



A knowledge-first approach to episodic memory

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Abstract

This paper aims to outline, and argue for, an approach to *episodic memory* broadly in the spirit of knowledge-first epistemology. I discuss a group of influential views of episodic memory that I characterize as ‘two-factor accounts’, which have both proved popular historically (e.g., in the work of Hume, 1739–40; Locke 1690; and Russell 1921) and have also seen a resurgence in recent work on the philosophy of memory (see, e.g., Dokic 2014; Michaelian, 2016; Owens, 1996). What is common to them is that they try to give an account of the nature of episodic memory in which the concept of knowledge plays no explanatory role. I highlight some parallels between these two-factor accounts and attempts to give a reductive definition of knowledge itself. I then discuss some problems two-factor accounts of episodic memory face in explaining the distinctive sense in which episodic recollection involves remembering personally experienced past events, before sketching an alternative approach to episodic memory, which takes as basic the idea that episodic memory involves the retention of knowledge. I argue that we can give an exhaustive constitutive account of what episodic memory is, and how it differs from other types of mental states, by considering what particular type of knowledge is retained in episodic memory, and what exactly having that knowledge consists in.

1 Introduction

A general approach to epistemology that has come to prominence in particular in the wake of Timothy Williamson’s (2000) *Knowledge and Its Limits* is sometimes referred to as ‘knowledge-first epistemology’. In short, proponents of knowledge-first epistemology reject the idea, behind so many approaches to epistemology developed in the second half of the twentieth century, as well as historically, that we can

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give a reductive definition of knowledge – specifically, that knowledge can be analysed as true belief that satisfies some further condition or set of conditions. Instead, they argue that we should accept that knowledge is conceptually and metaphysically prior to other mental and epistemic kinds.

Very crudely speaking, the overall argument for knowledge-first epistemology can be seen to take a two-pronged form. There is a first, negative, part, which consists in pointing out the dismal track record of existing attempts – in particular following on from and responding to Gettier's 'Is justified true belief knowledge?' (Gettier, 1963) – to provide a satisfactory definition of knowledge as true belief that meets some further condition or set of conditions. Proponents of knowledge-first epistemology may concede that they have no knock-down argument that no such reductive definition can be given; instead, their argument is that the plethora of unsuccessful attempts to do so provides at least some motivation for the view that knowledge is basic. The second, positive, part of the overall argument for knowledge-first epistemology is that, even if we have to give up the search for a reductive definition of knowledge and instead take it to be basic, doing so can, in turn, yield a number of positive payoffs. In particular, proponents of knowledge-first epistemology argue that if we hold knowledge to be basic, this allows us to give illuminating analyses of other (broadly) epistemic notions by relating them to knowledge. Suggested examples of such notions include, for instance, justification (Bird, 2007), understanding (Sliwa, 2015), and assertion (DeRose, 2002).

In this paper I will follow a structurally similar two-pronged strategy, but one that is concerned with the nature of *episodic memory*. First, I will discuss a group of influential views of episodic memory that I will characterize as 'two-factor accounts'. Although they form a somewhat diverse group, a common feature of them is that they try to give an account of the nature of episodic memory in which the concept of knowledge plays no explanatory role. Instead, somewhat analogously to analyses of knowledge as belief that satisfies a further set of conditions, they conceive of episodic memory as a combination of a first-order representation (of a certain type) of an event, plus another factor that distinguishes episodic memory from other mental states in which such a representation can supposedly also figure, such as imagination.¹

Two-factor accounts of episodic memory have both proved popular historically (see, e.g., Hume, 1739–40; Locke 1690; and Russell 1921) and have also seen a resurgence in recent work on the philosophy of memory (see, e.g., Dokic 2014; Michaelian, 2016; Owens, 1996). However, I will discuss a general set of stubborn problems that such two-factor accounts of episodic memory face. Secondly, I will show how such problems might be solved by an approach to episodic memory that takes knowledge as explanatorily basic, and that explains episodic memory as the retention of a distinct type of knowledge.

¹ The label 'two factor account' is inspired by Dokic's (2014) reference to 'two-tiered accounts' of episodic memory, but not too much should be read into the reference to 'two' factors. On the type of account in question, what I am describing as the 'second factor' can consist of several different elements. Thus, a typical assumption is that the relevant first-order representation has to be accurate as well as being accompanied by a certain phenomenology (see Sect. 4, below) and/or having been generated in a certain way (see Sect. 5). I am grateful to an anonymous referee for prompting me to clarify this.

Just as proponents of knowledge-first epistemology do not typically aim to put forward new arguments against existing attempts to provide a reductive definition of knowledge, but simply point out the persisting problems they face, the objections I will raise to what I am calling two-factor accounts of episodic memory do not necessarily aspire to originality (although I think they have not previously been presented in the way I do). Similarly, there are already existing examples of what I would classify as knowledge-first approaches to episodic memory.² My main aim in this paper is to try to step back somewhat from the particular theories and arguments that have been put forward, in a hope to shed new light on the overall dialectic in existing debates on episodic memory, by making explicit the fact that they turn crucially on the explanatory role, if any, that the concept of knowledge is assumed to play in accounting for the nature of episodic memory, and by pointing out parallels between those debates and the kinds of debates that have prompted philosophers to adopt a non-reductive account of knowledge itself.³

I will start with some remarks about the target explanandum and, relatedly, the specific type of explanatory question I take to be at issue in the relevant debates.

2 The target explanandum

What is episodic memory? In philosophical discussions of the nature of ‘memory’, even if the word is not qualified (indeed, particularly if it is not qualified), what is typically at issue is a specific type of mental capacity, different, for instance, from the capacity to remember facts – such as where the Hermitage Museum is located – remember how to do something – such as how to tie a slip knot – or remember what one was planning to do – such as going to pick up the dry cleaning.⁴

To a first approximation, the distinctive kind of mental capacity typically at issue in philosophical discussions of ‘memory’ might be characterized in terms of the idea that it involves the ability to *recall personally experienced past events* (see also, e.g., Tulving 1985b). Whilst this characterization will play a key role in what follows, it is important to note that there can be memories that are concerned with personally

² I would, for instance, classify the accounts put forward by Martin (2001) and Soteriou (2008) as such. As far as what is variously described as propositional, semantic or factual memory is concerned, the idea that memory should be defined as the retention of knowledge in fact has a long history (see, e.g., Annis 1980; Ayer, 1956; Malcolm, 1963; Naylor, 1971; Zemach, 1968). For discussions of ‘epistemic theories of memory’ in this sense, see, e.g., James (2017) and Adams (2011).

³ As an anonymous reviewer notes, another potential parallel to draw would be with debates between ‘highest common factor’ and disjunctivist (naïve or direct realist) accounts in the philosophy of perception (Burge, 2005; McDowell, 1982, 1996). To discuss the extent of this parallel in detail would introduce a further set of questions that I prefer to remain neutral on for the purposes of this paper, in particular about the extent to which episodic memory should be modelled on a relational view of experience typically implied by naïve or direct realist conceptions of perception (as, e.g., suggested by Debus 2008; see also Fish 2022).

⁴ As with episodic memory itself, there are a number of different terms that have been used to describe these other types of memory. In the psychological literature, the first is typically referred to as semantic memory, whereas philosophers have used the terms factual or propositional memory. The second has been referred to as practical or procedural memory. The third has not received much attention in the philosophical literature; in psychology it is usually referred to as prospective memory.

experienced past events that are not instances of the type in question: for instance, people typically remember when and where they were born, but this just seems to be an instance of the capacity to remember facts mentioned above.⁵

One way to get a provisional fix on what the distinctive type of memory typically at issue in philosophical discussions more specifically consists in is by noting that there is a distinctive grammatical form that paradigmatic reports of memories of this type take. As Martin (2001, p. 261) points out, only a certain type of memories “can be properly reported by using the form, ‘S remembers/recalls [x] *f*-ing’, as in ‘Mary remembers John falling asleep in the talk’, ‘Jo remembers being inoculated for smallpox’”. In philosophy, this type of memory has sometimes been termed ‘memory proper’ (James, 1890, p. 648), ‘experiential memory’ (Velleman, 2006; Wollheim, 1984, p. 105) or ‘personal memory’ (Locke, 1971; McCarroll, 2018).⁶ The dominant term for it used in the recent philosophical literature is ‘episodic memory’, influenced by the psychological literature on memory, where this term has been in use for some time (Tulving, 1972, 1985a).⁷

A number of recent authors have pointed out that it is important to distinguish between two quite different explanatory projects when it comes to giving an account of the nature of episodic memory. One of them is the project of giving an account of episodic memory viewed as a cognitive achievement, the other is the project of giving an account of episodic memory viewed as a set of neuro-psychological capacities subserving (if everything goes well) that achievement. As Craver (2020, p. 262) puts it,

[i]f we give up the idea that these views – one *empirical*, describing bio-psychological capacities and their mechanisms; the other *epistemic*, declaring an achievement, a success, in the effort to know the past – must either refer to the same thing (as the reductionist would have it) or be in competition with one another (as eliminativists hold), we might begin to sketch an alternative vision for how these two conceptions are related. The cost of failing to mark this intellectual divide is continued equivocation at the nexus of mind and matter.

We can understand Craver here as follows. There is a distinctive philosophical project concerned with the question of what the state of remembering consists in, where this describes a particular kind of epistemic state. While the results of empirical investigations into episodic memory may impose some constraints on the possible answers

⁵ At least typically. As Christopher McCarroll has pointed out to me, Salvador Dalí’s (1942) autobiography starts with an account of memories he claims to have of his own intra-uterine life.

⁶ Brewer (1996, p. 21) speaks of a “truly impressive” number of terms philosophers have used to denote the type of memory in question and lists 15 of them, which don’t even include some of the above.

⁷ Descriptions of the form ‘S remembers/recalls [x] *f*-ing’ are ambiguous between a reading on which they describe a dispositional state and a reading on which they describe a mental episode or occurrence – or what psychologists sometimes refer to as the stage of storage and the stage of retrieval, respectively. The same goes for the way the term ‘episodic memory’ is sometimes used in the philosophical literature. I will sometimes use the term “episodic recollection” or “episodic recall” when it is important to clarify that I am talking about the relevant mental episode or occurrence, rather than the dispositional state, but elsewhere I hope the context will make clear which reading is intended, and how they are meant to be related to each other.

to that question, the question itself needs to be distinguished from questions about the neural underpinnings of episodic memory (see also James 2017).

In what follows, I will be concerned with the philosophical question regarding the nature of episodic memory understood in this way. In particular, I am interested in explaining the distinctive sense in which episodic memory is memory for personally experienced past events.⁸ As I will argue, existing accounts of episodic memory face particular difficulties in explaining this central aspect of episodic memory, whereas it has a natural explanation if we take episodic memory to consist in the retention of a specific kind of knowledge.

3 Two-factor accounts of episodic memory

I call the general type of existing approach to episodic memory I have in mind, which can serve as a useful contrast to the alternative approach to episodic memory I will outline in the final sections of this paper, a *two-factor account* of episodic memory. I will distinguish between two different classes of such two-factor accounts, which I will call *empiricist two-factor accounts* and *mechanist two-factor accounts* of episodic memory, respectively. By necessity, my discussion cannot be exhaustive, just as critical discussions of attempts to provide a reductive account of knowledge typically do not claim to provide a knock-down argument against any possible attempt to provide such an analysis. There may be variants of what is recognizably a two-factor account of episodic memory that do not fit neatly into either of the two classes I discuss. Similarly, I will of necessity abstract from some of the details of different variants of the two types of two-factor account that I will discuss. Instead, my aim in this section is to identify some general features of what I think are the two dominant classes of two-factor accounts featuring in recent discussions of episodic memory. In the following two sections, I will then outline some general challenges the two classes of two-factor accounts of episodic memory face, which I will later suggest an account of episodic memory as the retention of a specific type of knowledge is capable of handling better.

Above I distinguished between a conception of episodic memory considered as a cognitive achievement, and a conception of episodic memory considered as a set of neuro-psychological capacities subserving (if everything goes well) that achievement. In what follows, I will assume that it is the former that is the explanatory target of two-factor accounts of episodic memory – i.e., that they seek to explain, in Craver's (2020, p. 262) words, a type of "success [...] in the effort to know the past". However, they seek to do so in a way that does not appeal to the concept of knowledge, or more specifically the idea that episodic memory involves the retention of knowledge. Instead, there is a crucial sense in which they seek to provide an essentially reductive account of episodic memory. This conceives of episodic recollection,

⁸ Compare here also Tulving's claims that what he calls "auto-noesis" and "chronesthesia" form integral parts of episodic memory, as expressed, e.g., in the following part of a definition he gives of episodic memory: "Episodic memory [...] makes possible mental time travel through subjective time, from the present to the past, thus allowing one to re-experience, through auto-noetic awareness, one's own previous experiences" (Tulving, 2002, p. 5).

as indicated by the term ‘two-factor account’, as consisting of a combination of two separate factors: The first factor is the subject’s having a first-order representation (of a certain kind) of the remembered event. More to the point, proponents of two-factor accounts of episodic memory typically hold that first-order representations of the relevant kind can also occur in the context of states other than episodic remembering – in particular, they can occur in the context of imagining. This is where the second factor comes in: The role played by the second factor is taken to be what explains what makes episodic remembering different from imagining, given that the same types of first-order representations of events can feature in both.⁹ As we will see, though, different two-factor theorists have a somewhat different conception of what exactly the latter explanatory question comes to.

This gives us a characterization of two-factor accounts of episodic memory at a very high level of abstraction, and, characterized in this way, a large number of approaches to episodic memory can be seen to exemplify a two-factor account. This includes a number of historical accounts (e.g., Hume, 1739-40; Locke 1690; Martin & Deutscher, 1966; Russell, 1921) as well as more recent accounts of episodic memory (e.g., Dokic 2014; Michaelian, 2016; Owens, 1996). As I have stressed, a crucial feature common to all these accounts is that, whilst they try to give an account of episodic memory as an epistemic achievement, the concept of knowledge plays no explanatory role in that account. Instead, akin to reductive analyses of knowledge that treat knowing as a matter of being in a certain representational state – having a belief – plus some further conditions being fulfilled, two-factor accounts of episodic memory treat episodic remembering as a matter of being in a certain representational state – having the postulated first-order representation of the remembered event – plus some further conditions being fulfilled.

As I said, proponents of two-factor accounts of episodic memory typically motivate the need for the second factor in terms of the idea that having the purported kind of first-order representation involved in episodic memory, on its own, is not unique to episodic remembering, but can also occur in the context of imagining, so the second factor is needed to explain what makes the two different from one another. However, there are two quite different ways of understanding the explanatory issue in play in the question as to what distinguishes episodic memory from imagination. And related to this, there are also two quite different ways of conceiving of the nature of the second factor supposedly involved in episodic memory in addition to the first order representation of the remembered event. This is what distinguishes the two classes of two-factor accounts of episodic memory that I will discuss in the following two sections from one another.

Proponents of what I will call *empiricist two-factor accounts* take the crucial explanatory question to be what distinguishes episodic memory from imagination *phenomenologically* – i.e., how the remembering subject herself can tell episodic recollection from imagination from her first-person point of view. Correspondingly, on this type of account the relevant second factor consists in a further mental item, such as a representation of, attitude towards, or feeling associated with the relevant first-

⁹ Again, there may be more than one element making up this second factor (see footnote 1 and below); the label ‘two factor account’ should therefore not be taken too literally.

order representation of the event – i.e., some supposed feature accessible from the first-person point of view that makes episodic recollection different from imagining.

By contrast, proponents of what I will call *mechanist two-factor accounts* take the crucial explanatory question to be the question as to what constitutes the difference between episodic memory and imagination – i.e., what the theorist should say about the difference between the two – irrespectively of whether there is any phenomenological feature by which the remembering subject herself can tell them apart. Correspondingly, the second factor, on such an approach, consists simply in a particular mechanism by which the relevant first-order representation of the event is produced, which is purportedly different from the mechanisms involved in imagining.¹⁰

I shall now discuss each of these two types of two-factor account in more detail and suggest that each faces some crucial challenges when it comes to explaining the precise sense in which episodic memory is distinctively memory for personally experienced past events.

4 Empiricist two-factor accounts

Locke famously characterizes 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, book II, Chap. 10, Sect. 2). Both uses of the term ‘perception’ in this passage are open to interpretation, but for present purposes we can set this aside because it actually allows for Locke’s words to serve as something like a schematic characterization of the broad range of what I am calling empiricist two-factor accounts of episodic memory. What unites them, as I said, is the idea that episodic memory consists of a first-order representation (of some kind) of the remembered event, plus some further representation of, attitude towards, or feeling associated with the relevant first-order representation of the event. Empiricist two-factor accounts of episodic memory differ in how exactly this second factor is conceived of, but, as I said above, the general idea behind them is that this second factor is needed in order to account for a particular phenomenological feature of episodic memory, where this is typically more specifically described as the feature that allows the remembering subject to tell whether they are remembering or imagining.¹¹

As I wish to argue, there are actually two quite different ways of fleshing out this latter idea, depending on what the postulated first-order representation is taken to

¹⁰ Though the analogy is not perfect, it is possible to see some structural similarities between the distinction between what I am calling empiricist and mechanist two-factor accounts of episodic memory, respectively, and the distinction between justificationist and reliabilist accounts of knowledge (at least how the latter are sometimes understood).

¹¹ Holland (1954) speaks simply of the ‘empiricist theory of memory’, but essentially means the same as what I am referring to as an empiricist two-factor account of episodic memory. Similarly Dokic (2014) seems to use the term ‘two-tiered account’ to refer specifically to what I call an empiricist two-factor account of episodic memory. There are affinities also with what has been termed the ‘representational theory of memory’ (Senor, 2014), though I want to remain neutral on whether these terms completely overlap with one another.

be a representation of. One possibility might be that this first-order representation is already a representation as of a personally experienced past event; the other possibility is that the first-order representation is just a generic representation of an event. On either interpretation, I wish to suggest, empiricist two-factor accounts struggle to give a satisfactory account of the nature of episodic memory.

Let us consider the second possibility mentioned above first: this is that the purported first-order representation postulated by two-factor accounts of episodic memory is just a generic representation of an event, and that the second factor is needed to turn this into a representation of a personally experienced past event. This would be one way in which to understand the significance proponents of two-factor accounts assign to the question as to how we can distinguish remembering from imagining. ‘Imagining’, in this context, would refer to the general process of conjuring up mental images of events, and the idea would be that because doing so does not generally imply having in mind a particular event, the second factor is needed to turn such a mental image into the representation of a personally experienced past event.

The key challenge for this way of motivating two-factor accounts of episodic memory is to provide an answer to the following question: If the purported first-order representation of the event entertained in episodic memory does not already represent a particular personally experienced past event, how can these features be added by the second factor? What makes it the case that I represent the remembered event as a personally experienced past event, if these features are not already parts of the content of what is retrieved?

Where proponents of empiricist two-factor accounts can be seen to try to address that challenge,¹² they typically appeal to the idea of what are sometimes referred to as *metacognitive feelings* experienced at the time of retrieval (see, e.g., Dokic 2014; Matthen, 2010a, 2010b; Michaelian, 2016; Perrin, 2018; an important precursor here is Russell, 1921).¹³ Purported examples of such metacognitive feelings are a ‘feeling of pastness’ and a ‘feeling of familiarity’. The idea, in other words, is that, in episodic memory, the retrieval of the purported first-order representation of the event is accompanied by such feelings, which makes it the case that that event comes to be represented by the subject as a personally experienced past event.

I think the most basic problem this way of fleshing out an empiricist two-factor account of episodic memory faces is that it is not at all clear that there is such a thing as a ‘feeling of pastness’ or a ‘feeling of familiarity’ that can play the explanatory role the defender of a two-factor account of memory wants to assign to it. Introspec-

¹² There are also versions of empiricist two-factor accounts that simply seem to side-step the challenge, rather than addressing it. Though this would need further discussion, I think this applies, for instance, to views according to which the second factor should be understood as an ‘attitude’ entertained towards the first-order representation (Mahr & Csibra, 2017), or a ‘mode’ under which it is entertained (Recanati, 2007). It is not clear to what extent such views can claim to amount to an explanatory account of what episodic memory is, rather than providing a (not uncontentious) characterisation of what is to be explained.

¹³ There are also variants of an empiricist account of episodic memory on which the retrieval of the relevant first-order representation is accompanied by a metacognitive element, but where this is not construed as a feeling in the sense typically envisaged by empiricist two-factor accounts (I would interpret Fernández 2019 in those terms; precursors are Perner, 1995, and Dokic 2001). For present purposes I will concentrate on what I take to be the mainstream empiricist two-factor approach.

tion clearly doesn't deliver an obvious verdict on their existence.¹⁴ Note especially that – as suggested, e.g., by the two different labels 'feeling of pastness' and 'feeling of familiarity' – it seems that we need to assume the existence of not just one, but several distinct such feelings in order to account for different features of episodic memory, such as the fact that remembered events are represented as past and also as personally experienced. I for one find it very difficult to discern any such feelings, let alone a number of clearly qualitatively different ones.¹⁵

There are two interconnected problems here for the defender of an empiricist two-factor account of memory. First, in the absence of any independent evidence for their existence, it seems that the postulation of the relevant metacognitive feelings becomes explanatorily vacuous. They are postulated in an *ad hoc* manner, to account for whatever feature of episodic memory – its past-directedness, or the fact that it is memory for personally experienced events – we want to account for. Secondly, it also seems that the account given of the nature of these metacognitive feelings becomes unstable. Whilst supposedly part of the phenomenology of remembering, these feelings seem to play the role of *theoretical postulates*, rather than there being clear introspective evidence for their existence. Using a phrase used by Holland in a related context, they are "not, as it were, disclosed in the psychological laboratory but rather deduced in Kantian fashion as one the things which alone make remembering possible" (Holland, 1954, p. 478).

I have looked at one way of understanding empiricist two-factor accounts of episodic memory, on which the purported first-order representation that constitutes the first of the two factors supposedly making up episodic memory is a generic representation of a type of event. I have suggested that it is not clear how the proponent of such an account proposes to explain how the supposed second factor involved in episodic memory turns this into a representation of a personally experienced past event. In particular, I have suggested that there is no good reason to believe in the so-called metacognitive feelings sometimes invoked to supposedly provide the relevant explanation. Let me therefore now turn to the other way in which one might think of the first-order representation postulated by empiricist two-factor accounts, viz., that the first-order representation is already a representation as of a personally experienced past event.

On the assumption that the purported first-order representation is already a representation as of a personally experienced past event, what becomes of the two-factor theorist's idea that a second factor is needed to explain how we can distinguish remembering from imagining when retrieving such a first-order representation?

¹⁴ On this, see also Byrne (2010) and Debus (2016). Debus also makes the point that accounting for the nature of episodic memory by appealing to such feelings seems at odds with the significance we assign to episodic memories of events, e.g. in legal contexts. For a complementary account of the ineliminable role the concept of knowledge and cognate concepts play in legal practices, see Littlejohn (2020).

¹⁵ I don't want to dispute here that it is part of the phenomenology of episodic memory that remembered events are remembered as personally experienced past events, and that this is an essential ingredient in episodic memory that any account of it needs to capture (though see the next section for a family of views that disputes this). Some empiricists might hold that this is all they want to say, but then it looks like they are simply restating the explanandum, rather than giving an explanation. My point here is that, if the talk of a 'feeling of pastness' etc., is to play a more substantial explanatory role, it is not at all obvious what introspective support there is for the existence of such things.

Arguably, if the first-order representation is already a representation as of a personally experienced past event, the only sense in which there can be an issue of distinguishing between remembering and imagining is that that representation might either be a genuine memory or only a merely apparent, false, memory. In other words, the suggestion behind the two-factor account would be that we need to recognize a second tier in episodic memory that allows us to tell genuine from merely apparent memory.

There are again two interconnected problems this second proposal faces. The first problem is that it looks like we have just changed topic. We were looking for the features that make something an episodic memory; now, instead, we are looking for a feature that makes it possible from the first-person perspective to distinguish a genuine episodic memory from a merely apparent one.¹⁶ Factors that do make people more inclined to think that they are remembering are discussed in the psychological literature under the topic of “source-monitoring”. This literature speaks, for instance, of the fluency with which information comes to mind as one factor that influences people’s memory judgements, such that people are more inclined to judge that they are remembering if the relevant piece of information comes to mind relatively fluently. However, the source monitoring literature is best seen as being concerned with processes underpinning people’s confidence that they are in a state of remembering (i.e., a confidence in a metamemory judgement), rather than the processes generating that state of remembering in the first place.¹⁷

The second problem faced by the defender of a two-factor account of episodic memory along the lines just sketched is that there is clearly no good reason for thinking that there always *is* a feature of the phenomenology of episodic memory that can ground judgements as to whether or not one successfully remembers. It is quite obvious that there are many cases in which one just can’t do so, and asking for episodic memory as such to come with some psychological feature by which one could always tell whether one is genuinely remembering would be to ask for a psychological guarantee against scepticism. Even if there are phenomenal (or other) features that sometimes allow one to distinguish genuine from merely apparent memory, it is not always possible for one to do so, and the relevant features can therefore not be a constitutive feature of episodic memory as such. To put the point differently, episodic recollec-

¹⁶ As Senor says in his discussion of Hume: “We are trying to figure out the criteria according to which an image is of memory and not the conditions under which one can introspectively know that [it is]” (Senor, 2014, Sect. 1.1). In light of the current paper’s focus on knowledge, another way of describing the problem with this approach is that it focuses on the wrong kind of knowledge in trying to account for the nature of episodic memory: In so far as it considers questions about knowledge, they are ones that concern the knowledge *that one is in a state of remembering*; instead, what we should be focusing on is the knowledge one has in virtue of being in that state.

¹⁷ It is of course also part of the point of some of the literature on source monitoring that this ability, even in cases where we think we can exercise it, is fallible. Precisely because factors such a fluency can be influenced by a variety of other variables, it is possible to manipulate people’s metamemory judgements in ways that don’t correspond to the accuracy of those judgements. Note also, as Dokic (2014, p. 415) observes, that source monitoring processes are assumed to be involved both in episodic memory and semantic or factual memory. Indeed, the same factors that influence people’s judgements that they are remembering can also influence judgements not related to memory, such as whether a name is that of a famous person (Jacoby et al., 1989). In which case it is clearly not the case that these factors can be what makes episodic memory itself distinctive as such.

tion has a characteristic phenomenology that can be present whether or not one is confident that one is remembering. Thus, if there is something that sometimes makes one more confident that one is remembering, that can't be the thing that explains the characteristic phenomenology of episodic recollection.

I have distinguished two different ways in which empiricist two-factor accounts of episodic memory might be understood, dependent on how they conceive of the nature of the purported first-order representation involved in episodic remembering – a representation supposedly of a type that can also be present in imagining. If what I have been saying about the difficulties faced by an empiricist two-factor account on either interpretation is at least roughly along the right lines, I think it is possible that the reason why philosophers have continued to believe that some variant of such an account might be able to give a satisfactory characterization of episodic memory – in the face of a long history of critiques of existing attempts to do so¹⁸ – is because these two ways of fleshing out an empiricist two-factor account of episodic memory have not been clearly distinguished from one another. Once it is granted that episodic memory involves the representation of personally experienced past events, as the second interpretation has it, there may well be elements of the phenomenology of remembering that make us more or less confident, on particular occasions, in our judgements as to whether we are remembering or not. As long as we stick to this second interpretation, however, it should also be clear that would be a mistake to take these to be constitutive features of episodic memory as such. However, they can easily look to be such if we do not distinguish this second interpretation from the first one, which attempts to press purported features of the phenomenology of remembering into service to account for the sense in which episodic memory involves representing personally experienced past events in the first place.

5 Mechanist two-factor accounts

Let me now turn to the second class of two-factor accounts of episodic memory that I mentioned, which I refer to as mechanist two-factor accounts. As I said before, rather than focusing on the phenomenology of episodic memory, as empiricist two-factor accounts do, mechanist two-factor accounts claim that what is distinctive about episodic memory is the mechanism by which the purported first-order representation of the remembered event is produced. The classical example of a mechanist two-factor account of this sort is the causal theory of memory as exemplified by C. B. Martin and Max Deutscher (1966). However, in what follows, I will focus in particular on Kourken Michaelian's (2016) more recent "simulationist" approach to episodic memory, which he presents as a successor to the causal theory of memory, because I

¹⁸ For overviews of critiques of existing versions of what I am calling empiricist two-factor accounts of episodic memory (in which the second factor is sometimes construed as a 'memory indicator' or 'memory marker') see, e.g., Bernecker (2008, ch. 6) and Teroni (2017).

think it illustrates the idea of a mechanist two-factor account of episodic memory, and some of the issues it faces, particularly well.¹⁹

Michaelian's simulationism is a form of radical constructionism on which there does not need to be any causal link connecting one's present episode of recollection to a past experience one has had. Rather, for one to have an episodic memory it is enough for one to be in a state of simulating a past event, where this is the output of a cognitive system – which he calls the “episodic reconstruction system” – that reliably produces accurate such simulations of the past. Crucially, what counts for Michaelian is just the fact that the episodic reconstruction system is reliable. There is no restriction on the inputs to that system, which can also, for instance, include purely semantic or second-hand information about the event. Michaelian (2016, p. 107) thus provides the following definition of episodic memory, in which I have numbered the conditions he gives (whereas he just has bullet points), in order to make the status of his account as a version of a two-factor account particularly perspicuous:

The simulation theory says that *S* remembers an episode *e* just in case.

- (1) *S* now has a representation *R* of *e*.
- (2) *R* is produced by a properly functioning episodic construction system which aims to produce a representation of an episode belonging to *S*'s personal past.

Note that, in contrast to empiricist two-factor accounts of episodic memory, Michaelian's definition of episodic memory seems to be completely silent on matters of phenomenology.²⁰ There are also other indications that he does not think that the task of giving an account of the nature of episodic memory is to give an account of its distinctive phenomenology. For instance, as mentioned, he frames his theory as a successor to the causal theory of memory proposed by Martin and Deutscher, which allowed that there could be cases of (episodic) recall in which the remembering subject was not aware of retrieving a personally experienced past event, or even seeming to do so (Martin & Deutscher, 1966, p. 167 f., see Hoerl 2014, for discussion). And he explicitly interprets certain kinds of clinical cases as cases “in which episodic

¹⁹ An anonymous reviewer queries whether the causal theory of memory or simulationism should be construed as aiming to give an account of episodic memory seen as an epistemic achievement (see Sect. 2, above). I take this to be the case at least with respect to Martin and Deutscher's (1966) and Michaelian's (2016) accounts, because the definitions of episodic memory they provide include clearly normative terms. The first condition in Martin and Deutscher's definition is an accuracy condition, and, as we will see below, Michaelian's definition makes reference to a ‘properly functioning episodic construction system’. Michaelian (2016, p. 10, and *passim*) also explicitly describes his theory as a contribution to the epistemology of memory. As explained in Sect. 2, accounts that aim to provide a purely descriptive analysis of the neuro-psychological capacities subserving episodic memory are outside the scope of this paper.

²⁰ This is not quite in line with what Michaelian says elsewhere, where he claims that “while semantic memory is concerned with propositional representations, episodic memory is concerned with representations that have a richer, quasi-perceptual kind of content” (Michaelian, 2016, p. 35). However, even taking on board this qualification, (1) clearly does not seem to be sufficient for explaining the sense in which episodic memory is distinctively memory for personally experienced past events.

remembering occurs without its characteristic phenomenology” (Michaelian, 2016, p. 118).

Rather, in so far as Michaelian is trying to answer the question as to what makes episodic memory different from other cognitive states, he is interpreting this as a question as to what the distinctive underlying mechanisms of episodic memory are, rather than a question as to what the distinctive phenomenology episodic memory has.²¹ Specifically, in doing so, his approach is informed by his endorsement of *continuism* – the view that episodic memory is just one manifestation of a more general capacity that also includes, e.g., episodic future thinking, which all involve the capacity to mentally simulate events (Michaelian et al., 2020). He takes continuism to be supported by recent research in psychology (more on this below), and I think his insight is that simulationism, or something like it, is the logical consequence of continuism. However, I think his simulationism also raises some questions about the very project of trying to account for episodic memory within a continuist framework.²²

If episodic memory is only one manifestation of a more general capacity for mental simulation, we have to ask what makes episodic memory distinctive amongst the other exercises of that capacity. As we have seen, Michaelian’s answer to this is that episodic simulations are ones that are “produced by a properly functioning episodic construction system which aims to produce a representation of an episode belonging to [the subject’s] personal past” (Michaelian, 2016, p. 107). Just to bring out one corollary of this, which Michaelian is happy to concede: He thinks that “one can in principle remember an entire episode that one did not experience – as long as the relevant representation is of an event belonging to one’s personal past, and as long as it is produced by a properly functioning episodic construction system” (Michaelian, 2016, p. 118 f.).²³

One question here is what work the appeal to an “episodic construction system” is supposed to do. Michaelian also describes it as “a distinct cognitive process” (ibid., p. 119) which is “directed at the personal past” (ibid.). But it is not very clear how talk about a ‘system’ or ‘process’ is to be cashed out here, and what individuates such processes.

We can illustrate this by looking at an example Michaelian uses: He says that he can episodically *remember* his own voyage from France to Turkey, but can at best episodically *imagine* his great-grandfather’s voyage from the Ottoman Empire to the United States, even though “this episodic imagination has a great deal in common with my remembering my own voyage” (ibid.). I think we should ask whether Michaelian’s account, by its own lights, actually has anything substantive, explanatory, to say about the difference between the two cases, rather than just that the first *counts as* episodic memory whereas the second doesn’t. Why think that the first case

²¹ Compare my characterisation of the difference between empiricist and mechanist two-factor theories in Sect. 3, above.

²² For other critiques of continuism, see Debus (2014); Robins (2020), Perrin (2016).

²³ The idea of an event belonging to one’s personal past that one did not experience might at first look like an oxymoron, as sometimes when we say that we experienced an event we just mean by this that we lived through it. The context makes it clear that Michaelian means events that were lived through but not consciously experienced because capacities for conscious experience had not yet developed or were not active at the time.

involves a “distinct cognitive process [...] directed at the past”, and what would such a process, distinctively, look like? Similarly, the addition, to the above definition of episodic memory, of the condition that the represented event belong to one’s personal past just seems *ad hoc* and it is unclear why it should be seen to mark any real difference in the nature of the supposed ‘systems’ or ‘processes’ involved (on related issues, see also Aranyosi, 2020; McCarroll, 2020).²⁴ This should worry Michaelian in particular, as he describes himself as being motivated by a strong commitment to naturalism.

Michaelian concludes his discussion of these matters with the somewhat weak claim that “[i]t remains meaningful [...] to distinguish between episodic memory – simulation of episodes in one’s own past – and other forms of episodic imagination” (ibid., p. 119 f.). The question I have in effect been pressing is whether, by his own lights, the conclusion Michaelian should actually draw from continuism is that there is in fact no real difference between those different supposed exercises of simulation, other than the fact that they involve simulating different facts or circumstances.

At a number of points in this paper, I have been drawing on parallels to discussions in epistemology about the nature of knowledge and the question – spurred on in particular by the Gettier problem – as to whether we can give a reductive definition of it. As I have mentioned above, one of the reactions to the repeated failures of attempted reductive definitions of knowledge has been to argue that we need to take the concept of knowledge to be basic – an idea that I will draw on in my own suggested account of episodic memory below. However, there is of course another possible, eliminativist, reaction, which says that the repeated failures to provide such a reductive definition just show that the concept of knowledge is not a well-formed concept. On such a view, we can describe beliefs in various ways: as true, as justified, as having been generated by a reliable system, etc. None of these descriptions, and no combination of them, may be coextensive with the word ‘knowledge’ as ordinarily used. But it would be equally mistaken to think that there is in fact something else picked out by that word that those descriptions can’t capture. Instead, we should simply give up on thinking the word captures a useful category.²⁵

What I am suggesting, then, is that a better fit for continuism than Michaelian’s mechanist two-factor account of episodic memory is a somewhat similar eliminativ-

²⁴ It might be thought that this problem arises for Michaelian’s theory because it is what he calls a “post-causal” one, and that the more traditional causal theory of memory, according to which one’s current representation of an event has to causally trace back to one’s own experience of the event for the representation to count as a memory, can explain a sense in which episodic memory is necessarily restricted to one’s personal past. I discuss the causal theory of memory in more detail elsewhere (Hoerl, 2014). Here I will just note that simply adding a causal condition to an account that is otherwise continuist won’t provide a satisfactory way of singling out the phenomenon of episodic memory, as a causal connection to past experience may also be present in some of the other exercises of the capacity for episodic simulation appealed to by the continuist. For instance, Martin & Deutscher (1966) classify as (episodic) memory a case in which a person is painting a scene which, unbeknownst to them, they actually experienced earlier in their life, whilst thinking of it a purely made-up scene. It is unclear on what grounds, other than by stipulation, a continuist could classify this as an instance of memory rather than imagination. For other critiques of the causal theory of memory see, e.g., Debus (2010, 2017).

²⁵ See, for instance, Papineau (2021, p. 5311), who – echoing Russell’s similar claims about the concept of causation – claims that “the concept of knowledge is the relic of a bygone age, erroneously supposed to do no harm”.

ism about episodic memory, or, in other words, that continuism eventually collapses into such an eliminativism. This in fact seems to be the direction in which Michaelian himself is going in some of his most recent work (Michaelian, draft). According to this approach, we can describe episodic simulations in various ways: As accurate representations of events at a particular time, rather than just a counterfactual situation, as representations of events in one's personal past rather than events not belonging to one's personal past, or as being causally connected to one's experience of a particular past event, etc. However, on this view, this is all there is. We should simply give up on the question as to whether one of these descriptions, or a combination of them, is co-extensive with the term 'episodic memory' or whether that term captures something genuine in addition to what they can capture. We should simply stop thinking that the term 'episodic memory' is a useful explanatory category in the first place.

I think there are strong *prima facie* reasons to resist such an eliminativist conclusion. As should be clear from what I said in Sect. 1, it would go against a long tradition within both philosophy and psychology that has tried to single out a distinctive category of memory as being of particular theoretical interest. Two ideas in particular that have animated this tradition concern the relation between memory and the very nature of self-awareness over time (Gardiner, 2002; Wheeler et al., 1997), and the epistemic status and some of the social functions of first-person testimony (Henry & Craver, 2018; Mahr & Csibra, 2017). This is not the paper to provide a comprehensive discussion of the relevant issues, but I think the idea that there is simply no distinctive memory capacity of the type envisaged in these accounts would at the very least be highly revisionary.²⁶ However, I also hope to have shown that empiricist two-factor accounts of episodic memory do not provide a satisfactory alternative to such a view. In what follows, I will therefore outline an alternative approach to episodic memory that, in contrast to the two kinds of two-factor approaches I have outlined, takes as basic the idea that episodic memory consists in the retention of a certain kind of knowledge.

6 Towards a knowledge-first approach to episodic memory

I believe the broad class of what I have called two-factor accounts of memory has some claim to be the orthodox view amongst philosopher writing about episodic memory at present. In Sects. 4 and 5, I sketched what I take to be some of the main challenges such accounts face. As against empiricist variants of such a two-factor account, I argued that they seem to flounder at giving a persuasive account of the phenomenology of episodic memory that could explain the distinctive sense in which it involves memory for personally experienced past events. As against mechanist variants of a two-factor account, which do away with phenomenological considerations, I argued that, whilst they may provide a sense in which episodic memory distinctively involves memory for personally experienced past events, they merely

²⁶ I take it that this is also implicit in Michaelian's (draft) own reference to his own recent views as 'radical'. I am grateful to an anonymous reviewer to prompt me to mention at least some of the potentially relevant considerations here.

do so by stipulation, and they don't succeed in giving substance to the intuition that episodic memory constitutes a *sui generis* type of cognitive achievement. Instead, they are in danger of collapsing into a form of eliminativism about episodic memory.

What I have stressed throughout is that there is a structural analogy between what I have called two-factor accounts of episodic memory and attempts to define knowledge as true belief that meets some further conditions. In particular, whilst they try to account for episodic memory as an epistemic achievement – as a way of knowing the past – the way two-factor accounts of episodic memory try to do so makes no reference to the idea that episodic memory involves the retention of knowledge. Instead, they try to define episodic memory as a combination of a factor that is allegedly in common between it and other states such as imagination, plus a further factor that is supposedly distinctive of episodic memory. In that sense, they are trying to provide a reductive account of episodic memory analogous to the way analyses of knowledge as true belief that meets some further conditions try to provide a reductive account of knowledge itself.

In what follows, I want to explore an alternative, non-reductionist, approach to episodic memory – one that does take as basic the idea that episodic memory involves the retention of a specific type of knowledge, and one that defines episodic memory in terms of the type of knowledge retained in it. At the heart of this approach is the idea that, as Dummett (1993, p. 415) puts it, the knowledge I have when recollecting “simply is the knowledge I had as an eyewitness, maintained in being.”²⁷ As I will also call it, episodic memory is the retention of *experiential knowledge* of the remembered event – a specific type of knowledge made available by the subject's own experience of the event and retained over time.²⁸ On the view I wish to explore, we can give an exhaustive account of the nature of episodic memory in terms of this idea that there is a particular kind of knowledge that was acquired in the subject's original experience of the remembered event, and that that knowledge has been retained from this experience.

It might be objected that, on the account of episodic memory I am sketching, it is simply true by definition that episodic memory is memory for personally experienced events – which is a feature I have criticised in Michaelian's (2016) simulationist approach to episodic memory. However, as I wish to show, in contrast to the simulationist approach, an approach that treats episodic memory as the retention of experiential knowledge of the remembered event has the resources to explain why it should thereby be categorized as a distinct, *sui generis*, form of mental state.

Before I turn to this issue, though, I want to address what I take to be both an insight as well as a mistake behind two-factor accounts of episodic memory – especially some of their recent incarnations. This is the idea, also informed by some recent empirical work on episodic memory, that episodic recall is in an important sense

²⁷ As he also puts it (*ibid.*): “My recollection may well be wrong; but, so long as I trust it, I cannot separate the knowledge I suppose myself to have now from the knowledge I surely had at the past time. For the former is derived from the latter”.

²⁸ For the purposes of this paper, I will keep the term ‘experiential knowledge’ somewhat schematic. As I set out in slightly more detail in the conclusion, there are substantive questions as to how exactly the term should be understood, even if the general idea that episodic memory involves the retention of experiential knowledge is along the right lines.

generative, or involves a constructive activity. There are two sets of empirical results that defenders of two-factor accounts have been influenced by, in particular in discussions about “continuism” (Michaelian et al., 2020) or “simulationism” (Michaelian, 2016) about episodic memory. The first are findings that have been argued to show the malleability and unreliability of episodic memory (Loftus, 1997; Roediger & McDermott, 1995); the second are findings from neuropsychology that indicate that episodic memory recruits some of the same neural machinery that also shows activation when people imagine counterfactual states of affairs or future events (Addis et al., 2007; Hassabis et al., 2007; Schacter et al., 2012).

Together, these findings have been taken as evidence that episodic recall is a *constructive* process, in at least two senses: First, in the sense that it involves the generation of a representation of a distinctive type at retrieval – a process variously described as “simulation” (Cheng & Werning, 2016; Michaelian, 2016) or “scenario construction” (Cheng et al., 2016); and secondly in the sense that, in and of itself, the relevant representation does not differ in its nature from representations generated in the process of imagining or future mental time travel. This can be seen to reinforce the idea of episodic memory as involving a first-order representation of an event that is not different from those entertained in imagining and future thinking, supplemented by a distinctive second factor proprietary to episodic memory.

As well as thus potentially providing materials for an argument in favour of a two-factor account of episodic memory, the empirical evidence adduced to in this line of thought, might also be thought to count against an account of episodic memory of the type I wish to develop, which defines episodic memory as the retention of a particular type of knowledge. So how should a defender of a knowledge-first account of episodic memory of the type I want to put forward respond to this line of thought?

First, I think it is important to see that a defender of the idea that episodic memory is fundamentally the retention of a certain type of knowledge can entirely agree with the idea that episodic recollection involves an element of construction in something like the first sense identified above, i.e., the idea that the retrieval of episodic memories is in some sense a generative process, rather than, say, just the accessing of a stored representation. Indeed, as we will see, an account of episodic memory which takes the idea that it involves the retention of experiential knowledge as fundamental can itself make precise a sense in which episodic recall is *essentially* a generative process.

Secondly, and for similar reasons (as we will see), the fact that episodic recollection, like imagining and future time travel, involves something that could be described as “simulation” or “scenario construction” does not force the conclusion on us that imagistic experience forms a neutral common core between these three different activities (on this see also Martin, 2001). This also holds if the process involves the operation of the same neural structures in each case, as the same neural structures can be involved in carrying out different functions (Anderson, 2010).

This leaves the evidence that episodic memory can be malleable and unreliable.²⁹ However, given that I am assuming that both defenders of two-factor accounts of epi-

²⁹ There are also some questions as to whether the evidence for the unreliability of episodic memory has been overstated. In daily life, we rely on episodic memory all the time, and the fact that there are experi-

sodic memory as well as defenders of an account of episodic memory as the retention of a particular type of knowledge are aiming to give an account of episodic memory as a type of cognitive success, it is unclear how such evidence should be thought to bear on the dialectic between those different accounts. An account of episodic memory as the retention of a particular kind of knowledge is of course also compatible with the idea that this knowledge is often incomplete or sketchy. Thus, in so far as empirical research has pointed out crucial ways in which episodic memory is often malleable and inaccurate, in particular under specific experimental conditions, the proposed account is compatible with those findings.

Relatedly, I take it that an analysis of episodic memory as the retention of a particular type of knowledge is also eminently compatible with the idea that we can't always tell remembering from imagining. As Frise (2018, p. 416) has pointed out:

If a subject mistakes an ongoing process of merely imagining for remembering, she might falsely believe what she is imagining. This tarnishes the track record of merely imagining, but not of remembering – by stipulation it is inoperative. If she mistakes remembering for merely imagining, she might needlessly withhold belief. That hurts remembering's *power* (tendency to produce many true beliefs) but not its *reliability* (tendency to produce true rather than false beliefs).

In fact, I take it that on all of these points an account of episodic memory as the retention of a certain kind of knowledge is in fact strictly on a par with the types of two-factor accounts of episodic memory I discussed above. Again, recall that I took it that they, too, seek to give an account of episodic memory as an epistemic achievement – “a success [...] in the effort to know the past” in Craver's (2020, p. 262) words. As such, they too arguably need to admit that that success is often only partial and that it is sometimes not transparent to the subject whether they have succeeded or not.³⁰

7 Episodic memory as retained experiential knowledge – the positive proposal

I take it that the key question that a proponent of an account of episodic memory as the retention of a particular type of knowledge – or what I will sometimes call a ‘knowledge first’ account of episodic memory – might be thought to face concerns the extent to which it is *explanatory*. By starting with the idea that episodic memory involves the retention of a particular kind of knowledge, have we not simply given up on the project of explaining the epistemic achievement episodic recollection consists in, rather than just describing it?

mental manipulations under which people are prone to sometimes quite profound instances of misremembering does not show that memory is similarly unreliable also outside the experimental context. For some relevant recent empirical studies, see Brewin et al., (2020); Diamond et al., (2020).

³⁰ For other critical discussions of the way defenders of a two-factor account have tried to marshal empirical evidence in support of their view see Robins (2020), Schwartz (2020), Aranyosi (2020), as well as Craver (2020), whom I have already quoted.

In response to this question, I think it might help to remind ourselves of the two main desiderata emerging from the discussion above that two-factor accounts of episodic memory struggle to meet, both of which have to do with the intuition that episodic memory is distinctively memory for personally experienced events. These are that a theory of episodic memory should (a) be able to explain the precise sense in which episodic memory is memory for personally experienced past events, and (b) do this in such a way that also gives substance to the idea that episodic memory constitutes a *sui generis* form of cognitive faculty. I will argue that a key virtue of an approach to episodic memory as the retention of a particular kind of knowledge is that it has the resources to meet these desiderata that two-factor accounts of memory have particular difficulties meeting.

To this might also be added a further desideratum that emerges from the discussion in the preceding section. As we have seen, at least some of the motivation behind two-factor accounts of episodic memory is the idea that episodic recollection is in some sense a generative process, variously described as “simulation” or “scenario construction”, rather than just the retrieval of a stored representation. As I said, some two-factor theorists stress this feature of episodic recollection particularly in light of empirical research on episodic memory, but I take it that part of what they are trying to capture is also simply the phenomenological insight more traditional approaches to episodic memory try to capture in terms of the idea that episodic recollection crucially involves the conjuring up of a memory image of the remembered event. I will take this as a feature of those accounts that is worth preserving, giving us as a third desideratum that a theory of episodic memory should also (c) make intelligible a sense in which episodic recollection is necessarily a constructive or generative process. I will argue that an account of episodic memory as the retention of a certain type of knowledge has the resources to meet this desideratum, too.

I will consider this third desideratum first, before looking at the first two. To start off with, though, one more remark might be in order. In the following, my suggestions as to how an account of episodic memory as the retention of experiential knowledge can meet the relevant desiderata will themselves make heavy use of the concept of knowledge, and considerations about the nature of different types of knowledge. This will of course be anathema to anybody who assumes that the concept of knowledge cannot be basic but must admit of a reductive definition. However, here it is worth remembering the overall dialectic of the present paper. I have in fact been arguing that something like the latter assumption forms a crucial part of the background of what I have called two-tiered accounts of episodic memory, and that it might explain some of the problems they run into. Conversely, my positive case for the conception of episodic memory as retained experiential knowledge turns precisely on the positive explanatory benefits yielded by rejecting the assumption that the concept knowledge must be amenable to a reductive definition and instead taking knowledge to be basic. If the following considerations make heavy use of the concept of knowledge, this should therefore come as no surprise, but instead forms part of the overall argumentative strategy of this paper.

With that in mind, how might a proponent of an account on which episodic memory consists in the retention of experiential knowledge accommodate the intuition that there is nevertheless also a sense in which episodic recollection is in part a gen-

erative process, i.e., involves what is variously described as “simulation”, “scenario construction”, or the generation of a memory image? As we saw, two-factor accounts typically invoke something like the latter idea based on either phenomenological or empirical considerations. However, there is also a third route through which one might arrive at this idea, which one might call *the epistemic route*. Consider the following quote from H. O. Mounce:

Suppose I am asked what I had for breakfast. I have an image of myself eating bacon and eggs. Then I say what I had. Now it cannot be that I derived my knowledge of what I had from that image. For that would suggest I was ignorant until the image informed me. But it could not inform me unless it embodied knowledge of the past; and whose knowledge could it embody except my own? A little reflection will reveal that the image is not the ground from which I derive my knowledge but the form, on this occasion, which my knowledge takes. (Mounce, 1994, p. 176)

We can envisage two somewhat different ways in which Mounce could answer the question as to what he had for breakfast. One would be by retrieving a stored piece of propositional knowledge. Suppose that, after having his breakfast, Mounce judges that it will be important later in the day to remember what he had for breakfast because he wants to balance out a sumptuous breakfast with a healthier diet during the rest of the day. So he forms the proposition “I had eggs and bacon for breakfast”, and that proposition simply becomes available for him to retrieve later in the day. Note that there need not be any obvious sense in which this would involve a generative process at retrieval. Retrieval simply consists in accessing a proposition that was stored before.³¹

The case described by Mounce, however, is a different one – one that involves him episodically recalling eating eggs and bacon for breakfast. He is not just engaged in retrieving stored propositional knowledge that he had eggs and bacon for breakfast, but the experiential knowledge of eating eggs and bacon for breakfast. And we can understand part of Mounce’s point to be that possession of the latter kind of knowledge, even though the knowledge in question is not an instance of what is normally understood as ‘knowing how’, consists in a form of practical ability. More specifically, it consists in the ability to conjure up a memory image of the particular event of eating eggs and bacon for breakfast. Thus, the ability to conjure up a memory image of the remembered event is integral to the ability to retain and access the relevant knowledge.³²

³¹ Note also that this form of memory could issue in behaviour – choosing to have a salad for lunch – even without Mounce having to explicitly retrieve the proposition in question for it to do so.

³² In line with the anti-reductionist spirit of the proposal put forward in this paper, part of the thought here is that the relevant practical ability cannot be individuated without reference to the particular past event itself (see also Martin 2001, for relevant considerations). A similar ‘externalist’ conception of practical abilities is in play in Hyman’s (2015) account, which construes knowledge in general as a practical capacity. How exactly the relationship between the proposal put forward here and Hyman’s more general account should be construed would require considerably more discussion, though, and the above should not be seen as entailing an endorsement of the latter.

Couching something like the idea of experiential knowledge in terms of the notion of ‘knowing what it was like to apprehend the past event’, Soteriou (2008, p. 481) puts a similar point as follows:

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

In this way, an account of episodic memory which takes the idea that it involves the retention of knowledge as fundamental can itself make precise a sense in which episodic recall is essentially a generative process – one that need not stand in opposition to the phenomenological or empirical considerations that have led researchers to describe episodic recall as essentially constructive, but one on which the generative nature of episodic recollection does not imply the necessity of a second factor, in addition to the conjuring up of a memory image, to constitute episodic recollection.

Once this type of approach to episodic memory is in play, I think we can also use ingredients of it to approach the other two explanatory desiderata I singled out, which I argued two-factor accounts of episodic memory have difficulty meeting. One of them was to explain the sense in which episodic memory is distinctively memory for personally experienced past events, which I singled out as a particular problem for empiricist two-factor accounts of episodic memory. The key move made by the proponent of a view of episodic memory as the retention of experiential knowledge here is to invert the order of explanation that empiricist two-factor accounts try to employ. Instead of postulating particular features of its phenomenology, describable independently of any appeal to the concept of knowledge, in an attempt to explain the distinctive way in which episodic memory involves knowledge of personally experienced past events, the defender of a knowledge-first approach to episodic memory uses considerations about the particular type of knowledge manifested in episodic memory to explain its phenomenology.

One central idea the defender of a knowledge-first approach to episodic memory can make use of in this context is the idea that certain types of knowledge can only be acquired in a certain kind of way. Experience can teach us a number of things, the thought goes, but what it teaches us specifically *qua* experience, and uniquely so, is how to recall the experienced event in the form of a mental image. That is to say, in contrast to the knowledge retained in semantic or factual memory, which can have a variety of different sources – such as engaging in inferential reasoning, reading books or relying on the testimony of others – the knowledge retained in episodic memory cannot be acquired in any way other than through first-hand experience of the relevant event. Experience, the thought is, can furnish us with knowledge that we

have no other epistemic means of obtaining, and it is this knowledge that is retained in episodic memory.³³

Related considerations also allow us to address the remaining desideratum noted above, which was to give substance to the intuition that episodic memory constitutes a *sui generis* cognitive achievement, which we singled out as a particular problem for mechanist two-factor accounts of episodic memory. From the perspective of a view of episodic memory as the retention of a specific type of knowledge, there are two aspects to addressing this desideratum: One is to do with the difference between episodic memory and other non-memory capacities involving the generation of mental images. In what sense does episodic memory form a different type of cognitive achievement from other ways of envisaging, simulating or forming mental images of events? The answer the proponent of a view of episodic memory as retained experiential knowledge will give will turn on the epistemic significance of episodic memory.³⁴ Simply put, episodic memory embodies knowledge of events in a way in which this is not the case for other ways of envisaging, simulating or forming mental images of events, even if they, too, may involve the operation of reliable mechanisms or a causal link to past experience. This is what makes episodic memory distinct.

Yet, given that the proponent of episodic memory as the retention of experiential knowledge of events is likely to operate with a general notion of memory as the retention of knowledge, the question as to what makes episodic memory distinctive will also have a second aspect for them, which is to do with how episodic memory is different from other forms of memory, which also involve the retention of knowledge. Here too, though, we have already seen how an account of episodic memory as the retention of experiential knowledge has the materials to spell out a sense in which episodic memory is distinctive. Whilst both episodic memory and semantic or factual memory are a matter of retaining knowledge, as we have seen, retrieving different kinds of knowledge can amount to quite different kinds of thing. Our ability to bring to mind a memory image of the remembered event in episodic recollection provides us both with a distinct way of retaining knowledge, as well as a way of retaining a distinct form of knowledge.

In this way, a knowledge-first approach to episodic memory has the potential to address the challenges faced by the two types of two-factor accounts of episodic memory that I discussed in the first half of the paper, both of which related to the sense in which episodic memory is distinctive in virtue of being memory for personally experienced past events. On a knowledge-first account, this is because personally experiencing an event equips us with knowledge we have no other epistemic means of obtaining, and episodic memory just is the faculty for retaining that knowledge.

³³ Similar ideas are already familiar from the literature on qualitative knowledge (Jackson, 1982; Lewis, 1990). The point here is that they can be extended to what I am calling experiential knowledge of particular events.

³⁴ A related argument, targeted specifically at the causal theory of memory, can also be found in Debus (2010).

8 Concluding remarks

I have suggested that it might be useful to look at existing discussions of episodic memory through the lens of the broader issue as to whether we should aim to seek a reductive definition of the concept of knowledge. I have highlighted in particular that what I called two-factor accounts of episodic memory, which have notable historical precursors and probably also represent the mainstream of writing on episodic memory at the moment, try to give an account of the nature of episodic memory in which the concept of knowledge plays no explanatory role.

I have outlined an alternative theoretical account of episodic memory according to which it, distinctively, involves the retention of experiential knowledge, the particular type of knowledge about an event that only experience of the event can provide us with. Taking this view, I have argued, we are in a position to explain both the sense in which episodic memory constitutes a distinct type of cognitive achievement, and the distinct sense in which episodic memory is memory for personally experienced past events – two aspects of episodic memory that what I have referred to as two-factor accounts of episodic memory face challenges accommodating. It also allows us to preserve the intuition that episodic recollection is in some sense a constructive or generative process.

Throughout this paper, I have tried to make clear its programmatic nature. I do not take myself to have provided knock-down arguments against the very possibility of providing a satisfactory two-factor account of episodic memory, rather than just suggesting that no persuasive such account has yet been offered, despite a long history of attempts to do so. The alternative I have outlined is clearly also in need of further, detailed, development. In particular, I have deliberately left the concept of what I have called ‘experiential knowledge’ schematic. The key idea I have been working with in Sect. 6 is that experience of an event can equip us with a type of knowledge of the event that we could not obtain through any other means, and that it is this type of knowledge, distinctively, that is retained in episodic memory. However, that leaves open some important questions as to how we should think of the nature or relevant type of knowledge and, correspondingly, of the nature of episodic memory itself. One central such question is whether the relevant type of knowledge is just knowledge of the remembered event itself, so that episodic memory should be seen as putting us directly in touch with worldly past events themselves (Aranyosi, 2021; Debus, 2008), or whether what I have called the experiential knowledge of events that is preserved in episodic memory should be seen as knowledge about one’s own past experience of the remembered past event (Hoerl, 2018; Soteriou, 2013).³⁵ While I feel unable to adjudicate this question within the scope of this paper, I think it is a genuine question – and one that is difficult to frame within the context of existing two-factor accounts of episodic memory – so it should not be held against the approach that I have out-

³⁵ Martin (2001), whom I have characterized as a proponent of a knowledge-first approach to episodic memory, does not in fact frame his account of episodic memory in terms of the notion of knowledge but rather that of acquaintance. Connected with this, there is a question about which side of the theoretical divide I am sketching here his account should be seen to belong to. But again these are genuine, important questions that only come to light once we adopt a knowledge-first type of approach to episodic memory.

lined that it raises this question, but should rather be seen as an important area of philosophical debate made space for by that approach.

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