, fail to provide the best explanation of such reports under good reporting conditions (Windt, 2013). Detailed reports about drug-induced and meditation-induced states can also be obtained through methods that minimize the risk of confabulation (Petitmengin et al., 2019; Timmermann et al., 2019).

Furthermore, it is worth noting that the burden of proof is on proponents of the Ubiquity Thesis; short of claiming that relevant reports are *always* and *wholly* unreliable, they must explain why descriptions of selfless episodes in particular should not be trusted, without resorting to the Memory Challenge. Unless they can provide such an explanation,

the empirical line of argument against the Ubiquity Thesis remains compelling.[14]

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