

What memory teaches:

Experiential knowledge, imagination, and accuracy in remembering*

Direct experience is an evasion, or hiding place, for those without any imagination.

—Fernando Pessoa, *The Book of Disquiet*

This paper clarifies and then indicates a conflict between, on one hand, influential and longstanding ideas in the epistemology of imagination and, on the other, an emerging view of the accuracy conditions of remembering and the content of episodic memory—namely, *alethism*. Although we explore several ways to resolve the conflict, we take the most plausible to be to reject alethism. Drawing on assumptions made on both sides of debates about the epistemic limits of imagination, the paper constitutes an extended argument in favour of (“strong”) *authenticism* about the accuracy conditions of remembering. Authenticists can maintain that experience is necessary for certain forms of imagining and also that episodic memory is what supports and explains this fact by virtue of providing a privileged store of experiential knowledge.

1 Introduction

Experience is the best teacher. So says Lewis (1988). And many would agree (Nagel 1974; Jackson 1982). Indeed, for certain kinds of knowledge, experience might be the *only* teacher (Ullmann-Margalit 2006). Some experiences, it seems, are *epistemically transformative*, and no amount of imagining the experience beforehand will enable us to really know what undergoing it would be like (Paul 2014). Is this right? Or is there not a sense in which we can imagine experiences that we haven’t undergone, and in doing so often arrive at knowledge of what having the experience would be like (Kind 2020)? This debate concerns the role of experience in gaining new knowledge, and how imagination might provide or fail to provide us with such knowledge.

In this paper, we pursue the implications of this debate for the philosophy of memory. We argue that many of the claims about the epistemic limits of imagination and the crucial role of

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experience hinge on assumptions about episodic memory. Both sides of the debate—those who think we can in principle gain knowledge of novel experiences through imagination (Kind 2021a), and those who think knowledge of such experiences is often beyond the scope of imagination (Paul 2014)—can be seen to rely on there being a privileged kind of memory that retains knowledge of our experience. It is often assumed, and sometimes argued (Hoerl 2018a), that such experiential knowledge is retained by episodic memory. Yet this assumption about episodic memory has recently been challenged by those who claim that episodic memory does *not* provide us with a distinctive source of knowledge for what it was like to experience events, but, instead, only knowledge about the events themselves (of a sort which could, in principle, have been obtained other than through first-hand experience), a position known as *alethism* (Michaelian 2020; Michaelian and Sant’Anna 2022). Our discussion therefore has implications for both the philosophy of imagination and the philosophy of memory. In particular, we argue that episodic memory does provide us with experiential knowledge. If it didn’t, the epistemic scope of imagination would be implausibly narrow and epistemically transformative experiences ubiquitous. If episodic memory is to help explain why and how experience is sometimes required for certain imaginings, it must be a distinctive basis of experiential knowledge, and alethism must be false.¹

The paper is structured as follows. In §2 we outline the recent debate about accuracy in remembering, and the commitments of alethism when it comes to the content of episodic memory. In §3 we clarify some venerable ideas about the link between experience and the epistemic scope of imagination, and then tease out the commitments those ideas seem to bring concerning the content of episodic memory. In §4, we argue that these two sets of demands on the content of episodic memory are in tension. §5 explores the most promising resolutions to this tension, coming down in favour of rejecting alethism before §6 concludes.

2 Alethism, authenticity, and the content of episodic memory

Philosophers have often taken there to be a distinctive form of remembering, paradigmatically about particular experiences in one’s past, in which imagistic components play an important and

¹ While we are inclined to think it is indeed episodic memory that plays this role of grounding experiential knowledge, we will see later (§5.2) that our argument against alethism does not essentially depend on this.

perhaps partly constitutive role.² When, in this sense, Sally remembers seeing International Klein Blue at an art gallery yesterday, there is an intimate link between her remembering and the deep blue visual imagery of which she is conscious. There is a much closer connection than there would be were she to merely recall that Plato taught Aristotle while simultaneously visualising Raphael's *The School of Athens*. When we are remembering in this first way—the signature of episodic memory—it is natural to describe ourselves as in some sense ‘reliving’ a past experience, and representing a way things were through the lens of some past act of conscious awareness.³

When remembering has this character, what is its subject matter? Many have noted a perplexing duality here (Hoerl 2018a; Fernández 2019; Rowlands 2018). On one hand, remembering appears to be directed upon public and objective events in one's personal past and how things actually unfolded around the subject during the relevant interval of time. On the other hand, remembering equally appears to be directed upon *experiences* of the remembering subject and how their stream of consciousness unfolded during the relevant interval of time.⁴ To bring out the intuitive contrast we find here, consider the following passage from Reid.

Suppose that once, and only once, I smelled a tuberose in a certain room where it grew in a pot, and gave a very grateful perfume. Next day I relate what I saw and smelled. When I attend as carefully as I can to what passes in my mind in this case, it appears evident, that the very thing I saw yesterday, and the fragrance I smelled, are now the immediate objects of my mind when I remember it. [...] I beg leave to think with the vulgar, that when I remember the smell of the tuberose, that very sensation which I had yesterday [...] is the immediate object of my memory (Reid 1764/1997: 28).

² We use ‘remembering’ as a success notion, requiring genuineness and accuracy above some threshold. We remain neutral on what genuineness requires (e.g., appropriate causation, reliability). What it takes for purported instances of remembering to be accurate will be our focus.

³ We avoid the ambiguous term ‘memories’ and try to restrict our use of ‘memory’ to systems or the general faculty of encoding, storing, and retrieving information. We also prefer ‘remembering’ to ‘episodic memories/remembering’ since few if any tasks are thought to ‘tap’ just one system (Tulving 1983).

⁴ We are not presupposing any particular view of what this difference amounts to, or assuming it is clear or precise. For now we are simply observing, like others in the literature, that there is an intuitive duality here.

Is Reid remembering the odour of the flower on the relevant past occasion, or is he remembering the olfactory experience he underwent on that occasion? Reid himself appears to be somewhat ambiguous. First he suggests that he remembers ‘the fragrance *smelled*’. Later in the passage, it is ‘the sensation *had*’. One response, advocated by Folescu (2018), is that Reid remembers a complex event—*his smelling the odour of the tuberose*—partly constituted by both his olfactory experience and by the odour of the tuberose during that interval.⁵ More generally, the idea would be, successful remembering has as its content complex events with both experiences and experienced events as constituents. An alternative response would be to suggest that the subject matter of remembering is always an experience, but that, perhaps due to the so-called transparency of experience, “it is in virtue of remembering that experience that the subject also remembers the event itself” (Hoerl 2018a: 320).⁶ Whatever one’s view about the content of remembering (and we will return to this below), there appear to be two dimensions of *accuracy conditions* that track this rough distinction between the event as it actually unfolded and the conscious character of one’s past experience.

Bernecker (2010) calls these two dimensions of accuracy in remembering *truth* and *authenticity*, respectively. An occurrence of remembering is said to be true when it is accurate with respect to a particular, objective event that occurred in one’s personal past—the kind of thing others might have also been witness to or participants in. An occurrence of remembering is said to be authentic when it is accurate with respect to one’s corresponding original experience—the kind of thing one undergoes alone.

These two ways of evaluating remembering for accuracy can come apart. We can think of truth as an external or third-personal criterion, tracking the reality of a subject’s personal past. Authenticity, on the other hand, is ‘an internal criterion’ (Bernecker 2015), tracking the course of a subject’s past stream of conscious experience and how things were represented as being. For example, perhaps Reid’s original olfactory experience of the tuberose’s odour *mis*represented its properties. In that case, Reid may be remembering authentically but not remembering truly. A particularly clear illustration of the distinction is possible in cases of remembering ‘from the

⁵ We are assuming for ease of presentation that odours are events, but this is purely a convenience. (For discussion of olfactory perception and the ontology of odours, see Batty (2010), Cavedon-Taylor (2018), and Barwich & Smith 2022)).

⁶ As Soteriou (2013) suggests, capturing this transparency, in remembering one “represents a past phenomenally conscious experience of an event, and thereby represents a *non-representational awareness* of that event” (176).

outside'. Often when subjects are remembering, the spatial perspective taken in visual imagery is distinct from the perspective they know that they had within the original scene. For example, they may visualise themselves as though from the perspective of an 'observer' point of view. In these cases, it is natural (though perhaps not necessary (McCarroll 2018)) to think that the subject might be remembering truly but not remembering authentically.

The utility of the distinction between truth and authenticity does not require that the distinction is clean or exhaustive. For example, is accurately remembering the *look* of an object on a certain occasion a matter of truth or authenticity? Moreover, it is also not obvious that the distinction gets a grip in cases where one remembers having a headache or an itch (cf. McCarroll & Perrin 2025). And it is unclear how to apply the distinction in cases where what one remembers is a general event or an object (Openshaw 2022). Nonetheless, and whatever its merits, the distinction tracks an intuitive duality in the intentional character of remembering, one which has led to a substantial literature on accuracy in remembering that takes its lead in part from Bernecker's (2010) discussion (e.g., Fernández (2024); Dings, McCarroll & Newen (2023); Sant'Anna & Camillo (2025)).⁷

2.1 Alethism

According to what we might call *strong authenticity*, remembering must be both true and authentic to be accurate: "a mental state qualifies as a memory only if it accurately represents the objective reality and accords with the subject's initial perception of reality" (Bernecker 2017: 4). An alternative view, *weak authenticity*, would be that accurate remembering requires only authenticity, not truth.⁸ Others, however, have instead argued that accurate remembering requires only truth, not authenticity (Michaelian (2020: 137); Michaelian and Sant'Anna (2022)). According to these *alethists*, authenticity requirements on the accuracy of remembering are, despite their intuitive appeal, implausible and ought to be rejected.

⁷ In this paper we must set aside issues of accuracy in remembering dreamt events and other non-veridical experiences, and the theories which have been proposed to accommodate them (see, e.g., Michaelian (2024)).

⁸ This view appears to be endorsed by von Leyden (1961)

Before exploring some of the commitments of alethism, we will reconstruct the alethist's signature argument, as this will provide purchase on what is at stake in the debate. To do this, consider the phenomenon of boundary extension (Intraub & Richardson 1989). Participants who saw photographs of partial scenes tended to report having seen photographs of larger, encompassing scenes (Ibid.). The effect is one of many examples where memory appears to 'generate' representational content that was not included in one's original experience. This is, in part, due to how processes that subserve remembering rely on general schemata or models that contribute information about, e.g., the expected layout of a particular type of scene (e.g., Intraub et al., 1992). More generally, memory is thought to routinely mix information acquired first-hand with other information in reconstructing events in one's personal past. It is a ubiquitous feature of empirical research on these phenomena that no distinction between content that is 'remembered authentically' and 'merely inferred truly' is present. As Michaelian (2013) put it, "though boundary extension involves the agent remembering more of a scene than she actually saw, it is consistent with the accuracy of memory if the system's 'guesses' about the unseen portions of a scene are accurate" (2449). According to authenticists, of course, these constitute 'errors of commission'.

The alethist argument against authenticism is then roughly as follows. Since the majority of researchers think of these 'errors of commission' as adaptively beneficial, good-making features of a system one of whose principal functions is to represent the past accurately at an efficient cost, the alethist concludes that effects such as boundary extension "are not in fact errors: memory may aim at truth, but it does not aim at authenticity" (Michaelian 2020: 137). More precisely, the general line of argument is this (see Michaelian & Sant'Anna (2022: 853)). First, the arguer assumes that accurate remembering is not atypical. After all, it would be a theoretical cost if one had to uncharitably conclude that some cognitive system is typically in error. Second, they argue that an account of what accuracy in remembering consists in which would imply that accuracy *is atypical* must be incorrect. Finally, they argue that authenticism is such an account. Therefore, it is concluded, authenticism is false.⁹

Although this is not the place to evaluate the alethist's argument in depth, we think the burden of this argument lies in the third premise, in which it is said to be a commitment of

⁹ A structurally similar argument appears in De Brigard (2014). For relevant discussion and a tentative defence of authenticism (or 'preservationism') as one relevant dimension of accuracy evaluation, see Openshaw (2023).

authenticism that accuracy in remembering is not sufficiently common by the standards introduced in the first premise. Michaelian expresses the concern particularly strongly: “it is unlikely that retrieved memories are ever wholly accurate with respect to the corresponding experiences; it is likely, in fact, that they are often highly inaccurate with respect to them” (2020: 137). It is simply no commitment of authenticism that remembering is often or ever *wholly* accurate. Nor does complete accuracy seem any more achievable by the alethist’s lights. Does authenticism entail that remembering is *often highly* inaccurate? We are not sure why. Michaelian & Sant’Anna (2022) use the particular case of remembering from the outside. Even if remembering from the outside—or indeed boundary extension—were very common, spatial perspective is only one feature of an event representation.¹⁰ So it is not clear why inaccuracy in that respect alone should mean that one’s event representation is ‘highly inaccurate’.¹¹

2.2 Implications of alethism

Setting aside the arguments for the view, what are its implications? It is orthodoxy that the accuracy conditions of a mental state or process are intimately connected to its *content*.¹² One way of spelling this out is that instances of remembering involve *reference* to particulars, and therefore have *object-dependent* accuracy conditions (Dickie (2015: 254ff); Openshaw (in press)). What this means is that

¹⁰ One might object here and say that the change in spatial perspective will necessarily introduce different content and hence further inaccuracy in the memory representation (Liefke 2025). One sees one’s own face, for example. However, it is not clear why the content itself should be considered inaccurate. Alethists themselves acknowledge that observer memories may include seemingly accurate changes in content if one visually imagined such content during the original perceptual experience (Michaelian & Sant’Anna 2022: 840). Hence it might be that the visual perspective alone is inaccurate at least in some cases.

¹¹ Sant’Anna (2024: 16) has recently argued that alethists can accept that how one experienced an event often contributes to (in)accuracy. His reasoning is that experiences are simply a kind of event, so a view on which *remembering represents events* can accept that it represents experiences as a consequence. However, it is not clear why the point that remembering represents ‘events’, in this inclusive sense, is sufficient for alethism. Notice, for instance, that Sant’Anna’s (2024) view would be targeted by Michaelian & Sant’Anna’s (2022) *anti-authenticist* argument, rehearsed above. As we understand Sant’Anna (2024), the key issue seems to be whether authenticist accuracy conditions are first-order products of episodic memory or whether they require metarepresentational processes. Since such processing issues are arguably orthogonal to the primary debate, Sant’Anna may be considered an authenticist by our lights.

¹² There are no doubt alternative conceptions of the link between content and accuracy conditions, but what we call the orthodoxy is very much the dominant view (Siegel 2010; Schellenberg 2018; cf. Zahoun 2023).

when Reid remembers smelling the odour of the tuberose, he is remembering accurately if and only if *that very flower* produced such-and-such odour. When one is remembering, then, accuracy comes about in virtue of the particular referent having been a certain way.

These straightforward points about the relation between accuracy conditions and reference imply that alethists are committed not only to a claim about accuracy conditions but also to a claim about the content of remembering. Alethists must think that, when one is remembering, the referential content of remembering *just is* an objective event in one's personal past. Conversely, they must deny that the referential content of remembering is also partly constituted by one's *experience* of the event, so that the scope and character of how one experienced the event places constraints on what may count toward (in)accuracy.

This is not news to existing alethists. First, self-proclaimed alethists sometimes explicitly flesh out their view in terms of the claim that the content of remembering is only ever a past event (Sant'Anna 2024: 5). Second, alethists have been inclined to pair their view with simulationism (Michaelian 2016). Since simulationism commits one to the claim that "one can in principle [...] remember an entire episode that one did not experience" (2016: 118), they must in any case deny that the content of remembering in general concerns experiences. If the content of remembering, when things go well (i.e., when the underlying cognitive system is properly functioning), can in principle be an *unexperienced* event in one's personal past, then there is no reason to think that there is any special link between the content of remembering and the past experience of the remembering subject.¹³ Instead, when one is remembering, *what* one remembers must be a mind-independent chunk of the actual world: "since it does not (as standardly formulated) include a previous experience condition, [simulationism] *entails* alethism and is therefore incompatible with authenticism" (Michaelian & Sant'Anna 2022: 854). Indeed, given that simulationists take the proper function of the underlying episodic system to support reliability with respect to objective *events* in one's personal past (Michaelian 2016), we can expect that the outputs of that system, when it properly functions, *represent* events and do not thereby represent experiences.

¹³ Michaelian has since proposed a stronger view—radical simulationism—which denies that remembered events must be in the personal past of the remembering subject (Michaelian 2022). This view makes alethism an even clearer commitment. We set radical simulationism and its implications aside in this paper.

This brings us to a final pertinent commitment of alethism. If the content of remembering is not partly constituted by the past experiences of remembering subjects, what does this suggest about *episodic memory*?

Within the multiple memory systems model of declarative memory (Schacter & Tulving 1994), episodic memory is the hypothesised system distinctively involved in what we have here called remembering. Although episodic memory and semantic memory are interdependent (Greenberg & Verfaellie 2010; Renoult et al. 2019), episodic memory is tailored to support rich, imagistic, scene construction that characteristically draws on information from specialised ‘traces’ and produces outputs accompanied by a sense that the subject is bringing to mind first-hand knowledge of an event experienced in their personal past (Tulving 1972). Following work by the likes of Schacter & Addis (2007), the episodic system is now widely regarded as having as much to do with simulating future or possible events, or constructing multi-purpose scene- or scenario-representations (Hassabis & Maguire 2007; Cheng & Werning 2016), as it does with remembering the personal past (De Brigard 2014). For Michaelian (2016), there is no deep difference between the activity of the ‘episodic construction system’ when it is directed at events in the personal future versus events in one’s personal past. On this ‘continuist’ view (Perrin 2016), remembering is ultimately a form of imagining. Whether the episodic construction system is engaged in remembering or in imagining, it draws on the same store of information.

If a paradigmatic activity of the episodic system is remembering, and if alethism is right, then we should expect that the system stores information that primarily tracks features of objective events rather than of how we experienced those events at the time. Insofar as the episodic system comprises some privileged store of information, that is, we should expect it to have the function of enabling the system to accurately represent at an efficient cost. By analogy, there is a sense in which a “primary function of a perceptual system is to perceive”, and since “[p]erception is veridical representation”, “[f]ailure to produce veridical representation is a failure to fulfil that function” (Burge 2010: 310). Assuming that the proper functioning of the episodic system is tied to its reliability in this sense (i.e., its tendency to produce accurate outputs (Michaelian 2016)), alethists must think that the episodic system has the function of accurately representing events in our personal past but not how we experienced them. After all, boundary extension and observer memory allegedly show that how we experienced events is simply accuracy-irrelevant.

To be clear, our assessment of the alethist position is not that they claim the episodic system does not or cannot store phenomenal or qualitative content or that the outputs of remembering are bleached of all experiential character. No one would wish to make such an implausible claim. Rather, the primary claim concerns *function* and *accuracy*: the experiential character of one's past awareness of a remembered event, whether it is 'relived' or not, is not something the episodic system has the function of getting *right*. The basic issue is the normative standard (or, more plausibly, one dimension of the standards) against which remembering succeeds or fails. We take this to be the most charitable construal of alethism, and it is this reading with which we principally engage in what follows.¹⁴

In this section we have argued that alethism about the accuracy conditions of remembering is plausibly committed to claims about the content of remembering (namely, that in remembering *what* one represents is just an external event framed in objective terms) and the content of episodic memory (namely, that it stores information relating just to such events rather than also to how we experienced such events). In §4 we will argue that these claims are in tension with dominant and recurring ideas about the role of experience in providing an epistemic basis for certain forms of imagination (§3).

3 Experience, memory, and imagination

Simplifying Jackson's (1982) tale to suit our topic (and following Paul (2014: 9)), consider Ordinary Mary, who has lived her life in a monochrome environment but has learned what science is able to offer regarding colour vision in humans. Despite her knowledge, Mary does not *know 'what it's like'* to undergo an experience of seeing red. Correspondingly, there is a sense in which she cannot sensorily imagine or visualise undergoing such experiences either. This is something she can only learn upon leaving her room and going out into the world of colour. Book-knowledge and the testimony of friends are not enough to enable her to know what it is like to experience seeing red. To know what it is like, Ordinary Mary must experience it for herself.

While Jackson's (1982) original thought experiment was intended to show something surprising about the nature of consciousness, this simple case illustrates something very familiar:

¹⁴ We are grateful to an anonymous reviewer for encouraging us to clarify this.

experience is perhaps the only way of coming to know, and of acquiring the ability to correspondingly imagine, certain experiences. In this section, we clarify this intuitive connection between experience and the scope of imagination, before arguing that we should expect that *episodic memory* comprises, among other things, a privileged store of experiential knowledge that supports and explains the link between experiences and imaginings of the relevant sort. We will then in §4 be in a position to identify the tension between the themes of this section and alethism.

3.1 Experience and the epistemic limits of imagination

The first point of clarification concerning the intuitive link between experience and imagination is the role of knowledge. The claim is not that Ordinary Mary is unable to imagine what it's like to undergo an experience of seeing red until she has had the experience for herself. It is that she cannot *know* what it's like to undergo an experience of seeing red until she has had the experience for herself. And, as a result, her imaginative efforts, as good as they might be, do not qualify as a form—or the manifestation—of knowledge.¹⁵ After all, Ordinary Mary can perfectly well understand what colour vision is, and the meaning of the term ‘red’, and so she can visualise whatever she likes and thereby imagine *poorly* or *inaccurately* what it's like to undergo an experience of seeing red (Vendler 1984; cf. Kind 2024). As Paul puts it,

Unless you've had the relevant experiences, what it is like [...] is, in a certain fundamental way, inaccessible to you. It isn't that you can't imagine something in place of the experience you haven't had. It's that this act of imagining isn't enough to let you know what it is *really* like (2014: 8).

Or, as Crane has suggested, “instead of an unsound argument against physicalism, we have a sound argument which identifies a particularly important form of knowledge” (2019: 31); specifically, “experiences have the following [...] property: *they are such that you cannot know what they are like without having had them*” (Crane 2019: 29).

¹⁵ At any rate, her imagining lacks some positive epistemic status. Others may prefer to instead say that Ordinary Mary lacks justification or some other epistemic property.

So suppose that Sally has never smelled a skunk before, but due to some magic spell or blow to the head she is suddenly capable of producing imagery in herself that is precisely of the right olfactory experiential quality. Can she now accurately imagine what it's like to smell skunk? We may suppose she can. As Lewis (1988: 264) put it, "the casting of a spell could do to you exactly what your first smell of skunk would do". But, equally, there is nevertheless something missing from what Sally can now do: there is an *epistemic* deficit in Sally's ability. The reason one needs experience to imagine what it's like to see redness or to smell skunk is not because it is (meta)physically impossible to do so without experience. Rather, experience is the only path to attaining *knowledge of* what it is like to experience these things, at least given the way the world currently is. As Lewis went on to say, "We might quibble about whether a state produced in this artificial fashion would deserve the *name* 'knowing what it's like to smell a skunk,' but we can imagine that so far as what goes on within you is concerned, it would differ not at all" (264). Our point is that the crucial link between experience and the scope of imagination is epistemic in character, not just a matter of 'what goes on within you'.

The thinking that underpins this orthodoxy has recently crystallized in the notion of *transformative experience* (Paul 2014; cf. Ullmann-Margalit 2006). A transformative experience is an experience that is "both radically new to the agent and changes her in a deep and fundamental way" (Paul 2015: 761). Such experiences can be *epistemically* transformative by "giving you new information in virtue of your experience", or they can be *personally* transformative, "changing how you experience being who you are" (Paul 2014: 17). These two kinds of transformation can come apart (Ibid.), and it is the former that interests us here.

Epistemically transformative experiences, such as Ordinary Mary seeing red for the first time, illustrate two things about the epistemic limits of imagination. First, prior to having such experiences, no amount of imagining *can put one in a position to know* what it is like to undergo them. Second, only experiential knowledge can put one in a position to remember experiences *or to imagine undergoing them anew* in different circumstances or temporal contexts. So imagining is not enough to get us experiential knowledge. And, once we have such knowledge, *the scope of imagining itself* is broader.

A second point of clarification concerns the *content* of the knowledge that underpins the intuitive link between experience and the scope of imagination. In particular, the knowledge is

plausibly *about* experience. What does Ordinary Mary learn? Intuitively, she learns something about experiences of the relevant type, namely what it is like to have them. More specifically, she comes to know the phenomenal character of the sort of visual experience one has when seeing redness (in ordinary conditions). As Nemirow put it, one understands the experience of seeing red, or knows what it's like, if one has "an ability to place oneself, at will, in a state *representative of the experience*" (1980: 475; emphasis added). Paul puts it a bit more strongly, suggesting that what Ordinary Mary gains is knowledge about the intrinsic nature of such experiences (2014: 15). What most would agree on in spirit is that an important part of the knowledge acquired from undergoing a new experience is knowledge *about* experiences of the relevant type: "[once you] learn what it's like, you can afterward remember the experience you had. By remembering how it once was, you can afterward imagine such an experience" (Lewis 1988: 286).

In observing that Ordinary Mary learns something about experience, we do not deny that she might learn other things too. Hoerl (2018b) distinguishes two kinds of experiential knowledge: *phenomenal* and *qualitative*. Phenomenal knowledge is knowledge about the phenomenal character of particular, token experiences. Qualitative knowledge is instead "knowledge of what, in general, it is like to have an experience of a certain type" (Hoerl 2018b: 156, n. 17). Citing Campbell, Hoerl notes that when Ordinary Mary 'steps into the blaze of colour', she learns something about the world, "about characteristics of the objects around her: their colours" (Campbell 2014: 42ff). According to Hoerl, "retaining this type of knowledge, too, plausibly requires the ability to call up memory images of the relevant qualitative features, an ability that we acquire when we encounter them in experience" (2018b: 156). What matters for us is simply that the acquisition of *phenomenal* knowledge through experience, *ceteris paribus*, is enough to constitute an epistemic transformation.¹⁶

A third and final point of clarification. How should we individuate types of experience? If I never tasted *this* particular strawberry, which I have just picked, I can substitute-in my knowledge of what it was like to taste *that* strawberry gathered from the same plant earlier, and so surely I can still imagine what it will be like to experience the taste of the new strawberry? Yet, if we adopted a sufficiently fine-grained method of individuating types of experience, our discussion above

¹⁶ Martin (2002) has argued that the (imagistic) imaginings with which we are concerned are constitutively imaginings of experiences (cf. Langland-Hassan (2025)). His argument could therefore be used in defence of the claim that one dimension of the knowledge gained through firsthand experience is knowledge *about* experience.

would suggest that I cannot, and therefore I am incapable of engaging in the relevant type of experiential imagining. Of course, there is no reason to exclusively adopt such an arbitrary means of individuating types of experience. What matters are whether the experiences are relevantly different from those one has had before (Paul (2014: 26); Kind 2020). Fine-grained experiences are not new in an interesting sense; we need a more coarse-grained notion of new experience: “epistemically transformative experiences involve experiences of new and different, reasonably natural experiential kinds” (Paul 2014: 11, n. 11; see also Lewis (1988: 265)).

Before reconnecting these themes with episodic memory, we pause to note that the epistemic and temporal priority of experience has recently come under pressure in a way that provides an appropriate segue. Even if we have never had a certain type of experience, we might, through imagination, be able to come to know what the experience would be like. According to Kind (2020; 2021a; 2021b), one can use the process of *imaginative scaffolding*, drawing on previous experiences and imaginatively piecing them together to gain knowledge of what it would be like to have a wide range of new experiences. Through imaginative scaffolding, we imagine ‘additions, subtractions, and modifications’ (Nagel 1974: 439) to our previous experiences, and can thereby gain experiential knowledge.

Nevertheless, it is important to note the precise point of disagreement here. Both sides recognise that we can use imaginative scaffolding to imagine *some* new experiences. For example, one may be able to imagine what it is like to take a new hiking trail *if* one has enough experiences of previous (relatively similar) hikes to draw on. The difference between epistemically mundane new experiences and epistemically transformative experiences is that in the former but not the latter we have enough ‘experiential background to get an appropriate toehold for the imagination’ (Kind 2020: 136). For Paul, this difference in experiential background carves out the class of epistemically transformative experiences. Kind thinks that we can, through imaginative scaffolding, get a grasp of experiential knowledge for a broader range of novel experiences, including many that are apparently epistemically transformative. In effect, this debate between Kind and Paul hinges quite crucially on *memory* and our (in)ability to call upon experiential knowledge in imaginative scaffolding.¹⁷

¹⁷ There are a number of authors who discuss the role of memory in underpinning our ability to imagine novel experiences (e.g., Peacocke 2020; Blackwell 2020; Boisserie-Lacroix and Inchingolo 2021). Ferran (2023) makes

3.2 The epistemic limits of imagination and episodic memory

The epistemic limits of imagination seem to depend on the limits of our experiential knowledge. There is an implicit claim about memory in there. Not every new experience, in the fine-grained sense, will count as epistemically transformative. The reason is that we can call upon our experiential knowledge and imagine them. This is part of the insight behind Lewis' (1988) claim that when we learn what an experience is like through having it, we gain certain abilities to remember or to imagine undergoing it. Indeed, if Kind is right, even some supposedly epistemically transformative experiences will be accessible, by drawing on our memories of similar experiences, and imaginatively combining them to furnish us with new experiential knowledge. The process of imaginative scaffolding involves drawing on previous experiences, and, again, crucially depends on memory. As Lewis put it, it is “common ground” that “experiences leave distinctive traces in people, and that these traces enable us to do things” (290), such as to visualise redness after seeing it for the first time. What kind of memory might be involved here? The natural answer is episodic memory. As Hoerl puts it:

the distinctive way [...] episodic memories put us in touch with particular events [...] is rooted in the fact that it is memory for the particular epistemic transformation we underwent when we experienced the event and learned what it was like to experience it—a type of knowledge we could only obtain on that occasion (2018a: 322).

Part of Hoerl's suggestion is that what distinguishes episodic memory from other forms of declarative memory is that it enables us to remember what it was like to undergo particular experiences in such a way that we manifest the epistemic transformation afforded. In other words, episodic memory involves precisely the kind of experiential knowledge that is at play in considering the epistemic bounds of imagination. We can imagine new fine-grained experiences precisely

an interesting case that we can imagine emotions not previously experienced. She is particularly explicit that memory is a crucial component of imaginative scaffolding. See also various chapters in the edited volume by Vendrell Ferran and Werner (2025), especially Cath (2025), Werner (2025), Vendrell Ferran (2025), Maibom (2025), Reuter & Vogel (2025), and Williamson (2025).

because episodic memory “preserves a kind of [phenomenal] knowledge that only experience itself provides us with” (Hoerl 2018b: 154). And transformative experiences are experiences of a type for which one lacks, in episodic memory, the experiential knowledge that could be employed in imaginative scaffolding.

To help illustrate the importance of episodic memory in these cases, consider the case of pain experience. As Vendler put it, “We can imagine being in pain because we have felt pain in the past” (1984: 55). Yet things may not be so simple. Montero (2020) argues that those who have experienced giving birth lack memory of the qualitative aspect of labour pains:¹⁸

With respect to understanding the *feeling* of labor pains, experience leaves you no wiser than someone who has never been pregnant. When it comes to pain qualia, experience, it seems, fares no better than lessons (Montero 2020: 116).

Montero’s point is that someone who has undergone the pain of giving birth and someone who has not are actually on an equal epistemic footing to imagine the experience of undergoing labour—to know what the feeling of such pain is like. As Paul puts it, if Montero is right, then it is not only the first time that giving birth is transformative (2020: 152). For our purposes it does not matter whether Montero is right that there is something special about our (in)ability to imagine the ‘fundamental *ouch*’ quality characteristic of pain experiences (or whether the right explanation might appeal to the neural architecture involved in pain (De Brigard 2020: 142–143)). What matters for us is the broader point that, if we lack episodic memory of the experience (whether that picks out a specific occasion or instead a series or type of repeated event), then we lack the knowledge of *what it was like* to undergo that experience. Without episodic memory to track our experiences, every painful experience would, in effect, be epistemically transformative.¹⁹

¹⁸ This point is complicated slightly because Montero (2020) thinks there is a distinctive form of ‘qualitative’ memory for phenomenal properties that is not equivalent to episodic memory, and that it is this form of memory we lack with respect to pain experience. See Coninx (2020) and De Brigard (2020) for compelling counter-arguments. We return to the issue of whether it is really *episodic* memory that is needed to account for retained experiential knowledge in §5.

¹⁹ Although we are inclined to think that episodic memory is what plays a profound role here, our argument will not strictly require this assumption. In §5.2, we indicate that a weaker claim about episodic memory is sufficient to ground concerns for the alethist.

4 The argument, summarised

Our discussion in §§2–3 sets up a conflict between alethism and a set of intuitive and widely held claims in the transformative experience and imagination literature. What happens if the alethist view of episodic memory is correct? It would seem that if episodic memory fails to provide us with experiential knowledge, then the range of transformative experiences would be considerably broader. Without experiential knowledge of what it was like to see red, or taste a raspberry, or go on a hike, each and every time we undergo such an experience will, epistemically speaking, be just like experiencing it for the first time. This seems obviously incorrect. The debate about the epistemic limits of imagination, and the precise bounds of epistemically transformative experiences, gives us reason to think that episodic memory represents our past experiences.

To make our argument precise, we provide an explicit statement of the conflict below.

P1. Experience is necessary to enable certain imaginings that qualify as forms of knowledge (or that, at any rate, have some positive epistemic status).

P2. The imaginings at issue in (P1) represent experiences (and the phenomenal, perspectival, affective, or agential properties which characterise them).

P3. There must be some privileged store of experiential knowledge that supports and explains the link in (P1) between past experiences and the imaginings they make epistemically available.

P4. Episodic memory is the best candidate for comprising this privileged store of experiential knowledge.

C1. Therefore, we should expect that episodic memory includes a privileged store of experiential knowledge that supports and explains the link between past experiences and the imaginings they make epistemically available. (From (P1)–(P4).)

P1*. Alethism is true. In other words, only events and their constituents contribute to the (in)accuracy of purported instances of remembering. The experiential character of one's past awareness of such events is irrelevant to the accuracy of remembering.

P2*. There is a tight link between accuracy conditions and content: if a mental state M is (in)accurate wholly in virtue of whether x is F , there is no y distinct from x that M is also about.

Intermediate conclusion. In purported instances of remembering, one represents only events and their constituents, not the experiential character of one's awareness of such events. (From (P1*) and (P2*).)

P3*. If in remembering one represents only events and their constituents, then if episodic memory has any privileged store of knowledge or information, it will have the function of tracking properties of events and their constituents.

P4*. If a system has the function of tracking properties of events and their constituents and not the experiential character of one's awareness of those events, it is unlikely to offer a privileged store of experiential knowledge that supports and explains the link in (P1).

C2. Episodic memory is unlikely to include a privileged store of experiential knowledge that supports and explains the link between past experiences and the imaginings they make epistemically available. (From (Intermediate conclusion), (P3*), and (P4*).)

Pulling all this together: we have a tension. Something must go, for (C1) and (C2) are in conflict.

5 Responses

How might the tension illustrated in the previous section be resolved? Although we think that, all things considered, the least costly reply is to reject alethism, we do not mean to provide a knock-down argument for that assessment. So in the course of briefly exploring these responses we point out the particular burdens that each incurs, leaving it open whether future work will ultimately cast some of these burdens in a more positive light and render an alternative, alethist-friendly response the most compelling.

We do not consider the rejection of each and every premise here. In particular, we take it that we said enough in §3 to make (P1) sufficiently compelling.²⁰ Concerning (P3), we note that

²⁰ Alethist simulationists also talk this way. Michaelian (2016: 98) approvingly quotes Hesslow: “[e]ven when we are imagining things that we have never experienced, we are using remembered experiences as building blocks” (2012: 75–76).

while some may not wish to speak of a store of ‘knowledge’ (Werning 2020), or of a store of contentful representations (Michaelian & Sant’Anna 2021), all that matters for our argument is that the ability afforded by experience (in (P1)) must have some categorical basis. (P1*) is simply a statement of alethism. (P2*) and (P3*) were motivated in §2.2. We therefore focus our discussion on routes and ramifications of rejecting (P2), (P4), and (P4*).

5.1 Denying (P2)

Is it right that *experiences* are what is represented in the imaginings made available by an epistemically transformative experience? One might worry, to quote Evans (1982), that “[w]e no more have, in memory, information that is primarily about our past experiences than we have, in perception, information which is primarily about our present experiences” (Evans 1982: 240). Perhaps an alethist could suggest that in remembering one represents events, and insofar as imaginings of the relevant kind draw on the same store of information, this information also concerns qualitative features of objects, properties, event types, etc. It does not concern phenomenal features of one’s experiences (or types of experiences) of those things.²¹

We think this move would rest on a confusion about the notion of experience. We are not suggesting that memory only, or even ever, retains knowledge of some inner, Cartesian facsimile of the events in our personal past. Rather, it retains experiential knowledge; knowledge which, when activated, represents *events and objects* (etc.) *because* it represents experiences which are themselves partly constituted by one’s awareness of those events and objects. What seemed to be worrying Evans was a kind of internalism. But neither (P2) nor authenticity has any such commitment.²²

5.2 Denying (P4)

²¹ Another way to frame (P1) and our argument would be in terms of the distinctive *format* of representations made available by experience, rather than their content. We must leave this possibility for future discussion.

²² Perhaps another way to apply pressure would be to insist on the necessary intentionality of experience, such that experiences themselves are never candidate objects of remembering or imagining given that they are always and everywhere skull-bound vehicles with content that represents the world as being a certain way (e.g., Copenhaver (2024: 29)). While considering this line of reply would take us too far afield here, we think the burden rests on such neurorepresentationalists to make their grand case (cf. Barkasi & Openshaw 2024).

If we are to underwrite the claim that experience is sometimes required for corresponding imaginings to qualify as forms of knowledge, there should be some distinctive means of retaining what experience teaches that explains why it is *not* typically possible to acquire such an ability by other means (e.g., via testimony). In §3.2, we echoed the orthodoxy that the *episodic* system is the best candidate here. As Burge has recently put it, “[w]hat distinguishes episodic memory is that it retains how the past-perceived particulars were perceived on specific occasions”, so that some “of the attributives are retained from a perceptual episode” (Burge 2024: 619). Note that there is nothing anti-constructivist about this suggestion. Indeed, that episodic amnesics also lack much of the ability to imagine as to remember undergoing certain experiences—e.g., relaxing on a beach (Hassabis & Maguire 2007)—suggests that an episodic system underpins both capacities. While authenticists can simply say that the same store of experiential knowledge retained in the basis of remembering is what explains the epistemic link in (P1) between experience and imagination, the alethist must offer some alternative story. Note, that episodic memory is involved does not mean one must ‘relive’ a whole, specific event from one’s personal past whenever one remembers how redness looks (De Brigard 2020: 140). Moreover, it is compatible with our argument that semantic memory also plays an important role, particularly if some items of semantic memory abstracted from first-hand experience might not be the sort of thing one could easily learn other than through experience.

Yet this might seem to give rise to an objection. Must it really be *episodic* memory that comprises the privileged store of experiential knowledge required by (P3)? Could it not often be that semantic memory resources underpin our capacity to experientially imagine? Might it even sometimes be that semantic memory resources alone *suffice* for us to visualise redness or auditorily image a lion’s roar? If decontextualised information that results from semanticisation can comprise a form of experiential knowledge, then while episodic memory might be an excellent candidate, it is not *uniquely best*.²³

We do not wish to adjudicate this live empirical issue here, and we also do not need to do so. If the objection is going to help the alethist escape our argument, they need to establish more than that it is an open question what semantic memory resources have the capacity to store. The

²³ We thank an anonymous reviewer for prompting us to address this objection.

alethist must demonstrate that whatever role memory *does play* in underpinning our ability to retain experiential knowledge, this role is insufficient to give the representations that feature in remembering authenticist accuracy conditions. This is what we think is implausible.

Let *R* denote whatever cognitive resources subserve remembering: the episodic system narrowly construed, the episodic system together with semantic memory, or some other arrangement again. What our argument strictly turns on is a *parity-of-resources* claim: whatever *R* is, *R* also largely subserves the imaginings at issue in §3. This parity is not a commitment we are imposing on alethists from the outside. It falls out of the continuist picture that is alethism's natural home (§2.2). On continuism, remembering and analogous imaginings draw on a common construction system. The alethist therefore already grants that *R* is largely shared across the two activities. Indeed, they may be read as suggesting that *R* is exactly shared across them.

With the parity claim in hand, our argument is able to proceed without specifying the neurocognitive basis of experiential knowledge. §3 established that *R*'s role in the relevant imaginings constitutively involves its capacity for the retention of experiential knowledge (or information), and this is why experience is required for such imaginings. Experiential-knowledge-retention is a feature of *R* itself. Given the parity claim, the alethist would need to explain how *R* constitutively supports the retention of experiential knowledge in imagining but where this experiential-knowledge-retention is just *accuracy-irrelevant* when *R* is deployed in remembering. Our suggestion is that the very system(s) that produces the representations whose accuracy conditions are at issue in the alethism-authenticism debate is the same system(s) whose role in imagining the §3 considerations show require experiential-knowledge-retention. So while we welcome the idea the semantic memory may have a bigger role to play in grounding, or scaffolding, at least some portion of our experiential knowledge, this observation does little to help the alethist's case. What is crucial to our argument need not be episodic memory *per se* but the observation that whatever grounds the epistemic role of experience in imagining also grounds a dimension of accuracy evaluation when deployed in remembering.

5.3 Denying (P4*)

Finally, the alethist need not claim that knowledge about past experiences is *never* retained. Yet if episodic memory functions to enable accurate representation of personal past events but not how we experienced those events at the time, the extent to which it does comprise such knowledge is a sub-optimal use of resources. A potential reply here might gesture towards an intertwinement or interdependence of past experiences and the past events experienced, so that in a sense having the resources to enable accurate representation of events broadly suffices to enable accurate representation of how one experienced them. But in that case, why wouldn't alethists endorse authenticist accuracy conditions in the first place? The interdependence of experiences and events experienced is something strong authenticists can insist upon, because they do not need to disentangle them in stating their view. Indeed, we think of this as a major advantage of the view. It is the alethist who owes us an account of the putative 'event-experience' distinction. Any way of articulating such a distinction looks destined to undermine the present route to resolving the tension. In other words, for the alethist to make this move is in tension with their signature argument that authenticist accuracy conditions are *overly demanding* and therefore implausible.

An initially more promising version of this line of objection instead goes as follows. While experiential knowledge is retained, this is never anything more than a *byproduct*. Let us again adopt the convenience of using *R* to denote the cognitive resources that subserve remembering. According to this line, the function of *R* is to enable accurate representation of events in the personal past; any experiential knowledge it happens to retain along the way is incidental to that function in much the way that a trait can reliably produce some effect without that being among the things the trait is *for*. Consider an analogy.²⁴ Let us suppose the function of fever is to raise body temperature so as to impair invading microorganisms. Its function is not to restore the organism to health. After all, fever often sacrifices the organism's health. That fever is so often followed by a return to health does not suffice to make the restoration of health one of its functions. That is only a characteristic byproduct. Now, the alethist may say: that *R* retains experiential knowledge, and that this retention is so often accompanied by our capacity to imagine the experiences in question, does not show that experiential-knowledge-retention is among the proper functions of *R*. It may instead be a characteristic byproduct of a system whose function is

²⁴ We thank an anonymous reviewer for prompting us to address this objection and for offering the analogy.

merely event-accuracy. And if so, the alethist can grant the retention while denying (P4*) and the inference to (C2).

While we think this is a natural reply for the alethist (given what was said in §2.2 about our construal of their position), we are sceptical that a byproduct could underwrite the link at issue in (P1). Restoration of health is merely a byproduct in part because it is not reliably secured: fever discharges its function whether or not health is restored, and indeed sometimes at the cost of health. A byproduct is in a sense *detachable* from the operation of a function. It is the kind of thing that can come apart from the trait's exercise without it thereby failing to do what it is for. But the link in (P1) is crucially not like this. The connection between having undergone an experience and being able to imagine, in a way that amounts to the manifestation of knowledge, an experience of that type is not a fortuitous accompaniment to remembering that might equally have been absent. As the literature on transformative experience illustrates, it is systematic and central to the epistemic role that experience plays in our lives. A capacity that exhibits this profile is not a byproduct: it exemplifies the marks by which we distinguish what a system is for from what merely accompanies its operation.

In effect, the alethist who takes the byproduct route faces a kind of dilemma. On the first horn, experiential-knowledge-retention is detachable from the exercise of R in the manner characteristic of genuine byproducts. But in that case it is too unsystematic to underwrite (P1), and the epistemic facts (§3) go unexplained. On the other horn, experiential-knowledge-retention is not so-detachable. But in that case we can explain the epistemic facts only because it is not a byproduct at all; it is a function-level feature of R, and the path to resisting (P4*) is a dead-end. There is no 'middle way' by which to secure that retention is both systematic enough to do the epistemic work and accidental enough to leave alethist accuracy conditions in place.

6 Conclusion

We have shown that if alethism were correct, then venerable and widely accepted claims about the role of experience in broadening the epistemic scope of imagination would be jeopardised. If alethism were correct, the range of epistemically transformative experiences we undergo would be unrecognisably broad. Rather than concede either such claims or our best account of what

underwrites and explains their truth, we conclude that alethism is incorrect. While a detailed assessment of where the apparent arguments in favour of alethism break down is beyond the scope of this paper (though see our remarks in §2.1), it is enough if we have shown here that there are substantial grounds for doubt. We also hope to have highlighted some deep interconnections between memory and the imagination and transformative experience literatures worthy of future investigation. Not only is experience often the best teacher, to remember best is to remember authentically.[†]

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