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## **Episodic memory and theory of mind: A connection reconsidered**

Christoph Hoerl

### Abstract:

In the literature on episodic memory, one claim that has been made by a number of psychologists (e.g., Perner & Ruffman, 1995; Suddendorf & Corballis, 1997; Wheeler, Stuss, & Tulving, 1997), and that is also at least implicit in some of the accounts given by philosophers (e.g., Dokic, 2001; Fernández, 2008; Owens, 1996), is that being able to recollect particular past events in the distinctive way afforded by episodic memory requires the possession of aspects of a theory of mind, such as a grasp of the relationship between one's present recollective experience and one's own past perceptual experience of the remembered event. In this paper, I re-examine what connection, if any, there is between episodic memory and theory of mind. I first criticize the dominant way in which this connection has been construed theoretically, which – perhaps influenced by other aspects of theory of mind research – has sought to link the possession of episodic memory primarily with a grasp of the idea of representation, or the idea of informational access. I then argue for a novel, alternative, way of connecting episodic memory and theory of mind, which focuses on the category of *an experience*, and on the role a grasp of that category might be seen to play in episodic recollection. In doing so, I also draw attention to a dimension of our understanding of the mental which remains as yet underexplored in the literature on theory of mind.

## **Episodic memory and theory of mind: A connection reconsidered**

According to G. E. M. Anscombe (1976, p. 15), what she calls “the peculiar philosophical concept of ‘experience’” makes its first historical appearance in a passage in Plato’s *Theaetetus* that is in fact not directly concerned with the nature of perceptual experience itself, but rather with the nature of memory. The context, more specifically, is the question Socrates puts into Protagoras’s mouth as to whether “in remembering what he has experienced, a man is having the same sort of experience as he had when he was experiencing what he now remembers” (ibid.).<sup>1</sup>

My main focus in this paper will be on memory – and specifically the type of memory most relevant to Protagoras’s question: the capacity to consciously recollect particular events from one’s own past, typically referred to as *episodic memory* (Tulving, 1985). However, questions about the concept of experience, and about what is involved in grasping that concept, will be central to my discussion too. I will argue that there is an aspect of our very understanding of the nature of experience that is tied up in a crucial way with the ability to recollect events in episodic memory, in so far as episodic memory distinctively involves the retention of knowledge of what it was like to experience the remembered event – or, as I will also put it, knowledge of the particular epistemic transformation that experiencing that event consisted in. Thus, perhaps it is more than just a historical accident that the first explicit mention of the

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<sup>1</sup> The original is at *Theaetetus* 166b1-4. This translation appears to be Anscombe’s own. The original Greek in fact allows for more than one reading, which affects the question as to what exactly the argument is that Socrates portrays Protagoras as putting forward. See Rowe, Welbourne, and Williams (1982) for discussion.

concept of experience that we know of should be found within a philosophical discussion of memory.

That episodic recollection distinctively involves ‘re-experiencing’ the past – re-living one’s original experience of the remembered events as they happened, in at least some sense – has been a common theme in the recent literature on the topic (J. Russell, 2014; Wheeler et al., 1997). So has been the idea that, at the same time, there is an important difference between one’s original experience and one’s recollection of it, in so far as the latter only involves *representing* the original experience, rather than actually having it all over again (Martin, 2001). My question is to what extent ideas such as these imply that episodic memory is bound up with a grasp of mental concepts, as it has been claimed by some psychologists (e.g., Perner & Ruffman, 1995; Suddendorf & Corballis, 1997; Wheeler et al., 1997) and, at least implicitly, by some philosophers writing about memory too (e.g., Dokic, 2001; Fernández, 2008; Owens, 1996). In so far as it involves a distinctive way of representing one’s own past experiences, should episodic recollection be seen to involve a grasp of a ‘theory of mind’ and the capacity to conceptualize certain aspects of one’s own mental life as such, and, if so, what sort of knowledge about the nature of the mental is manifest in episodic memory?

I will start by taking a critical look at Josef Perner’s work on episodic memory – which contains perhaps the most influential existing attempt at connecting episodic memory with the possession of theory of mind abilities. Drawing on some additional ideas emerging in Perner’s own more recent writings on episodic memory, I will then sketch an alternative way of conceptualizing episodic memory, and in particular the knowledge episodic memories embody, which also provides for a new way of framing questions about potential connections between episodic memory and theory of mind

abilities. I will finish by highlighting a specific set of explanatory questions – concerning in particular the *particularity* of episodic memories – which I suggest can be addressed by a conception of episodic memory on which the capacity to episodically recollect past events involves a grasp of the concept of an experience. As I will suggest, some of the existing philosophical literature on phenomenal consciousness holds within it the materials for developing an account of what such a grasp consists in, and of the precise role it might play in accounting for the particularity of episodic memory.

### 1. Perner on episodic memory and theory of mind

The idea that episodic recollection recruits theory of mind capacities has been a key theme in Josef Perner's work on the development of episodic memory (Perner, 1991, 2000; Perner, Kloo, & Gornik, 2007; Perner, Kloo, & Stöttinger, 2007; Perner & Ruffman, 1995). Perner and his collaborators see themselves influenced by conceptions of memory such as Locke's, who speaks of memory as "a power [possessed by the mind] in many cases to revive perceptions which it has once had, with this additional perception annexed to them, that it has had them before" (Locke, 1690 bk. II, ch. 10, §2). Perner takes this to imply that memory, at least of the kind Locke has in mind, involves theory of mind abilities, in so far as it involves the ability to grasp that certain sorts of relations obtain between one's present mental state and a past experience.

There are two particular kinds of theory of mind abilities that Perner thinks are required for episodic memory, which he refers to as

- a) the ability to “understand that [one’s] recollective experience represents the earlier experience” (Perner, Kloo, & Gornik, 2007, p. 472).
- b) the ability to “understand that [one’s] present memory of the event originates in [one’s] earlier witnessing of the event” (ibid.), reflecting a “direct [...] informational access” (Perner, 2000, p. 300) to the event.

The common motivation behind both of these claims, I believe, is ultimately the thought that the subject herself must be able to *distinguish* episodic recollection from certain other mental states – a consideration also explicitly motivating Owens’ (1996) similar ‘Lockean’ theory of memory. In particular, the thought seems to be that genuine episodic remembering requires the subject to be able to distinguish episodic recollection from other ways of knowing about the past. For instance, there is clearly also a great deal of knowledge about past events that we have acquired through the testimony of others and retained in what is typically referred to as semantic memory. But this is knowledge of the past of a different type from that involved in episodic memory – retrieving that knowledge does not involve recollecting those events in the way that retrieving episodic memories does.

What does it mean to say that episodic remembering requires the ability to distinguish episodic recollection from other ways of knowing about the past such as this? Note that it would be wrong simply to assume that, in order for a subject to be able to engage in episodic recollection rather than just retrieving other kinds of knowledge she has about the past, she has to understand something about the nature of episodic recollection itself, and how it differs from those other ways of knowing about the past in virtue of its representational and causal structure. For it is not generally true that simply being in a mental state of a particular kind requires such a

theoretical understanding of the nature of the mental state one is thus in and of what makes it different from other types of mental state (on this, see, for instance, Perner's own work on pretense (Perner, Baker, & Hutton, 2004)). Thus, we need a reason for thinking that there is something special about episodic memory that means that a requirement of this type holds for it.<sup>2</sup>

What really seems to lie behind Perner's claims about the involvement of theory of mind abilities in episodic memory, and what I think is meant to supply such a special reason, is an epistemic consideration, having to do with the question as to how we can tell the mental state of episodically recollecting apart from others. This also seems to be suggested by Perner's endorsement of the following argument originally put forward by Jérôme Dokic (2001):<sup>3</sup> It is clearly possible, Dokic argues, for me to have knowledge of a particular past event *without* knowing whether this is based on my own experience of the event in question, or whether it is based on having been told about the event by others.<sup>4</sup> It is also of course possible, he goes on to point

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<sup>2</sup> Russell (1921, p. 179) and Broad (1925, p. 240) already warn against the kind of danger of overintellectualizing memory at issue here. However, if there is some overintellectualizing tendency that needs to be cautioned against here, this raises the question as to what it is specifically about the case of (episodic) memory that explains why this tendency arises. If, as I argue in section 3, there is a crucial role that a grasp of mental concepts does play in episodic memory, this can go some way toward answering this question.

<sup>3</sup> See, e.g., Perner, Kloo, and Stöttinger (2007). In more recent work, Dokic himself seems to advocate a somewhat different approach to episodic memory, see Dokic (2014).

<sup>4</sup> In this context, Dokic refers to a passage from the paper by Anscombe that I already quoted from at the beginning of this paper, in which she writes: “[W]hen Goethe says at the beginning of his autobiography that he is going to tell us of things belonging to his childhood, of which he does not know whether he remembers them or was told them, there is nothing extraordinary about it. It seems

out, for me to have knowledge of this kind of a past event and then be told by others that the only way I can know about the event is through my own personal experience of it. Yet, this does not suddenly turn my knowledge into an episodic memory of the event. That is to say, a causal dependence of one's present knowledge of an event on one's own past experience of it, plus the additional knowledge that it does thus causally derive from one's own past experience are not sufficient for episodic memory. What Dokic takes to follow from this is that, in episodic memory, it is actually part of the very content of one's current recollective experience that that experience derives causally from one's own past perceptual experience of the remembered event.<sup>5</sup> This, the idea is, is how having experienced the event in question makes a difference to how it can be recalled.

Thus, the epistemic requirement at issue here is that an account of episodic memory needs to explain our capacity to tell episodic memory apart from other ways of knowing about past events, even though such knowledge, too, can be causally based on our own past experience, and even though we may even be aware that it has this basis. It is in answer to the explanatory question as to what grounds this discriminative capacity that Dokic puts forward the idea that the very experience of episodic recollecting itself includes within it an awareness that it has the subject's own past experience of the remembered event as its causal ground. This is how we can tell episodic memory apart from other ways of knowing about the past. It also implies, though, that there is a special connection between episodic memory and

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familiar and intelligible. Nevertheless, it can raise a puzzle, and it is worth investigating" (Anscombe, 1976, p. 16).

<sup>5</sup> A similar claim can also be found in Fernández (2008), though his argument for it is somewhat different.

theory of mind, since it means that the very ability to recollect past events in episodic memory requires a grasp of the representational and causal connections that obtain between the subject's current mental state and her past experience.

In fact, though, Dokic's argument trades on a crucial ambiguity, which we can bring out by considering two quite different ways of fleshing out the scenario he describes, leading to two quite different versions of the story which we must be careful to distinguish from one another. Each version points to a different way of reading what exactly the relevant epistemic requirement might be. Yet, on the first reading, nothing of the sort proposed by Dokic is needed to meet it, whereas on the second reading, it is simply implausible that any requirement of the relevant type holds.

In the first version of the story, it is obvious to me from the start that all I have is the knowledge that a certain past event happened, but I can't recollect that event itself. Here, even if my knowledge derives causally from my own past experience, this obviously no longer makes any difference to how I can think about the relevant event. The only way in which I can think about the event is the same as the way in which I can think about events I know about only through testimony. In this case, as the difference between my mental state and that of recollecting the event itself is obvious from the start, it is not clear what else should be needed to explain my ability to tell them apart.

In the second version of the story, by contrast, I do seem to be able to recollect the event itself, and wonder whether I genuinely episodically recollect the event or whether I have in fact reconstructed the event I seem to recollect from what others have told me. I think it should be obvious that, if it is a case like this we have in mind, the idea of some other ingredient by which I can, after all, distinguish between the

two situations myself seems hopeless. From my own perspective, I simply can't tell them apart from one another. That's it. If there is a plausible epistemic requirement in the vicinity here, it can only concern the question as to how it is that we can tell episodic remembering apart from other ways of knowing about the past *when we can do so*; it cannot be the implausible requirement for a scepticism-busting feature that would allow us to tell genuine from merely apparent episodic memory.

In other words, it is only because it blurs the distinction between these two quite different scenarios that it can appear that Dokic's argument succeeds.<sup>6</sup> If Dokic's argument fails, though, we have no special reason for thinking that, in the case of episodic recollection, uniquely, the subject's being in the relevant mental state requires the subject to conceptualize the mental state as such, or exercise theory of mind abilities, any more than we think so for the case of other mental states.

## 2. Episodic memory and knowledge of what it was like

In this section, I will start working towards a rather different way of conceptualizing the nature of episodic memory, which will eventually also yield a novel way of connecting episodic memory with theory of mind abilities – one that moves away somewhat from traditional concerns in the theory of mind literature with our understanding of the representational nature of mental states and of the link between informational access and knowledge.<sup>7</sup> I believe that it is because these have been some of the dominant aspects of our understanding of the mental that have figured in

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<sup>6</sup> See Urmson (1971) for a somewhat similar criticism of traditional arguments, put forward in the context of empiricist theories of memory, for the existence of a 'memory indicator' or 'memory marker'.

theory of mind research so far that researchers have been tempted to move from the plausible thought that episodic recollection involves representing one's past perceptual experience to much less plausible ideas such as that it requires an understanding, on the part of the subject, of the representational and causal relationship between one's current recollective experience and one's past perceptual experience.

A grasp of the notion of representation, or of informational access, are the wrong theory of mind categories to focus on when it comes to thinking about the potential relation between theory of mind and episodic memory. Instead, because episodic recollection is a matter of representing one's own past experience, we should be asking to what extent such recollection involves a grasp of the concept of *experience*, and, to the extent that it does so, what particular knowledge about the nature of experience it involves.

In fact, I think we can see an interesting development in Perner's own ideas in this context. Whilst claims like the ones discussed in the previous section – which seek to establish, e.g., a connection between episodic memory and a grasp of the representational nature of mental states – still feature in his more recent work on episodic memory, there are now also new claims which link episodic memory development specifically to the development of abilities to engage in certain activities such as mental rotation – mental activities that involve the use of mental imagery.<sup>8</sup>

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<sup>7</sup> At least as the role of grasp of the latter is understood, e.g., within the context of the literature on false belief tasks.

<sup>8</sup> These claims do not figure, for instance, in Perner and Ruffman (1995) or Perner (2000), but are particularly prominent, for instance, in Perner, Kloo, and Rohwer (2010). The main type of imagery at stake in Perner's claims seems to be visual imagery. However, what he says appears compatible with

Implicit in these claims seems to be the idea that episodic recollection, too, crucially involves forming mental images.

Why might it be important that, in the case of episodic memory, it is mental images – memory images – that are being used to represent one’s earlier experiences? Matthew Soteriou (2008) has offered an account of the role of images in episodic recollection which turns on the idea that episodic recollection answers the question as to *what it was like* to apprehend or experience a particular past event.<sup>9</sup> His own main interest in this context is in the idea that memory in general can be defined as the retention of knowledge, with different types of memory then being distinguished by the different type of knowledge they preserve over time. Thus, episodic memory, like other forms of memory, is not itself a source of knowledge – it is rather, as Michael Dummett (1993, p. 415) puts it, “knowledge [...] maintained in being”. Nevertheless, episodic memory is a distinct form memory, because maintaining knowledge in being can consist in quite different types of things, depending on the kind of knowledge it is. As Soteriou explains:

What I already know [when I have an episodic memory] is what it was like to apprehend a particular past event. This knowledge is retained in memory. But this is not to say that this knowledge has been stored as propositional

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the idea that other types of imagery, such as auditory or gustatory imagery, may play an analogous role in episodic memory. In what follows, the term ‘imagery’ is also meant to be read in this broader sense.

<sup>9</sup> Where the locution ‘what it was like’ is understood in something like Nagel’s (1974) sense to denote specifically the conscious experiential character of experience. I should acknowledge that Soteriou himself stops short of using the term ‘memory image’ the way I do in what follows, speaking instead of the “phenomenally conscious mental act of recollecting” (Soteriou, 2008, p. 481). My use of a somewhat different terminology is not meant to imply any substantive disagreement.

knowledge – and so this is not to say that my act of recollection is simply an act of recollecting some proposition stored in memory. Rather, my retained knowledge of what it was like to apprehend the event is a retained ability to do something that puts me in a state of propositional knowledge whose propositional content is a distinctive kind of answer to the question, ‘what was it like to apprehend that event?’ (Soteriou, 2008, p. 481)

Soteriou’s suggestion, essentially, is that our ability to form memory images is part of a distinct capacity for retaining knowledge, which is at the same time a capacity for retaining a distinct form of knowledge, viz. knowledge about what it was like to experience or apprehend a certain event, or what I will call experiential knowledge. When we retrieve that knowledge, the result of our doing so can be described as forming a proposition of the form: ‘That is what it was like...’. Yet, our knowledge of what it was like to have the experience is nevertheless distinctive in virtue of the fact that this answer is not arrived at by retrieving stored propositional knowledge; instead I answer it by forming a memory image, my episodic memory consisting in the retained ability to do so. My capacity to represent my original experience in episodic recollection by forming a memory image of that experience, thus, allows me to retain a particular form of knowledge about that experience, namely, what it was like to have it, i.e., knowledge about its nature *qua* conscious experiential occurrence.

Aspects of Soteriou’s discussion here recall an earlier debate about the epistemic role of sensory experience – about what the distinctive type of knowledge is that only sensory experience can provide us with. Take Frank Jackson’s well-known story of Mary the brain scientist:

Mary is a brilliant scientist who is, for whatever reason, forced to investigate the world from a black and white room via a black and white television monitor. She specializes in the neurophysiology of vision and acquires, let us suppose, all the physical information there is to obtain about what goes on when we see ripe tomatoes, or the sky, and use terms like ‘red’, ‘blue’, and so on. [...] What will happen when Mary is released from her black and white room or is given a color television monitor? Will she *learn* anything or not? It seems just obvious that she will learn something about the world and our visual experience of it. (Jackson, 1982, p. 130)

What Mary’s story illustrates is that there is a certain type of knowledge about conscious experiences – knowledge about what it is like to have them – that we cannot acquire through reading books or through the testimony of others, but only by having those experiences ourselves.<sup>10</sup> Why is this so? On one prominent view, it is because this kind of knowledge – which I have also called experiential knowledge – is a form of practical knowledge. To acquire it is to acquire specific abilities, and it is experience itself that equips us with these abilities, in a way in which books or the testimony of others cannot do so. As David Lewis puts it, “[w]hat’s essential is that when we learn what an experience is like by having it, we gain abilities to remember, imagine and recognize” (Lewis 1998, p. 29). This, in turn, endows the latter abilities

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<sup>10</sup> Or I take it that this is one thing it shows. At its most basic, Jackson’s story might actually best be thought to illustrate something about our knowledge of colours, or indeed the nature of colours themselves. On this point, see, e.g., Kalderon (2007, p. 598), and also Campbell (2014), whom I will discuss in the next section. Jackson himself originally took Mary’s story to demonstrate something about the metaphysical nature of conscious experience itself, namely that it cannot be accounted for in physicalist terms. He has since revised his view (see, e.g., Jackson, 2003).

with a crucial, irreplaceable epistemic role, in so far as they can serve as the carriers of our continued knowledge of what it was like to have the experience, even once the experience itself has ceased.<sup>11</sup>

To sum up, in so far as episodic recollection is a matter of representing past experience through forming a memory image, the knowledge it embodies is distinctively knowledge as to *what it was like* to have the experience, or experiential knowledge.<sup>12</sup> This is what explains how the fact that I have experienced an event

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<sup>11</sup> There is more to be said here, as memory and imagination in fact play somewhat different epistemic roles with respect to the retention of knowledge gained through experience. This will be the subject of the next section. Also, I will set aside what Lewis says about recognition, because my interest is specifically in our knowledge about experiences when we are not having them.

<sup>12</sup> Recent ‘generative’ accounts of episodic memory (De Brigard, 2014; Michaelian, 2016) might also be read as involving an appeal to something like the idea of a memory image, but they stress in particular the constructive aspect in generating that memory image, and the ways in which it might fail to be faithful to one’s original experience. Two points might therefore be worth clarifying: First, as I understand it, characterising episodic memory as the retention of knowledge as to what it was like to experience past events is compatible with there often being distortions and inaccuracies in the way we remember those events (McCarroll, 2017; Robins, 2016) – their presence might mean that we are less good at remembering the experience without this implying that we don’t remember it at all. Secondly, what I do take the approach to episodic memory I have sketched in this section to be committed to is a rejection of the idea – sometimes put forward in the context of generative accounts of episodic memory (see esp. De Brigard, 2014) – that there is no difference in kind between episodic recollection and the experiential imagination of future events. As will become clear in the next section, I take episodic memory to provide us with knowledge of the past of a kind for which there can be no future-directed equivalent, and one of the explanatory targets of the account of episodic memory I give is precisely to account for how it can do so. See also Debus (2013) and Perrin (2016), and see Robins (2016) for a separate critique of generative accounts on the grounds that they are in fact themselves ill equipped to account for differences between different ways in which memory can go wrong.

myself can make a difference to how I can remember the event. The distinctive role of episodic memory, more specifically, lies in the fact that it preserves a kind of knowledge that only experience itself provides us with. As I will try to bring out in the next section, to say this is not yet to demonstrate that episodic memory itself depends on a grasp of a concept of experience. However, it provides at least a starting point for an argument to that effect, and for framing a new picture of what exactly the role is that grasp of a concept of experience plays in episodic memory.

### 3. Episodic memory, particularity and experience

Earlier on in this paper I critically examined one set of motivations that seem to be behind Perner's view that episodic memory requires theory of mind abilities, which were to do with the contrast between episodic memory and other forms of knowledge about the past – in particular knowledge about the past retained in semantic memory. In addition to considerations to do with the contrast between episodic and semantic memory, however, Perner at one point also gives a somewhat separate argument for his view that episodic memory requires theory of mind abilities. He writes:

[B]y replaying past experiences I can enjoy visual impressions as distinct from, for example, auditory or gustatory impressions without having to have a concept of these types. However, such enjoyment of different types of sensory information is not enough [for episodic memory]. There also needs to be an understanding of how the experienced image at the time of remembering relates to the bygone event that is thereby being remembered. Without this understanding, children from an early age can have experiences of different

kinds and even replays of these experiences, but they cannot enjoy these replays *as* memories of an experienced event. (Perner, 2001, p. 191f.)<sup>13</sup>

In what follows, I want to suggest that there is something right about the line of thought sketched in this passage, but also that it points to a connection between episodic memory and theory of mind abilities of a rather different kind from that envisaged by Perner.

Perner's words in fact bear in an important way on the characterisation of episodic memory I introduced in the preceding section, according to which episodic memory involves the retention of knowledge of what it was like to experience the remembered event – experiential knowledge – which is knowledge of a form we can only acquire through having the relevant experience itself. What they show is that this type of knowledge must be distinguished from another, more primitive, type of knowledge, albeit one that we can also only acquire through sensory experience.<sup>14</sup> To illustrate this point, consider the following variant of Jackson's story about Mary the Brain Scientist, as told by John Campbell:

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<sup>13</sup> This passage is meant as a response to a critique of Perner and Ruffman's (1995) by Christopher Peacocke, in which the latter writes: "It seems that someone can remember seeing something without having the concept of seeing or of experience. In describing the memory as one of seeing, we characterize the episodic memory as one of a certain subjective type, which is phenomenologically different from remembering hearing, remembering tasting, remembering feeling. The memory experience can be one of these distinctive types without the rememberer having concepts of these types" (Peacocke, 2000, p. 315).

<sup>14</sup> On this distinction, see also Hoerl (2014).

Suppose that Mary is born in a black-and-white room and so on, but that she is unlike most humans in that she has no conception of sensory experience.

Perhaps she has no concept at all of sensory experience. Or perhaps we should think of it as her having no interest in sensory experience, or the conscious life generally. [...] Now suppose that she finally steps out from her black-and-white room into the world of colour. She certainly will learn nothing about the psychological life from doing so. But when she steps into the blaze of colour, will she then learn nothing at all? It seems perfectly obvious that she will learn something, and it would seem to Mary that she is learning something. She is learning something about characteristics of the objects around her: their colours. (Campbell, 2014, p. 42f.)

As I mentioned before, the standard interpretation Jackson's story has been one on which the true moral of the story concerns the knowledge we have of the conscious experiential character of perceptual experience, and the reasons why such knowledge cannot be gained through third-person testimony. What Campbell's variant of the story brings out, by contrast, is that it is not at all clear why we should think of this as the only, or even the primary, moral of the story.<sup>15</sup>

One way of understanding Campbell's point is in terms of the idea that the most fundamental epistemic role sensory experience plays is in fact in providing us with knowledge about the qualitative features of the world around us, such as colours. Note that retaining this type of knowledge, too, plausibly requires the ability to call up

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<sup>15</sup> Note here also that Jackson himself, at the end of the quotation already given above, says that it "seems just obvious that [Mary] will learn something *about the world* and our experience of it"

(Jackson, 1982, p. 130, my emphasis)

memory images of the relevant qualitative features, an ability that we acquire when we encounter them in experience. To retain the knowledge of the qualitative nature of the colour red, you have to retain the knowledge of what red looks like, and this knowledge is a matter of your being able to imagine that colour. In that sense, possessing the relevant knowledge might also be seen to be a matter of your knowing what it is like to experience the relevant qualitative features. Yet – and this Campbell’s version of Mary’s story makes very plain – knowing what it *is* (present tense) like to experience a certain thing, in the sense relevant here, clearly does not require grasp of the concept of experience itself, or of other mental concepts.

In the passage from Perner quoted at the beginning of this section, what he can be seen to highlight is the difference between knowing or remembering what it *is* like to experience something, in the sense just discussed – as encapsulated in the ability to ‘replay’ experiences in imagination, as he puts it – and the kind of knowledge of what it *was* like to experience a certain event that gets preserved in episodic memory. In other words, the distinctive feature of episodic memory he is drawing attention to is its past-directed nature – or perhaps we should talk of two connected features: episodic memory is of particular events, and it locates those events in the subject’s personal past.<sup>16</sup>

Perner’s further claim is that the difference here turns crucially on the fact that episodic memory recruits a grasp of mental concepts – that, in recollecting particular past events in episodic memory, one remembers one’s own particular past experience of them *as such*. One remembers a past event as the particular event it was by

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<sup>16</sup> It is precisely in order to account for these features that some philosophers have claimed that episodic memory involves, e.g., a grasp of the causal dependence of one’s present recollection on a past experience (see, e.g., Fernández, 2008).

remembering one's experience of it as the particular experience it was. This is what makes episodic memory psychologically different from merely remembering what it *is* like to have a certain *type* of experience on the basis of having had an experience of that type before. By why should this be so? How exactly is the idea that, in episodic memory, one conceptualizes one's past experience of the remembered event as such supposed to explain this difference, and in particular the distinctive particularity and past-directness that episodic memory has?

One way to get us started on a way of answering this question is by returning once more to Jackson's Mary. As we have seen, part of what her story brings home is that conscious sensory experience does not just provide us with a more direct route to knowledge we can also acquire by other means. There is a specific, new type of knowledge we gain when we undergo a new experience, and which we can gain only in that way.<sup>17</sup> As L. A. Paul has argued, this provides for a strong sense in which conscious sensory experience is *epistemically transformative*. As she puts it:

Once Mary leaves her room, her experience transforms her epistemic perspective, and by doing so, it transforms her point of view. When she sees color for the first time, she gains new knowledge by having this experience: she gains knowledge about what something is like, namely, what it is like for her to see color [...] When a person has a new and different kind of experience, a kind of experience that teaches her something she could not have

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<sup>17</sup> Indeed, as what I have said so far already indicates, there is more than one type of knowledge only experience can equip us with: On the one hand, there is the knowledge of what, in general, it is like to have an experience of a certain type. On the other hand, there is also knowledge of what it was like to have specific token experiences.

learned without having that kind of experience, she has an *epistemic transformation*. (Paul, 2014, p. 10f.)

There is, of course, a weak sense in which any instance of knowledge acquisition might be described as an epistemic transformation. But what Paul points out here is that sensory experience is epistemically transformative in a stronger sense, in so far as there is knowledge we acquire through it that we did not have before, and that we also could not have acquired by any other epistemic means.

Paul's own main focus is on experiences that are epistemically transformative in equipping us with wholly new types of phenomenal knowledge, such as Mary's first experience of chromatic colour.<sup>18</sup> However, as Paul herself acknowledges (Paul, 2014, p. 36), there is also a broader sense in which *every* experience can be said to be epistemically transformative. Specifically, every experience – be it momentous experiences such as Mary's first experience of red, or more mundane ones – is epistemically transformative with respect our knowledge about that very experience itself, as a particular conscious episode we undergo. More specifically, it is epistemically transformative precisely with respect to the knowledge that is subsequently retained in episodic memory, as characterized in the previous section: the knowledge of what it was like to have the experience in question.<sup>19</sup>

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<sup>18</sup> Her particular concern, which I will set aside for the purposes of this paper, is the extent to which we can rationally choose whether or not to undergo such experiences, given that, prior to having them, we do not know what it will be like for us to have them.

<sup>19</sup> It is a familiar point in epistemology that knowledge is harder to come by if there are closely similar alternative possibilities. A similar principle might be used to explain, within the context of this approach to episodic memory, why events of a type encountered frequently are less memorable than exceptional events. Even though there may in fact be something different about each individual time

This, I think, allows us to see how the particularity of episodic memory might be connected to its being a matter of recollecting one's own past experiences as such. The thought, in short, would be that it is because it involves the retained knowledge of the particular way in which my experience of an event was epistemically transformative – the particular way in which it added to my stock of experiences, as we might put it – that my episodic memory of the event in question is a memory of that event as such, happening at a particular time in the past, rather than simply a memory of what experiencing such an event *is* like. It is in this sense that episodic memory both embodies and is underpinned by grasp of the category of an experience. It embodies a grasp of the category of an experience because the knowledge retained in episodic memory is specifically knowledge of past experiences as such, i.e. of the specific epistemic transformation that having those experiences consisted in. And a grasp of the category of an experience, at the same time, underpins episodic memory, in so far as it is through recalling our experiences as such, in this way, that we can also recall the events they were experiences of as the particular events they were, in the way that is distinctive of episodic recollection. In short, we remember episodically in so far as we remember the particular epistemic transformation we underwent when we experienced the remembered event. The knowledge retained in episodic memory is knowledge of that transformation.

If this line of thought is along the right lines, then, it gives us a new way of understanding how episodic memory might be tied up with an element of a theory of

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we encounter a token event of a familiar type, each new experience of such an event is epistemically transformative only to a relatively minimal degree, because of its similarity to others. Hence, it may not be epistemically transformative enough for us to retain over a longer period of time the capacity to distinguish it from other token experiences of the same general type that we have had.

mind – that is, with a grasp of a particular psychological category, namely that of an experience. As I have in effect suggested, some of the philosophical literature on phenomenal consciousness provides us with the materials for spelling out just what grasp of the category of an experience comes to, and just how such a grasp might be implicated specifically in episodic memory. In recalling a particular past event in episodic memory, we represent our experience of that event as the particular conscious episode it was, in so far as we have some grasp of the epistemically transformative nature of that episode – the way in which it provided us with knowledge we did not and could not possess before we had the experience, i.e. the very knowledge of what that experience was like retained in our memory. And in so far as it is knowledge about this transformative aspect of the experience we are exercising – of the particular way in which it was epistemically transformative for us – this is at the same time knowledge of the experience – and, by extension, of the experienced event – as a particular past occurrence.<sup>20</sup> Episodic memory, in short, embodies knowledge of the category of an experience. The knowledge retained in episodic memory is knowledge about individual experiences conceived of as such, and this is what accounts for the particularity of episodic memory.

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<sup>20</sup> One crucial respect in which this account of episodic memory differs from Perner's is that, on his account, remembering is not just the retrieval of knowledge acquired through past experience, but also involves, in addition, a grasp of the connection between that past experience and one's current knowledge. The view I am sketching, by contrast, turns on the idea, mentioned in the previous section, that memory is not a source of knowledge, but the retention of knowledge. The idea is that consciously recalling a past event is a matter of retrieving a particular form of knowledge that was acquired through the experience of the remembered event – a form of knowledge in which, at the same time, a grasp of the concept of experience figures, in so far as it is knowledge of the particular epistemic transformation that experiencing the relevant event consisted in.

#### 4. Conclusion

In a detailed discussion of the phenomenology of what we would now call episodic memory, the philosopher William Earle writes:

It is emphatically true, that when I remember the past event, my explicit, thematic attention is on the past event, and not upon myself; but reflection discloses that in fact I am also implicitly aware that the event was an object for a past act of experience. [...] That what I now remember, the event, is not the event taken simply but an event as experienced, is not itself a hypothesis but a present phenomenological fact. (Earle, 1956, p. 10f.)

The point here is also sometimes couched in terms of the idea that episodic memory is subject to a 'previous awareness condition' (Shoemaker, 1970): We can only recollect events in episodic memory that we have witnessed ourselves, whereas our semantic memories can concern events we were not witnesses of. Moreover, this is not just a fact that emerges from empirical investigation of our capacity to recollect events in episodic memory, it is apparent from the very nature of episodic recollection as a conscious phenomenon.

What I have sought to offer in this paper is a new way of trying to account for the intuition that the knowledge of particular past events that we have in episodic memory is mediated by knowledge of our own past experiences of these events. In recalling a particular past event, I have suggested, I recall what it was like to experience the event, where this is a matter of recalling the particular way in which my experiential encounter with the event was epistemically transformative for me.

This is what accounts for what is sometimes referred to as the ‘episodicity’ of episodic memory (Perrin & Rousset, 2014).

If what I have argued is along the right lines, it provides for an alternative way of linking episodic memory with grasp of a theory of mind to those already discussed in the literature on episodic memory. It also highlights an aspect of our understanding of the mental that remains as yet underexplored in theory of mind research. Research on theory of mind – on our understanding of the workings of the mental – has long been a particularly active and fertile area of research in psychology, especially developmental psychology. It has also been an area of research that has demonstrated in a particularly vivid way the potential value of interdisciplinary exchange between psychology and philosophy, with many of the psychological accounts building on work in the philosophy of language and the philosophy of mind, e.g., on the nature of representation or intentional action. Part of what I have tried to show is how some of the recent work in philosophy on phenomenal consciousness, too, might provide an interesting starting point for asking questions about the development and nature of our understanding of the mental – in particular of our understanding of the category of an experience, and the role such an understanding might play in other cognitive capacities, such as the capacity to recollect particular past events.<sup>21 22</sup>

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<sup>21</sup> There are several already existing lines of research, especially in developmental psychology, exploring somewhat related aspects of aspects of what might be called folk epistemology. This includes, e.g., work on children’s understanding of the modality-specificity of sensory knowledge (O’Neill, Astington, & Flavell, 1992; Robinson, Haigh, & Pendle, 2008), research on children’s sensitivity to their own lack of items of knowledge (Robinson, Rowley, Beck, Carroll, & Apperly, 2006; Taylor, Esbensen, & Bennett, 1994), and research on children’s understanding of the knowledge prerequisites of pretense (Richert & Lillard, 2002). What seems to be missing from the literature so far, though, is work specifically on grasp of experiences as mental episodes, and the specific role such

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episodes play in providing us with a distinct type of knowledge not available through other epistemic means.

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