Are forgotten memories literal experiences of absences?
Episodic forgetting and metacognitive feelings

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ABSTRACT. Are occurrent states of forgetting literal experiences of absences? I situate this question within the debate on mental time travel (MTT) to understand whether these states can be explained as literal experiences of absent episodic memories. To frame my argument, I combine Barkasi and Rosen’s literal approach to MTT with Farennikova’s literal approach to the perception of absences, showing that both are built on the idea that for an experience to be literal it must afford an unmediated contact with the object that constitutes it. I test the idea that forgetting affords literal experiences of mnemonic absences by considering different views of absence perception and I evaluate whether the objections raised against Farennikova’s approach also apply to my exploratory idea. I show that, while the idea resists the objections that an advocate of a cognitive approach to mnemonic absences may raise, the same does not apply to those elaborated by advocates of a metacognitive approach. Even if conceiving of occurrent states of forgetting as literal experiences of episodic memories sounds appealing, this idea is misleading. Therefore, I suggest conceiving of occurrent states of forgetting as states with metacognitive features, which track the absence of episodic memories from awareness in an affectively mediated way.

Keywords: Forgetting; phenomenology of forgetting; absence awareness; absence perception; mental time travel; metacognitive feelings.

Introduction

Imagine having a conversation with a trusted friend in which you are recalling the series of your usual Friday dinners you had together over the last year. You recall all of them in great detail, you remember what you talked about over each of these dinners, what you ate on each occasion, who cooked, who brought dessert, etc. You feel like you have vivid memories of all these dinners you had together and you have that pleasant
feeling of reliving these events here and now. The conversation goes on and, at some point, your friend mentions that they had a lot of fun that Friday night when they were cooking together while watching the last episode of your favorite TV series. Nothing pops into your mind. You absolutely cannot recall having done that and, despite your friend giving you a lot of details about what happened that night, you cannot recall that dinner at all. You feel that you have completely lost your memory of that event and its absence pops into your mind as a clear gap within the series of events that you had just recalled. Which kind of experience is this?

This article explores this question to test the hypothesis that this experience and similar experiences of forgetting in episodic memory are literal experiences of mnemonic absences. Although in the philosophy of memory similar issues have been already investigated—in particular with reference to classical phenomenology (Eldridge, 2020; Kozyreva, 2018; Tyman, 1983; Rowlands, 2016)—in the current debate on episodic memory and mental time travel (MTT) the question has not received much attention. The article aims to situate this question within this debate by using elements of Barkasi and Rosen’s literal approach to MTT (Barkasi & Rosen, 2020) and of Farennikova’s literal approach to the visual perception of absences (Farennikova, 2013) to understand whether occasional mental states that track a failed process of remembering (i.e., occurrence of forgetting) are literally constituted by the absence of an episodic memory that could have been recalled but was not recalled.

Although these approaches have been developed independently of each other and deal with different processes (episodic memory and perception), a combination of the two is particularly helpful to address my question. On the one hand, Barkasi and Rosen have provided convincing reasons to explain the outcome of successful processes of remembering (i.e., a recalled memory of our personal past) as a direct relation with a past event and have used this relationist approach to support a literal approach to successful cases of past-oriented MTT. Their approach provides me with the right theoretical background to understand whether cases of unsuccessful past-oriented MTT (i.e., forgetting) have a similar literal component. This philosophical operation also serves to evaluate the explanatory breadth of their literal approach to MTT, investigating whether this approach can explain successful and unsuccessful cases of MTT (i.e., forgetting) by drawing on the same pool of concepts. On the other hand, Farennikova has provided detailed argumentations in support of a literal approach to the visual experience of absences and has given reasons to reject opposing (i.e., non-literal) views of this type of experience. Her approach provides me with the conceptual tools to think about occasional states of forgetting as literal experiences of mnemonic absences and to evaluate whether this idea can resist the objections that an advocate of a non-literal approach to mnemonic absences might raise against this exploratory idea. The rationale of the argument is this: if Farennikova is right and we have good reasons to claim that in perception we can and often do perceive absent objects qua absences (i.e., we literally perceive absences), then we might also have good reasons to claim that when we try to remember a particular event of our past and we fail (i.e., we forget it), the outcome of this process is a literal experience of absence: the absent episodic memory constitutes our actual experience of forgetting qua an experience of absence in our awareness. Conversely, if Farennikova’s approach is not correct, it might be that my exploratory idea is misleading and a different explanation of states of forgetting in episodic memory should be advanced.

The article proceeds as follows. In section 1, I introduce the main aspects of Barkasi and Rosen’s approach and their explanation of occasional states of remembering as literal experiences of MTT. In section 2, I specify the cases that I aim to take into account in my discussion of forgetting and I set up the idea that occasional states of forgetting are literal experiences of mnemonic absences. In section 3, I evaluate this idea in light of the literature on the perception of absences. I argue that, like in the case of perception the claim about the literal nature of experiences of absences is misleading, the attempt of explaining occasional states of forgetting in episodic memory as literal experiences of absences equally fails. I suggest that these experiences—like in the case of perception—are best explained by appealing to metacognitive feelings. In the Conclusion, I suggest that, although my argument does not jeopardize Barkasi and Rosen’s approach to remembering, it shows that it cannot explain the counterpart of this experience (i.e., the experience of forgetting) within the same explanatory framework. This may be problematic for a literal approach to MTT aimed at accounting for a variety of cases by drawing on a unified and coherent explanatory strategy.

1. Going literal with mental time travel

Although MTT approaches to memory come in varieties (Figuereido, 2018; Perrin & Michaelian, 2017; Sant’Anna & Michaelian, 2019), they share a common point: episodic memory is not best explained as a store
of information about ‘what’, ‘when’, and ‘where’ of events that we experienced in the past, but is rather the ability to mentally travel back to our past by imaginatively and consciously re-experiencing these events (Tulving, 1983), like in foresight we pre-experience or ‘pre-live’ possible future events through imaginative mental acts (Suddendorf & Corballis, 2007). Usually, philosophers and psychologists take the expression ‘mental time travel’ in a metaphorical sense and use it to refer to our episodic construction system, namely the neural mechanisms that underpin our ability to think about the past and our ability to think about the future (De Brigard, 2014; Michaelian, 2016; Schacter & Addis, 2007), allowing us to engage in acts of mental projection with different temporal orientations (towards the past or the future) and modalities (factual or counterfactual; Sant’Anna & Michaelian, 2019). Yet, recent philosophical views of MTT have questioned the degree to which the expression is metaphorical and have suggested that, while MTT does not certainly allow us to break the law of time and space and literally transport bodies outside the present (Barkasi & Rosen, 2020, p. 3), successful episodic remembering actually puts us in experiential contact with past experienced events (Debus, 2014) and allows us to undergo a MTT experience that is less metaphorical than we usually think. A particular instance of this reasoning is Barkasi and Rosen’s article “Is mental time travel real time travel?” (Barkasi & Rosen, 2020), which I take here as a basis to frame my question about occurrent states of forgetting.

### 1.1. The concept of genuine ‘event awareness’

To introduce their conception of episodic memory, Barkasi and Rosen draw from Tulving’s idea of MTT as the “[…] awareness not only of what has been but also of what may come” (Tulving, 2002, p. 20) and, focusing on past directed MTT, suggest that cases of successful episodic remembering are those in which we are not aware of past events as mere intentional objects but those that “[…] afford its subject genuine awareness of that event” (Barkasi & Rosen, 2020, p. 2). Following the general ideas of causal and experiential approaches to memory (Debus, 2008, 2014; see Michaelian & Robins, 2018 for a review), the remembered events that Barkasi and Rosen have in mind are particular past events in which we were the subjects of these experiences (e.g., our first trip to Paris or the first time we tried hummus) and that, relying on our episodic construction system, can be literally “[…] brought into consciousness” here and now, so that “[…] our state of recall extends back into the past to include that event” (Barkasi & Rosen, 2020, p. 2, 12). The specific and most interesting point of their proposal is conveyed by one important word: genuine. Most approaches to MTT suppose that in our occurrent experiences of remembering we undergo some phenomenological states (i.e., affective states such as the feeling of pastness; Perrin, Michaelian, & Sant’Anna, 2020) that make us aware of our experience of recall as an experience of the past. In addition, relationist approaches to MTT (Debus, 2014) have emphasized that, if states of episodic recall actually allow us to ‘re-experience’ or ‘re-live’ an original experience (i.e., the past experienced event), then the occurrent state of remembering “[…] is an experience of the past event that is being recalled” (Barkasi & Rosen, 2020, p. 6), suggesting that in this experience we are in some sort of contact with the past event. Yet, Barkasi and Rosen take a step further and claim that in successful remembering this contact is special and this makes our occurrent state of remembering a genuine experience of that event itself: the past event constitutes the occurrent experience of recall or, otherwise said, it is a constitutive part of that token experience. Hence, that occurrent experience of episodic remembering is a literal experience of MTT, in which what we are in a direct contact with is the past experienced event itself.

As Barkasi and Rosen explain, their idea is built on the assumption that experiences in general “[…] are constituted (at least in part) by the things of which they make us aware. What it is like for you to have an experience just is (at least in part) what the experienced thing is like” (Barkasi & Rosen, 2020, p. 12). For example, when you veridically perceive a pen on your desk through vision (i.e., you are not hallucinating it), the pen constitutes your experience of seeing: your occurrent experience is your visual awareness of the pen, which shows up into consciousness as its current object. Following Barkasi and Rosen, in this type of cases the contact that you have with the object has an experiential nature (i.e., the pen is a constitutive part of your occurrent experience) and this contact is kind of special because it defines your experience: your experience is this way and feels this way because the pen shows up in your conscious experience as its phenomenal object and fills your state of awareness. On Barkasi and Rosen’s view, the same kind of reasoning applies to occurrent states of successful remembering. In a nutshell, their idea is that, just like in non-hallucinatory cases of perception the actual object out there in the world constitutes your experience of seeing, the past experienced event that you recall at a given moment in time (e.g., the recalled memory of your first kiss) constitutes your

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1 For a theory that opens up the possibility that we can have veridical episodic memories of non-experienced past events, see Michaelian’s simulation theory (Michaelian, 2016).
experience of remembering, even if the event is not situated in the present (i.e., it is not actually happening now). The recalled event is literally brought into mind and this kind of ‘mental presence’ is what makes your occurrence experience an experience of that past event itself: the past event is genuinely present in your awareness; hence, in some sense, you are in a direct and genuine contact with it.

Their argument (for both perception and memory) does not rule out the possibility to claim that occurrence states are informed or enabled by other cognitive states (e.g., predictions about the incoming sensory signals in perception or – I would add – beliefs about your memory capacities in the case of memory) at the level of processes (i.e., the construction of a percept or of a mnemonic scenario). In addition, it does not rule out the possibility to conceive of the vehicile of the phenomenal object (i.e., what is experienced in the subject’s mind) as a representational state. Still, their central idea is that, to explain an experience of remembering as an event that affords genuine awareness of a past event (i.e., a literal experience of MTT), we should describe it as state that is not mediated by other mental states when it occurs. On Barkasi and Rosen’s view, this basically means that “[…] we do not experience recalled events in virtue of experiencing some mental intermediary” (Barkasi & Rosen, 2020, p. 9) but, rather, what is experienced in our minds are the recalled events themselves.

Barkasi and Rosen do not delve into the details of what these mental intermediaries are, since their main argument for the genuine awareness of past experienced then moves to an explanation of the role played by causal-informational links (Barkasi & Rosen, 2020, p. 15–16) and their enabling conditions at the sub-personal level (i.e., neural patterns and their activation). Still, they give the reader some hints regarding this aspect by talking about the occurrence experience of successful remembering as a token mental state that does not depend on experiencing some other state, like a mental representation (Barkasi & Rosen, 2020, p. 6) and by ruling out the possibility to understand occurrence states of remembering as states representing events as mere intentional contents according to some temporal orientation (‘it’s in the past’) and possibility (‘it actually happened’). This suggests that the contact with the past event afforded in the occurrence state of remembering is special and affords a literal experience of past experienced event because it is an unmediated contact. By claiming that an occurrence state of successful remembering does not involve the experience of another mental state (e.g., a belief representing that event as its propositional content), I suggest that Barkasi and Rosen are able to distinguish two possible types of conceptual cases. First, cases in which the past experienced event itself constitutes an occurrence experience of remembering as a genuine experience of remembering, i.e., the event itself is in the subject’s awareness and constitutes their experience qua the very experience of re-living that event. Second, cases in which the subject’s occurrence experience, because it involves the experience of other states, could be an experience of something else, namely an experience in which what the subject is aware of and in a mental contact with is not the past experienced event itself but, rather, a vicarious state that represents a past experienced event (e.g., the belief that they ate pastéis de nata in that fantastic bakery in Lisbon in 2015). In that case, what would constitute the subject’s occurrence experience would be their belief about the past event (i.e., a mental state referring to the past event as its intentional object) and not the event itself. Although the vicarious state would give the memory system information about that past event, it would not put the subject in direct contact with the past experienced event itself. Hence, it would not constitute the occurrence experience of remembering as an experience of genuine and literal MTT – where the event itself would be re-experienced in the present – but, again, another mental experience (e.g., the experience of a memory belief with its corresponding cognitive phenomenology).

2. Genuine awareness and the case of forgotten memories

As I explained in §1.1., on the view of MTT targeted here, we can conceive of successful states of episodic recall as affording a non-metaphorical and genuine experience of MTT only if we conceive of these experiences as characterized by a direct (i.e., unmediated) contact with a past experienced event in our awareness. Through this direct contact, the past experienced event would show up in our consciousness and would constitute our occurrence state of remembering as an experience of that past event qua that particular past event. Building on this account of episodic remembering, in this section I explore a possible way to explain occurrence states of forgetting within the framework illustrated above. Before illustrating my core idea (§2.2), I proceed with some conceptual clarifications (§2.1).

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2 Barkasi and Rosen set aside issues related to the metaphysics of time and to the possibility of having an experience of something that no longer exists. As they suggest, see Moran (2019) and Michaelian (2016) for a discussion of these issues.

3 This makes their proposal potentially consistent with both representational and non-representational approaches to processes of recall (see McCarroll, 2020; Michaelian & Sant’Anna, 2021 for discussion) and to the vehicles of occurrence states of remembering (see, e.g., Michaelian, 2016 for a representational view and Thompson, 2010 for a non-representational view).
2.1. Conceptual clarifications

By ‘occurrent states of forgetting’ I refer to occurrent mental states understood as the outcomes of a process of forgetting, namely states in which our memory system find itself at a given moment in time when a process has come to partial or ultimate end, i.e., the empty state resulting from ‘erasing’ a particular experienced event from the memory system, such as the breakfast meeting you had with your aunt 6 months ago. I use ‘forgotten episodic memories’ to refer to states in which previously encoded past events do not show up into our mind (i.e., as an equivalent of ‘occurrent states of forgetting’) and I use ‘process of forgetting’ in a narrow sense, referring to retrieval failure and to cases in which a subject actively and consciously engages in an individual or joint practice of remembering and fails to bring into consciousness an event that they experienced in the past (see my example in the Introduction).

My argument is neutral with respect to the underlying causes of forgetting at the level of neural mechanisms (e.g., whether it is caused by passive trace decay or by active inhibitory or suppression mechanisms; Davis & Zhong, 2017; Anderson & Hanslmayr, 2014). Moreover, in principle, it is applicable to both temporary and permanent forms of forgetting in episodic memory – since what I am interested in here is the ‘here and now’ of an occurrent state – and it remains neutral with respect to how we can draw distinctions between these two forms of forgetting (Davis, 2007; Tulving & Pearlstone, 1966). In addition, it applies only to cases in which our occurrent state of forgetting is framed by and within a practice of remembering targeting a series of episodes from our personal past. It thus applies to cases in which an occurrent mental state of forgetting is contextualized into a practice of remembering and is ‘scaffolded’ by other mnemonic mental states (i.e., states of remembering), namely to cases in which a subject can recognize and be aware of their occurrent mental state as a mental state of forgetting.

The reason why I focus on these types of cases is this: following a widespread conception of occurrent states in the philosophy of mind (Goldman, 1970), I consider occurrent states as conscious states of which we are aware. Therefore, explaining forgetting as a conscious occurrent state referring to episodic memory requires some restrictions. Indeed, contrary to episodic remembering – in which our occurrent states of remembering can be the product of both a voluntary and involuntary mnemonic process (Berntsen & Hall, 2004) – it seems implausible to claim that we can be aware of having forgotten an event experienced in the past without voluntarily engaging in a memory practice and without remembering other events associated to the forgotten event. At the level of processes, in order to be aware of our occurrent state of forgetting and of its ‘episodicity’ (i.e., the fact that our occurrent state is a state of forgetting related to a past episode that we experienced), we need some kind of scaffold that allows the forgotten event to pop up in our awareness as a forgotten event. First, the practice of remembering, which allows us to recognize our occurrent state as a mnemonic state; second, the series of remembered events, which allow us to recognize our occurrent state of forgetting as being a state of the same kind as our previous states (i.e., a mental state related to a past event).

My argument does not rule out the possibility that in other memory contexts and cases we can undergo occurrent mental states of forgetting even if these states are not scaffolded by a conscious mnemonic practice and by a series of remembered events. For example, imagine sitting on a train on your way to a conference, listening to music and looking at the nice landscape from the window. Suddenly, you are hit by a strange and uncomfortable feeling that at first you cannot identify. You start thinking about the reason why you feel this way and, at some point, you feel that you forgot something at home but you cannot tell what. In this case it seems pretty plausible to claim that your occurrent state is an occurrent state of forgetting, even if it does not rely on the scaffolds mentioned above. Still, cases like this would not qualify as cases of occurrent states of forgetting in episodic memory within the framework considered in §1.1, since what is forgotten would not be a past experienced event but another thing (i.e., an action you intended to carry out in the past – e.g., picking up your pen drive – and that you have the feeling of not having performed). Therefore, cases like this would not jeopardize my choice to focus on ‘scaffolded’ cases of forgetting nor the assumption that occurrent mental

\[^4\] For a recent criticism of consciousness and awareness as criteria to define occurrent states, see Bartlett (2018).

\[^5\] I do not rule out the possibility that the process that leads occurrent mental states of forgetting to emerge can be cued by an episodic memory popping up into our consciousness in an involuntary way. What I exclude is the possibility that episodic occurrent states of forgetting can pop up into our awareness without being framed within and scaffolded by a practice that allows us to recognize them as states of episodic forgetting.

\[^6\] As Marta Benenti, Vilus Dranseika, Jacob Lettie, Chris McCarroll, and Sarah Robins pointed out in different ways in response to an earlier version of this work, the cases that I consider here are really specific and my reasoning could take another shape in relation to other types of cases. I agree on this aspect, and I thank them for their really helpful comments. These cases are specific and I suggest this makes them worth considering. The effects of forgetting more than often lie in the background of our mind and we are not conscious of them. Thus, considering cases in which forgetting pops up into our consciousness with specific ‘episodic features’ might be a good starting point to investigate occurrent states of forgetting from a novel perspective.

\[^7\] See Arango-Muñoz and Michaelian (2014) and Arango-Muñoz (2013) for further examples.
states of forgetting in episodic memory always rely on the aforementioned kinds of scaffolds in order to show up into our awareness as forgotten episodic memories.

### 2.2. The exploratory idea

There are important differences between occurrent states of remembering and occurrent states of forgetting. Intuitively, remembering is characterized by a direct contact with a past experienced event, which is re-experienced or re-lived in the present. On the contrary, forgetting is characterized by a lost contact with a past event, which cannot be relieved or re-experienced at a particular moment in time. In some sense, remembering is a state characterized by a sort of 'mnemonic phenomenological fullness'. Although remembered events can be re-lived more or less vividly and in a more or less detailed way and the affective states associated to remembering can be more or less arousing, these states generally strike us as characterized by phenomenological qualities that shape their contours. For example, in your occurrent experience of remembering your 20th birthday party, your conscious state is characterized by phenomenal qualities that, in some sense, 'simulate' the phenomenology of your past-lived experience and its perceptual details. You re-experience the smell of our birthday cake, you re-hear the music you listened to during the party, etc., and these qualities, accompanied by other phenomenological qualities (such as, e.g., the feeling of pastness, the feeling of familiarity and the fluency that characterize your acts of recall; Perrin, Michaelian, & Sant’Anna, 2020), allow the occurrent state to show up as a mnemonic state related to that particular event. On the contrary, when you fail to recall a past experienced event and you undergo a state of forgetting, your occurrent state seems to be characterized by a sort of 'mnemonic phenomenological emptiness'. Within a series of episodic states of remembering occurring during the process of recall, your occurrent state of forgetting pops up as a sort of blank state in which the phenomenological qualities experienced in your states of remembering are lacking (i.e., the re-enactment or simulation of perceptual and affective qualities of the past experienced event does not take place). Still, you have some sort of phenomenology: you feel some sense of void, something doesn’t feel right, you feel uncomfortable, you are surprised by this memory gap after a long series of recalled memories, etc.

Yet, despite these important differences, one could appeal to a sort of commonsense understanding of memory (Frise, 2018) and claim that, since remembering and forgetting are the two poles of our memory system, the processes and outcomes of remembering and forgetting might have something in common. Starting from this intuition, one might suggest that an approach to memory should explain both and it should do it in coherent way, explaining remembering and forgetting by resorting to the same pool of conceptual tools (Caravà, 2021). I suggest that, in the explanatory framework that I take into account here, this can be done by resorting to Barkasi and Rosen’s central notion of genuine awareness and to the job that it might do in explaining occurrent states forgetting as literal failed experiences of MTT. The idea that I want to explore is this. In successful experiences of remembering a past experienced event, the outcome of the process of remembering is a state constituted by our direct contact with the event, where the event shows up in our awareness as a constitutive part of this state. Occurrent states of forgetting could be explained along the same explanatory line by claiming that the outcome of unsuccessful processes of remembering (i.e., forgetting understood as retrieval failure; see §2.1) is an occurrent mental state in which we are directly and genuinely aware of the absence of an event that we experienced in the past and this absence constitutes our occurrent state of forgetting. Just like in occurrent experiences of remembering what is like for us to have this experience is what the experienced thing is like (i.e., the event), in occurrent experiences of forgetting what is like for us to have this experience is what the experienced thing is like (i.e., the absence of the to be recalled event): our occurrent mnemonic experience is a literal experience of a ‘mnemonic absence’. Meaning that, within a practice of episodic remembering in which other events are recalled, at a particular moment in time this absence pops up in our consciousness in a direct (i.e., unmediated) way and constitutes our occurrent state of forgetting as a genuine experience of an absence: we are aware of is this ‘mnemonic absence’ and not of another token state.

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8 In the phrase ‘this mnemonic absence’, ‘this’ could be a very charged term, meaning that what we would be fully aware of is an absence understood as a particular thing (i.e., we are aware of the absence of this specific event as this specific event). I do not use term in this sense, since it seems implausible that we can be fully aware of the absence of a specific event when we have forgotten it: the state does not present phenomenological properties that would allow us to track a specific past experienced event as this particular past event. Still, the mnemonic absences that I target here are somehow specific: they are not absences of events that we did not experience (e.g., the French revolution) or absences that we can imagine while projecting ourselves in the future, such as the absence of my cat from the Christmas lunch that I will organize in 2060. By ‘mnemonic absences’ I mean absences of episodic memories that have been encoded in memory and that at time ‘t’ are not retrieved. These absences show up as absences with episodic features thanks to the framing job done by previously recalled memories (i.e., they appear as occurrent states of episodic forgetting), but differ from other episodic mnemonic states (e.g., remembering) in that they do not present us with a specific mnemonic content: they do not present a particular past experienced event as that ‘forgotten event but they rather track the absence of a memory of the episodic type.”
Here, by ‘another token state’ I do not refer to the states of remembering that function as scaffolds that allow the occurring state of forgetting to pop up into our awareness but –like in my interpretation of Barkasi and Rosen’s approach (see §1.1)– to other cognitive states (e.g., beliefs about the absent event) that might mediate our contact with a mnemonic absence. At this stage of my argumentation, the states of remembering that function as ‘scaffolds’ do not seem problematic for the claim about the unmediated contact with a mnemonic absence because these states occur at a different moment in time within the process that leads to a state of retrieval failure. What is important for the claim that occurring experiences of forgetting are literal experiences of a mnemonic absence is that the occurring state –when it occurs at a particular moment in time– cannot be confused with another mental state that refers to that absence as a mere intentional object (such as, e.g., a belief about that absence). Otherwise, the explanation would entail that the occurring state of forgetting could be constituted by our awareness of another mental state (i.e., a belief) and therefore would not be an experience of the absence of a past event qua an absent past event in our awareness (i.e., a literal experience of a mnemonic absence).

Still, one may claim that having an unmediated contact with a mnemonic absence is not a sufficient condition to guarantee an occurring state the title of ‘state of forgetting’ because there may be other states in which we are in a direct contact with an absence in memory but these states do not count as occurring states of forgetting. For example, think about an occurring mnemonic state that tracks an experiential absence in the series of dinners that you usually have at your sister’s place on Saturday nights, such as a dinner that was planned but did not take place because you were sick and you stayed at home. This state would present you with a mnemonic absence (i.e., the remembered absence of a dinner that should have taken place but did not) but would not certainly count as an occurring state of forgetting. Rather, it would count as a state in which you successfully remember the absence of an event from a series of events that you experienced in the past. Cases like this seem problematic for the exploratory idea that occurring states of forgetting are constituted by mnemonic absences, since they show that gaps in memory could also be the outcome of successful cases of remembering: the idea that what makes an occurring state of forgetting a state of forgetting is the direct contact with a mnemonic absence might not seem well-grounded.

This worry is plausible but can be easily addressed by saying that a direct contact with a mnemonic absence in awareness is a necessary but not sufficient condition to correctly characterize occurring states of forgetting and that another explanatory layer should be added to the idea that I want to test. This job can be done by appealing to the process that issues states of occurring forgetting and to the elements that it involves (i.e., memory traces providing causal links to a past experience; Barkasi & Rosen, 2020, p. 15–16), a conceptual operation that would allow to distinguish two types of absences in memory: absent memories that could have been recalled but did not (occurring states of forgetting) and memories of absences that one experienced in the past (occurring states in which we remember absences). Within Barkasi and Rosen’s framework and on the basis of my conceptual clarifications, occurring states of forgetting would result from a process in which memory traces connected to a particular experienced event are not activated and the memory system does not establish a causal contact with an event that you experienced in the past. This would prevent the event to show up in awareness and –coupled with the framing job done by the previously recalled episodic memories of the same kind as the forgotten one (§2.1)– would cause the experience of mnemonic absences typical of occurring states of forgetting. On the contrary, in cases of successfully remembering an experienced absence, the experience of a mnemonic absence in awareness would be caused by the activation of a memory trace tracking an actual experiential absence (e.g., the dinner that did not place because you were sick), which would determine the corresponding phenomenology of remembering an experienced absence.

### 3. Perceptual and mnemonic absences

I suggest that the theoretical requirements illustrated above make the proposal about occurring states of forgetting presented in §2.2 similar to the widely discussed approach to the visual perception of absences proposed by Farennikova in her article *Seeing absence* (Farennikova, 2015). Here I intend to use the core idea of this account as a sort of ‘philosophical test’ to check whether occurring states of forgetting –like visual experiences of absences in Farennikova’s approach— can be conceived as literal experiences of absences. On the basis of the arguments that I provided in §2.2, this would allow an explanation of experiences of

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6 I focus on the visual perception of absences for the sake of simplicity, but I do not exclude the possibility of drawing a comparison between forgetting and the experience of absences conveyed by other perceptual modalities, such as auditory or tactile modalities (Cavedon-Taylor, 2017; Sorensen, 2008).
mnemonic absences that would fit with Barkasi and Rosen’s approach based on the idea of ‘experience constitution’ and the concept of genuine (i.e., unmediated) awareness. Before proceeding with my argument, I want to consider some potential worries concerning my idea of using elements of Farennikova’s approach to investigate occurrent states of forgetting.

The first worry applies to the very comparison between absences in perception and absences in memory. One may indeed claim that since perception and memory are two different things, applying arguments from cases in visual perception to cases of forgetting in episodic memory is inappropriate because these cases are underpinned by different cognitive processes taking place in two different cognitive systems. The second worry is more specific but relies on a similar intuition: occurrent states of forgetting and states occurring when we visually perceive absences are disanalogous because the former entails some sort of failure (i.e., a failure to remember), while the latter is not understood as a failure (e.g., the failure to see a present object due to inattention) but rather as a successful visual experience (i.e., the veridical perception of an absence in the environment, such as an absent material object).

Therefore, a one-to-one comparison between occurrent states of forgetting and the visual perception of absences is not well-grounded.

Both are plausible worries, but do not undermine the overall structure of my exploratory idea. Indeed, my argument does not imply that absence perception and the experience of absences in cases of forgetting are exactly the same thing. Rather, the claim is that what might make these experiences counting as literal experiences of absences is the same thing: the unmediated contact that we have with an absence in our awareness. Meaning that, to argue for a literal approach to both cases, one should provide argumentations in favor of the unmediated contact with an absence as what constitutes the occurrent state in question as that particular occurrent state and verify if these argumentations hold. The rationale of the argument that I am going to explore is this (§3.2; §3.3): if the arguments for the direct (i.e., literal) perception of absences work, similar arguments might work for my cases of forgetting. Conversely, if the arguments for the direct perception of absence do not work, it might be that also the claim that occurrent states of forgetting are literal experiences of mnemonic absences fails and another account should be proposed.

### 3.1. Perceptual mismatches and the resistance to the belief view

The core point of Farennikova’s approach to the perception of absences is the following. In visual perception we do not only see presences, such as this article in front of you or your own hand holding a highlighter, but we also see absent objects and features, such as the absent moustache from your partner’s face or the absent chocolate form your fridge. Vision not only represents presences, but it also and often represents absences (Farennikova, 2015). One of Farennikova’s main examples is this:

You’ve been working on your laptop in the café for a few hours and have decided to take a break. You step outside, leaving your laptop temporarily unattended on the table. After a few minutes, you walk back inside. Your eyes fall upon the table. The laptop is gone! (Farennikova, 2015, p. 450).

On Farennikova’s view, this perceptual experience is peculiar. First, it seems to lack ‘proprietary appearances’: the experience of the absent laptop looks like the experience of the present table where the laptop was a few minutes ago. Second, it seems to lack specific sensible features that might be used to construct a representation of the visual absence that you get in awareness: what you get from your senses is the wooden table in front of you and not an absent object. Nonetheless, this perceptual experience is characterized by a specific and striking phenomenology (Farennikova, 2015), which distinguishes the perceptual experience of an absence (i.e., the perception of the absent laptop) from cases of positive seeing (i.e., the positive perception of the wooden table in front of you). How can we explain the peculiarity of perceptual cases like this?

On a potential view (i.e., the cognitive view), the peculiarity of this experience (i.e., its ability to instantiate a specific kind of phenomenology even if sensible properties and proprietary appearances are lacking) can be explained in terms of a cognitive experience. In the case of the absent laptop, e.g., you would see an empty table in front of you and –on the basis of these perceptual data– you would come to believe that the laptop is missing from the perceptual scene: the coupling of the perceptual data and your belief would produce the
phenomenology of your occurrence experience of absence. If that was the case, the experience of your absent laptop would not be a direct experience of a perceptual absence (i.e., an experience in which what constitutes your perceptual state is a perceptual absence in itself) but rather a mediated experience resulting from an inferential process, which would constitute this experience as the experience of a belief about an absent object ("The laptop is missing from the table"). Otherwise said, your experience of absence would be constituted by your belief about an absence plus the cognitive phenomenology that this belief instantiates (Gow, 2021) and not by the perceptual absence itself. Hence, the experience in question would be a metaphorical (i.e., non-literal) experience, in which you would have a sort of "as-if" experience of absence thanks to phenomenology instantiated by your belief that an object is absent.

Farennikova rejects this view for three main reasons. Here I consider just two of them because those are particularly relevant for my discussion on occurrence states of forgetting as literal experiences of absences. First, if the experience of absences was a cognitive experience based on inferential processes and the production of beliefs, it would take time and a mental effort. This does not seem to match our lived experience of the perception of absences and its phenomenology. Think again about the case of the absent laptop. You come back to the café after a short break ready to write the conclusions of your paper and your laptop is not there. The most plausible description of this experience is that the empty table strikes you as surprising immediately; you just see the empty table and –with it– you immediately see the absence of your laptop, even if you do not consciously think about it. Second, if the experience in question was an experience of a cognitive type, in principle you would be able to get a different type of phenomenology by modifying the belief-like cognitive machinery underpinning the perceptual experience. This does not seem to be the case. For example, think about this imaginative (but plausible) variation of the laptop case. You are working at a café with a trusted friend, you take break in the garden, you get back and you do not see the laptop on the table. You ask your friend if they know where the laptop is. They tell you that the laptop is still there, but you cannot see it because while you were in the garden, a professional magician got in and installed a complex system of mirrors (like those used in funhouses in fun fairs) to create a subtle visual illusion that makes your laptop disappearing from your perceptual field. You have good reasons to think that your friend is not lying, you believe them, and you come to believe that the laptop is still there. Nonetheless, you cannot see it: your perceptual experience continues to present you with an absence. Following Farennikova’s approach, cases like this provide reasons to think that the cognitive view of absence perception is misleading. If the phenomenology of the perception of absences was cognitive and mediated by belief-like states, changing our beliefs about the presence or absence of an object would modify the corresponding phenomenology (i.e., the cognitive phenomenology associated to a perceptual experience): this does not actually happen. On Farennikova’s view, these two points give important reasons to reject the cognitive view: experiences of absences are not mediated by cognitive states (such as beliefs). Therefore, they may best explained in a more direct and literal way.

Farennikova’s explanatory strategy is this. In paradigmatic cases of absence perception (e.g., the laptop case), the experience of absence results from the violation of perceptual expectations: you expected to see the laptop on the table and you do not. On her view, this conscious experience of an absence is underpinned by a sub-personal process which involves the mismatch between visual representations (i.e., templates) of objects that the perceptual system expected to get from the senses and the actual perceptual inputs (e.g., the perceptual properties of the laptop-less table). Although these mismatches occur at a sub-personal level, they "[...] are not mere vehicles and sometimes surface qua mismatches in our phenomenology of absence" (Farennikova, 2013, p. 445) and characterize the experience of an absence in awareness through the phenomenology of incongruity (i.e., sub-personal mismatches popping up into consciousness). On her view, this experience of incongruency characterizes the specific, immediate and effortless phenomenology of the perception of absences and makes these experiences literal (i.e., non-mediated) experiences of absences. This is to say that what constitutes the perceptual experience is the absence itself, which pops up in our awareness with its specific and striking ‘mismatch’ phenomenology (i.e., the phenomenology of incongruency). Considering the nature of the representations involved in her account (which are perceptual and not propositional or symbolic) and the fact that they are activated at sub-personal level (i.e., without conscious effort), the unmediated and non-cognitive nature of this experience seems to be guaranteed, because no properly cognitive aspect (e.g., conceptual representational formats and their integration into conscious

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12 For the third reason (based on the adaptivity of the perception of absences) see Farennikova (2013) and Martin and Dokic (2013) for discussion.

13 See Gow (2021) and Martin and Dokic (2013) for a formulation of this example.
beliefs) is involved. Hence, on the basis of Farennikova’s proposal, as well as on the basis of the argumentations provided here (§1.2 and §2.3), this account seem to guarantee a genuine contact with an absence (i.e., an absent object), guaranteeing a ‘literal’ status to this perceptual experience.

3.2. Mnemonic mismatches and the resistance to the belief view

My main suggestion is that within the framework of MTT proposed by Barkasi and Rosen occurrent experiences of forgetting could be explained along a similar explanatory line. Consider again the example that I provided in the Introduction. You are engaging in a practice of joint remembering with a trusted friend. You are recalling a series of events that you have experienced together, you have the sense of vividly reliving the series of events and, at some point, your friend mentions one of these particular events (e.g., a dinner you had together while watching the last episode of your favorite TV series). Suddenly, you are hit by an uncomfortable (and surprising) feeling that, following the idea I provided in §2.2, could be described by the specific phenomenology caused by a mnemonic absence popping up into your mind. In this case, as well as in other cases of retrieval failure contextualized in practices of episodic remembering (§2.1), it seems plausible to claim that this experience (the feeling of forgetting, henceforth ‘FoF’, and the feeling of surprise, henceforth ‘FoS’; Arango-Muñoz, 2013; Halamish, McGillivray, & Castel, 2011) arises from a similar but slightly different mismatch-involving process as that described by Farennikova.

In the types of cases that I consider here it seems implausible that the experience derives from a mismatch between a sub-personally activated representation of the to be recalled event (a sort of equivalent of objects templates in Farennikova’s account) and incoming signals (i.e., memory cues). Indeed, if we assume that there is a relation between the sub-personal vehicles of a conscious experience and the conscious experience itself, in these cases the activation of a relevant event representation at the sup-personal level (e.g., a representation of a past experienced event carried by a memory trace) coupled with relevant memory cues should activate a recall state related to that representation of the experienced event and produce the corresponding phenomenology of occurrent states of remembering at the conscious level (see §2.2). Rather, with respect to cases in which you engage in a conscious practice of episodic remembering that at some point fails (i.e., retrieval failure), it sounds pretty plausible that the phenomenology of your occurrent state of forgetting (i.e., the sense of void, the feeling that something does not feel right, the sense of surprise after a long series of successful and fluent acts of recall) arises from a mismatch between the implicit expectation that the next memory in the series will show up in your awareness and the lack of mnemonic qualities of your occurrent state of forgetting, in which the re-enactment or simulation of perceptual and affective qualities of a past experienced event does not occur. This is to say that occurrent experiences of forgetting might be characterized as mnemonic experiences of absences in which the absence of a to be recalled past event strikes us with a specific and surprising phenomenology that arises from unfulfilled expectations of recall within a memory practice that was successful, previously gave us a series of memories in their phenomenological fullness and that, at time ‘t’, does not present the expected phenomenology of remembering.

Like in the cases considered by Farennikova, it might seem that this experience is a good candidate for a literal experience of absence. Following the arguments that I provided in §1.1., §2 and §2.2, an experience is a literal and genuine experience of X (in this case an absent episodic memory) if we experience X in an unmediated way, so that X (and not another mental state, e.g., a belief) constitutes this experience. The types of cases of occurrent forgetting that I consider here seem to meet this requirement because of the same reasons that apply to the cases considered by Farennikova. First, even if the surprise, sense of void, and the uncomfortable feeling that you undergo when a mnemonic absence pops into your mind can instantiate conscious and effortful inferential processes aimed at recalling the forgotten event, in your practice of recall these phenomenological qualities usually appear suddenly and without effort: you are hit by a mix of surprise, sense of void, etc. without effortfully thinking about what is going on. Therefore, this experience does not seem to be ‘belief-like’ because—at the very moment in which it occurs—it does not seem to involve any cognitive process that takes time and conscious effort. Second, on a par with what the professional magician case suggests for the perception of absences (see §3.1), the occurrent state of forgetting and the phenomenological qualities that it instantiates do not seem to be modifiable through a process of belief-updating. In the case that I am considering here, you are struck by the absence of an event that you should and could have recalled but you did not recall (i.e., the absence of an episodic memory in your awareness). The friend you are talking with gives you a lot of details about the event that you forgot and that you experienced together. You trust them, you think that they are not lying, and you believe that you spent a night
cooking together while watching your favorite TV series. You try to recall that event by combining and re-combining the information that your friends gave to you but, still, you cannot recall it. The phenomenology associated to your occurrent state of forgetting persists: even if you believe that what your friends says is true and that the story they tell is accurate, the mnemonic absence is still there and fills your awareness with its striking phenomenology. Like in the case of absence perception, your occurrent state of forgetting resists the pressure of beliefs (e.g., the beliefs about you and your friend having dinner together while watching the last episode of your favorite TV series sometimes ago). Hence, this experience does not look like a cognitive (or belief-like) experience: your occurrent state of forgetting seems to be constituted by the mnemonic absence itself and not by another mental state. Otherwise said, because of the same reasons in favor of the literal perception of absences provided by Farennikova, the occurrent state seems to be an unmediated and genuine experience of an absence, which would constitute a literal (failed) experience of MTT.

3.3. Objections from the metacognitive view and the affective experience of absences

The arguments provided in §3.2 seem pretty intuitive and, if they are correct, they would serve to guarantee a literal status to mnemonic experiences of absences in episodic memory (i.e., occurrent states of forgetting or forgotten memories). By showing that the phenomenology of occurrent states of forgetting cannot be reduced to the cognitive phenomenology of beliefs associated to the absence of an episodic memory from our awareness, these argumentations would guarantee that what constitutes the occurrent experience of forgetting is a mnemonic absence, with the specific phenomenology that it instantiates. This would provide Barkasi and Rosen’s framework with a potential explanation of occurrent states of forgetting that relies on the same explanatory tools that they use to explain occurrent states of remembering. Still, what I want to suggest in this paragraph is that, even if this argument works, the idea that occurrent states of forgetting are literal experiences of mnemonic absences fails because –on a par with what happens in the literal account of the perception of absences– it cannot resist the objections raised by proponents of the metacognitive view of experiences of absences.

Consider the following case of absence perception elaborated by Martin and Dokic (2013) in their criticism of Farennikova’s approach.

You are presented with two series of 15 successive boxes. In the first series, the first 10 boxes contain red marbles but the 11th box surprisingly reveals a green marble while you implicitly expected a red marble. The second series is like the first, except that the 11th box surprisingly reveals nothing while you expected a red marble (Martin & Dokic, 2013, p. 5).

On Martin and Dokic’s view, although the two series instantiate a different phenomenology at step 11, both share the same experiential component (i.e., the ‘FoS’) arising from mismatches in the perceptual process. As Martin and Dokic rightly point out, to support her claim on the literal perception of absences, Farennikova should claim that “[...] in addition to the FoS, the second series elicits a specific perceptual experience: you see the absence of the red marble” (Martin & Dokic, 2013, p. 3, emphasis in the original). Now, as Martin and Dokic (2013, p. 3-4) suggest, try to engage in a simple thought experiment and mentally subtract the FoS from both series. In the first series, you would get some perceptual phenomenology (i.e., the phenomenology of the green marble), which would constitute your occurrent perceptual state as a state in which you are directly aware of the object ‘green marble’. In the second series what would remain at step 11? As Martin and Dokic suggest, without the FoS you would get the phenomenology instantiated by the bottom of the empty box, namely the phenomenology instantiated by a present object. This is to say that, if you subtract the affective state that you undergo when you are presented with the empty box, what would constitute your experience would be the bottom of the empty box (i.e., a perceptual presence), and not a perceptual absence (i.e., the absent marble) with a specific (i.e., proprietary) phenomenology. On their view –on which I agree– this suggests that, since this experience of absence does not present other phenomenological qualities other than the FoS, then experiences of absences in vision do not afford a direct and literal contact with an absence. Rather, what constitutes these experiences (i.e., what defines them and makes them appear to us the way they appear) is an affective component (i.e., the FoS) that, while not being properly cognitive (i.e., it is not a judgement or a belief), serves as a metacognitive resource (Koriat, 2007) to assess the ‘mismatchy’ nature of our occurrent experience.

My suggestion is that, relying on a thought experiment analogous to that proposed by Martin and Dokic, it can be shown that occurrent states of forgetting belong to the same type of experience (i.e., an affective experience with metacognitive components) and not to literal experiences of a mnemonic absence. Think
about these two mnemonic experiences. In the first experience, you are talking with your friend and during your conversation you remember (i.e., re-live) a long series of dinners you had together on Fridays over the past year. At some point, instead of reliving in your mind one of the events belonging to the category ‘Friday dinners you had with your friend’, for some reason you involuntarily recall a walk you had in Paris ten years ago. You are surprised and you are hit by the phenomenology of this unexpected episodic memory popping up into your awareness. In the second mnemonic experience, again, you are recalling the long series of dinners you had together on Fridays over the past year and when your friend mentions that they had a lot of fun when that Friday night you cooked together while watching the last episode of your favorite TV series, nothing pops to your mind (see the Introduction). You feel surprised and uncomfortable because the joint practice of remembering was doing really well and you previously had the pleasant feeling of vividly recalling that series of nice events you experienced in the past. In the first case, it seems plausible to claim that you would get a sort of phenomenology of surprise (i.e., the FoS) analogous to that described by Martin and Dokic plus the phenomenology of remembering associated to the involuntary memory that you did not expect to pop up in your awareness (e.g., the smell of macarons in the street, your reflection on the window of a nice bookshop in the Marais, etc.). In the second case –I suggest– you might experience the FoS due to a mismatch between your mnemonic expectations (i.e., the implicit expectation of fluently recalling a series of particular events) and your occurrent ‘blank state’ plus the uncomfortable feelings associated with the experience of forgetting (see §2.2).

Now, try to engage in thought experiment similar to the one proposed by Martin and Dokic and subtract the affective components (i.e., the FoS and the FoF) from the two memory cases. In the first case, similarly to the case of the green marble, you would get the phenomenology of something present into your awareness (i.e., the involuntarily recalled memory of a walk you had in Paris ten years ago). In the second case, i.e., the case of forgetting, which kind of phenomenology would you get? Intuitively, this case presents us with two options: either (a) the occurrent state of forgetting shows no phenomenology or (b) the phenomenology that persists after the subtraction of the FoS and of the FoF is the fading phenomenology of your previous states of successful recall. Both options are problematic for the account of occurrent states of forgetting as literal experiences of absences that I tried to construct in §2.2. Indeed, if option (a) is true, then it would be difficult to endorse the idea of ‘absence awareness’ that underpins the proposal, since with no phenomenological properties directly instantiated by the mnemonic absence it would not be clear what would ‘fill’ our occurrent state of awareness (i.e., what we would be aware of). If option (b) is true, then the explanation would incur in the same problem highlighted in Martin and Dokic’s criticism of Farenknikova’s approach. The phenomenological qualities that characterize the occurrent state of forgetting would not be absence-specific. Rather, it would be a sort of variation of the phenomenology of presence that you get when you are in a direct contact with a past event in your awareness (i.e., you would get the fading phenomenology of the past experienced events that you have just successfully recalled). Hence, on a par with Martin and Dokic’s argument for the metacognitive approach to absence perception, what seems to really constitute your occurrent state of forgetting is not the mnemonic absence itself but, rather, the affective states (i.e., the FoS and the FoF) associated with failed retrieval (i.e., forgetting). These affective states would be exactly what constitutes your occurrent state of forgetting and –similarly to what happens in perception– would serve as metacognitive resources to assess what is going on in your mind (‘I failed to remember!’) and identify the peculiar mental state that you are undergoing. Like in Martin and Dokic’s proposal, these affective states do not look like proper cognitive states (see the argumentations provided in §3.2 about the effort and time requirements). Therefore, their occurrence does not seem to entail the same problems that a belief-like view of occurrent states of forgetting would entail for Barkasi and Rosen’s general framework (see §2.2). Still, like in the case of the objections to the literal view of absence perception elaborated in the metacognitive framework, the argument for episodic forgetting based on the FoS and the FoF shows that a conception of occurrent states of forgetting as literal mnemonic absences fails. What seems to constitute the occurrent experience of forgetting is not a literal (i.e., unmediated) contact with a mnemonic absence. Rather, it is an affective experience that arises from the peculiarities of the retrieval process (i.e., its ‘mismatchy’ features) and that plays the role of a ‘metacognitive mediator’ between a sort of mnemonically blank state of mind and your ability to grasp as a specific memory state in your practice of recall.
Conclusion

I explored the idea that occurrent states of forgetting in episodic memory might be explained as literal experiences of mnemonic absences, where what constitutes the occurrent state is the absence of a past experienced event that we should and could have recalled but has not shown up into our awareness. If the idea was proven true, it would have served as a basis to explain both occurrent states of remembering and occurrent states of forgetting as literal experiences of MTT. In the first case, the unmediated contact with a remembered event would have constituted our experience of mnemonic awareness. In the second case, the unmediated contact with a mnemonic absence (i.e., a forgotten episodic memory) would have constituted our occurrent experience as a genuine (i.e., literal) experience of a mnemonic absence. I have shown that, even if this exploratory idea might sound appealing, it is misleading. By drawing a conceptual analogy with the perception of absences, I have shown that failed experiences of MTT (i.e., cases of episodic forgetting understood as results of retrieval failure) are not best explained as literal (i.e., unmediated) experiences absences in our awareness. Rather, what constitutes these mental states and makes them appear to us the way they appear to us is an affective experience. Otherwise said, in occurrent states of forgetting, what we are aware of (i.e., what ‘fills’ our awareness) is a series of affective states (i.e., the FoF and the FoS): these give the occurrent state its contours, shape it, and make it appear to us as the states that it is in our awareness. Although my argument does not jeopardize the approach to remembering proposed by Barkasi and Rosen within which I constructed my argument, it shows that it cannot explain the counterpart of remembering (i.e., the experience of forgetting) within a unified framework. This may be problematic for a desirable and complete theory of mental time travel aimed at explaining a variety of memory experiences (i.e., successful experiences of remembering, forgetting, confabulation, and misremembering) in an economical way, namely by using the same conceptual tools (i.e., the concept of genuine awareness and the idea of literal and unmediated experiences) to explain each type of mnemonic experience.

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References


Forgetting and the experience of absence


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