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An Epistemological Disjunctivist Account of Memory Knowledge

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Abstract
This paper explores the prospects for a Pritchardean epistemological disjunctivist account of memory knowledge. We begin by providing an overview of Duncan Pritchard's epistemological disjunctivist account of perceptual knowledge, as well as the theoretical advantages of such an account. Drawing on that account, we present and motivate our own Pritchardean epistemological disjunctivist account of memory knowledge. After distinguishing different sorts of memory and the different roles that memory can play in knowledge acquisition, we set out our account and argue that the case for epistemological disjunctivism enjoys parity with the case for epistemological disjunctivism of perceptual knowledge. We also consider objections to our account. The first is from Joe Milburn and Andrew Moon, who argue against a general epistemological disjunctivism of memory on the basis of differences in memory types. The second objection arises from a Radford-like case whereby one's true belief is from memory even though one lacks rational support that is reflectively accessible to one.

1. Introduction

Epistemological disjunctivism of perceptual knowledge is the view that, in the paradigm cases of perceptual knowledge, an agent *S* believes that *p* in virtue of having rational support *R* for *S*'s belief that *p* such that *R* is both reflectively accessible and factive (Pritchard 2012: 13).[1] Epistemological disjunctivism has been construed as a theory concerning perceptual knowledge. This is not, however, the only disjunctivist account of a source of knowledge. For example, McDowell (1998) offers a disjunctivist account of testimonial knowledge, which is based on his disjunctivist account of perceptual knowledge. Furthermore, it may even be possible, as Pritchard (2012) recognises, to promote a convincing disjunctivist account of knowledge in general.

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[1]The disjunctivism discussed in this paper is epistemological. We assume that epistemological disjunctivism is logically distinct from metaphysical disjunctivism. For more discussions of memory and metaphysical disjunctivism, see Schwarz (2018).

Our own paper discusses the prospects of a Pritchardean disjunctivist account of memory knowledge. More specifically, we argue that a disjunctivist account of memory knowledge is defensible, at least if the disjunctivist account of perceptual knowledge holds. We make our case with reference to different sorts of memory, as well as the different roles that memory can play in knowledge acquisition, in conjunction with an argument from parity with Pritchard's defence of disjunctivism of perceptual knowledge.

While very little scholarly work examines the prospects of an epistemological disjunctivist account of memory knowledge, Milburn and Moon (2019) have carried out a structurally similar investigation and have found in the negative. They hold that there cannot be a convincing unified epistemological disjunctivist account of memory knowledge, but rather only a disjunctivism of particular sorts of memory knowledge. In considering objections to our position, we give an account for why we think Milburn and Moon are wrong and why a theoretically unified position is indeed possible.

The remainder of this paper is structured as follows. In section 2, we will give an overview of Pritchard's disjunctivist account of perceptual knowledge and its theoretical advantages. In section 3, we shall present a disjunctivist account of memory knowledge. In doing so, we will introduce the classification of memory we employ in this paper and the connection between memory and knowledge. In section 4, we argue for the parity of the disjunctivist account of memory knowledge with that of perceptual knowledge, which is based on theoretical advantages they have. At last, in section 5, we shall offer critical responses to Milburn and Moon's objection to a disjunctivist account of store memory knowledge, concluding in defence of a unified disjunctivist account of memory knowledge.

2. Epistemological disjunctivism of perceptual knowledge

According to Pritchard (2012: 13), epistemological disjunctivism of perceptual knowledge (henceforth, ED-P) is formulated as follows:

> *Epistemological disjunctivism of perceptual knowledge*
> In paradigmatic cases of perceptual knowledge an agent, *S*, has perceptual knowledge that *p* in virtue of being in possession of rational support, *R*, for her belief that *p* which is both *factive* (i.e., *R*'s obtaining entails *p*) and reflectively accessible to *S*.

Clearly, ED-P is a thesis providing a necessary condition for perceptual knowledge in paradigm cases. Two technical terms in the formulation should be elaborated. First, *reflective accessibility* is a requirement according to which the subject has to be capable of being aware of the rational support underlying her belief. Suppose that *S* believes that there is a tree in front of her on the basis of her visual experience. The reason (namely, her visual experience) for the belief that there is a tree in front of her is reflectively accessible to her if *S* is able to be aware of the reason why she holds her belief. Second, *factivity* requires that the rational support *S* possesses for her belief that *p* entails that *p*. For instance, seeing that *p* is a kind of factive rational support for a belief that *p*, for no one can see that *p* unless *p* is true. Furthermore, seeing that *p* differs from seeing an object, in that the former requires that the content of *p* has to be grasped by the subject, yet the latter does not.[2]

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[2]A case in point is presented in Pritchard (2016: 127–8).

In light of the explanation above, what ED-P maintains is that, in order for S to obtain perceptual knowledge that p (in paradigm cases), S must believe that p in virtue of having rational support R which entails that p and is reflectively accessible to S (i.e., R satisfies both the factivity requirement and the reflective accessibility requirement).

Pritchard further argues that ED-P is a preferable position if it is theoretically available. Particularly, the account is preferable in three aspects. Firstly, ED-P can satisfy both internalist and externalist intuitions in epistemology (Pritchard 2012: 3–5). For reflective accessibility is an internalist requirement which constrains grounds for our beliefs to be knowledgeable to us, on the one hand; factivity is an externalist requirement according to which truth conducive belief formation is necessarily connected with knowledge, on the other hand.

Secondly, common practices in justifying perceptual beliefs can also support ED-P (Pritchard 2012: 17). For one thing, a common practice in justifying one's perceptual belief that p is to appeal to her seeing that p. For another, since ED-P proposes that one cannot see that p unless p is true, and that one can know by reflection alone that she sees that p, it can account for these common practices. Consequently, these common practices give us grounds for endorsing ED-P.

Lastly, according to Pritchard (2016: 133–4), ED-P is a satisfactory way to cope with underdetermination-based radical scepticism, which may be formulated as follows (Pritchard 2012: 133–4):

Underdetermination-based scepticism about perceptual knowledge
(UP1) One does not have rational support that favours one's perceptual belief in an everyday proposition E over an incompatible radical sceptical hypothesis H.
(UP2) If S knows that E and H describe incompatible scenarios, and yet S lacks a rational basis that favours E over H, then S lacks rationally grounded perceptual knowledge E.
(UP3) One has widespread rationally grounded perceptual knowledge E.

For Pritchard, each statement in this paradox is either intuitive or follows from intuitive claims. (UP1) is a reasonable claim in that we would not seem to be able to distinguish a radical sceptical hypothesis (say, the BIV hypothesis) from a normal case of perceptual knowledge. So, it seems hopeless in this situation for us to possess any rational support that favours our perceptual beliefs over the BIV hypothesis. Also, (UP3) is an intuitive statement that most people will endorse, especially with regard to perceptual knowledge.

Though, once (UP2), as a bridging claim, is considered, (UP1) and (UP3) are in conflict. (UP2) relies on a principle called the underdetermination principle (Pritchard 2016: 30):

The underdetermination principle (UP)
If S knows that p and q describe incompatible scenarios, and yet S lacks a rational basis that favours p over q, then S lacks knowledge that p.[3]

According to Pritchard (2016: 30–1), (UP) is plausible for it is hard to see how one can know that p if, provided that she knows the incompatibility of p and q, she fails to have a rational basis that favours p over q. Thus, given (UP2) realizes (UP), together with the

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[3]The sceptical paradox being considered challenges knowledge about the external world; 'p' and 'q' stand for propositions about the external world.

assumption that S knows the incompatibility of E and H, S acquires perceptual knowledge E only if S has a rational basis that favours E over H. Accordingly, each of the statements in the underdetermination-based sceptical paradox regarding perceptual knowledge is plausible, but there is an inconsistency between them, for the denial of (UP3) is entailed by (UP1) and (UP2).

Nevertheless, Pritchard (2016: 133–4) argues that an advocate of ED-P can simply reject (UP1), at least as it applies to perceptual beliefs. According to ED-P, in paradigm cases of perceptual knowledge, S's rational support for her belief that p is factive, which is not available to her, say, envatted counterpart, S^*. As the rational support that S has is factive, but the one S^* has is not, S's rational support is thereby better than S^*'s. In this sense, S has rational support that does favour the belief that p over the brain in a vat hypothesis. Given that other theories such as epistemic externalism and attributer contextualism face difficulties dealing with underdetermination-based scepticism about perceptual knowledge, Pritchard concludes that ED-P has an edge over other theories for it offers a satisfactory way to cope with the paradox.[4]

Given the theoretical advantages of ED-P discussed above, we should adopt ED-P unless there is any plausible argument or reason for rejecting it. In fact, Pritchard (2012) addresses three potential problems for ED-P – *the access problem*, *the distinguishability problem*, and *the basis problem* (see Pritchard 2012: 19–22, 2016: 127–32). A brief overview of these problems will be given below.

Firstly, Pritchard (2012: 46) formulates the access problem as follows:

The access problem
(AP1) S can know by reflection alone that her reason for believing the specific empirical proposition p is the factive reason R.
(AP2) S can know by reflection alone that R entails p.
(APC) S can know by reflection alone the specific empirical proposition p.

(AP1) is clearly a consequence of ED-P: Only through having rational support which is reflectively accessible for her belief that p can S acquire perceptual knowledge that p. Moreover, it seems natural to accept (AP2), for there is little room for doubt that S can know solely by reflection that she cannot see that p unless p is true. Yet, (AP1) and (AP2), along with a form of the epistemic closure principle, (APC) seems to follow. In other words, it appears that S can know by reflection alone that p while p is an empirical fact. The result is that, at first glance, ED-P seems to imply the odd consequence that empirical facts can be known by reflection alone.

Secondly, the distinguishability problem arises from the assumption that S is not able to distinguish by reflection alone illusory or hallucinatory states from states of seeing that p. However, ED-P maintains that S can know by reflection alone that S sees that p. For given that S can know by reflection alone that S sees that p entails that S is not in an illusory or hallucinatory state, with a form of the epistemic closure principle in play, S is able to know by reflection alone that S is not in an illusory or hallucinatory state. If so, ED-P seems to imply that S is able to distinguish by reflection alone illusory or hallucinatory states from states of seeing that p, which follows that the assumption above is not true. Due to the counterintuitiveness of this result, ED-P therefore has to give an account for why one is capable of doing this distinguishing work.

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[4]See Pritchard (2016: Ch. 2) for discussions on other theories which attempt to deal with scepticism.

Lastly, the basis problem stems from a thesis which some philosophers (such as Dretske 1969: 78–39; Williamson 2000: Ch. 1; Cassam 2007: 26–34) endorse:

> *The entailment thesis regarding seeing and knowing* (SK)
> Seeing that *p* entails knowing that *p*.

The rationale behind (SK) is that seeing that *p* seems to be a species of knowing that *p*. If so, *S*'s perceptual knowledge that *p*, which is grounded on seeing that *p*, will be self-supporting. As it is more or less accepted that self-supporting does not produce rational support, it suggests that seeing that *p* fails to be *rational* support for *S*'s belief that *p*. This consequence is however in conflict with ED-P.

With these three problems in mind, let us briefly examine Pritchard's rejoinders to them.[5] As Pritchard (2012: 50–2, 2016: 130) argues, the access problem is not a genuine problem for ED-P, for *S*'s perceptual knowledge is constituted partly by virtue of having rational support which is not acquired by means of reflection alone. In turn, the conclusion of the access problem, (APC), does not follow from the combination of (AP1) and (AP2).

As to the distinguishability problem, Pritchard (2012: 96, 2016: 131–2) concedes that we are unable to discriminate between states of seeing that *p* and states of illusion and hallucination solely on the basis of perception. Yet he suggests that, in paradigm cases of perceptual knowledge, *S* can still know that *S* sees that *p* rather than merely seems to see that *p*. From the fact that *S* knows the difference between the two sorts of states mentioned above it does not follow that *S* knows it by a discriminative ability.

But how is it possible? Take the zebra case discussed in Dretske (1970) to illustrate (see also Pritchard 2012: 69). Suppose that *S* is at the zoo and looks at a zebra in the clearly marked zebra enclosure. It is natural to say that *S* knows what she sees is a zebra in the cage, although she is unable to distinguish a zebra from a cleverly disguised mule. For her visual experience is not the sole evidence that she has for her belief, but rather her expertise and background knowledge (such as that it is not too expensive to buy a zebra, that it is too risky for the reputation of the zoo to paint the mule exactly like a zebra) also provide her evidence for the belief. Given all pieces of evidence *S* has, it is not unreasonable to say that *S* has better evidence for her belief in a normal scenario than the one possessed in the 'cleverly disguised mule' scenario. It is this favouring evidence that leads *S* to have the knowledge that *S* sees that there is a zebra in the cage. In the same vein, even if *S* does not have the ability to discriminate between states of seeing that *p* and states of illusion and hallucination, she still has some expertise and background knowledge which serve as evidence to favour the scenario she is in over the illusory or hallucination one. If Pritchard is right, the distinguishability problem will not be a genuine problem for ED-P as well, in that it does not maintain that *S* can distinguish between the two incompatible scenarios and thus no explanation is required.

In order to dissolve the basis problem, Pritchard (2012: 26–8, 2016: 127–8) argues against (SK), a core thesis of the problem, by indicating that it is possible for *S* to see that *p* without believing that *p*. To be more specific, *S* wrongly believes that her faculty is malfunctioning due to the presence of a *misleading* defeater. In this situation, *S*

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[5]Notice that the question of whether Pritchard's solutions to these problems are successful is not the core issue in this paper. After all, the issue that concerns us is: *if Pritchard's solutions to these problems can help ED-P, will analogous solutions help ED-E as well?* So, we will merely discuss them briefly and will not go any further.

still sees that p while not believing that p. For it is generally accepted that knowing that p entails believing that p, and yet there are cases where S sees that p without believing that p, seeing that p thereby fails to entail knowing that p. Accordingly, given that (SK) is false, perceptual knowledge that p is not self-supporting in ED-P's framework, and the basis problem is therefore dissolved.[6]

All in all, in this subsection, we have explored ED-P. Specifically, we have discussed three theoretical advantages of ED-P, three problems for ED-P, and Pritchard's rejoinders to those problems. Keep these in mind as we consider the case for the parity thesis between ED-P and epistemological disjunctivism of memory knowledge.

3. Epistemological disjunctivism of memory knowledge

To examine the prospects of epistemological disjunctivism of memory knowledge (henceforth, ED-M), we have to of course discuss memory. In psychology and philosophy, memory has been classified in different ways. Psychologists have tended to use declarative and non-declarative memory as a basic distinction in the taxonomy of memory, whereas some philosophers have employed a tripartite division for their taxonomy of memory. Furthermore, Budson and Price (2005) claim that declarative memory is explicit memory (or memory with conscious awareness), while Bernecker (2010) identifies whether a memory can be expressed as a distinguishing feature of declarative or non-declarative memory. It should be noted, however, as Michaelian and Sutton (2017) remark, that the taxonomy from psychology is now becoming standard in philosophy.

Declarative memory has in turn been divided into semantic and episodic. Semantic memory is memory of general information, such as Paris is the capital of France. Semantic memory is a sort of memory of information abstracted from the context of the generation of that memory. It can include memory of information about oneself, such as one's birthday, as long as such a memory does not involve the recollection of the episode in which one learns one's birthday. Presumably most readers' memories of their birthdays are like this. Episodic memory is not such abstracted memory but rather memory of information together with memory of the context or with some aspects of the context of the episode that generated the memory. This produces qualia in the rememberer, whereas no such qualia need accompany semantic memory. It is with the former type of memory that one can engage in a sort of mental time travel or reliving an experience.

Instead of employing the above distinction, some philosophers have employed a distinction that divides memory in three parts (Bernecker 2010). Experiential (or personal) includes memory of experience of the self which has qualia and the phenomena of reliving; propositional (or factual) is memory of facts which needs not be about oneself and of which one needs not have direct experience. As Bernecker (2010) points out, both types of memory seek to represent the world. In contrast, practical (or procedural) memory is not like this. Examples of such memory include how to ride a bike, swim, and so on. As the reader has probably anticipated, experiential memory is sometimes associated with episodic memory and semantic memory is sometimes associated with propositional memory. Milburn and Moon (2019: 282) use "experiential memory"

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[6]More details for this response can be found in Pritchard (2011). Yet, Ghijsen (2015) raises an objection to Pritchard's proposal for dealing with the basis problem. If Ghijsen's criticism holds, another strategy to deal with the basis problem is presented in Shaw (2019).

but favour using "stored memory" rather than "propositional memory". Someone remembering their own name is offered as an example of stored memory and in discussing the example they note that such memory knowledge "does not depend on any kind of memory image or experience". Of course, it is clear that they are using "stored memory" in contrast to "experiential" or "episodic memory". While there is clearly some untidiness in all this conflicting terminology, making the case for one set of distinctions over another is not our primary concern. Instead, our position is that epistemological disjunctivism of memory applies to memory knowledge where this implies a belief. So, what is key to our position then is not the appropriateness of the psychological or philosophical taxonomy of memory but simply what is true of memory knowledge that is propositional.[7]

Each sort of memory (episodic and semantic; experiential and propositional; experiential and stored) is relevant for propositional memory knowledge, whereas this may not be the case for, say, practical memory.[8] In fact, it is memory that yields belief that is solely of interest here. After all, by parity with ED-P, it is memory knowledge that p which is of interest for an epistemological disjunctivist that follows in the steps of ED-P.[9]

ED-M is a claim about memory knowledge that S acquires in virtue of being in possession of rational support R (i.e., remembering that p) for her belief that p, which is both factive (R's obtaining entails p) and reflectively accessible to S. As is the case in ED-P, R is factive if R's obtaining entails p, and R is reflectively accessible to S if S is able to be aware of the rational support underlying her belief – she is aware that she remembers that p. Thus, according to ED-M, if S has memory knowledge that Paris is the capital of France, then S knows this in virtue of being in possession of rational support, remembering that Paris is the capital of France, for her belief. S's rational

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[7]A concern that one may have, and one that we only briefly address here, is that for the purposes of epistemological disjunctivism episodic memory might be disanalogous to perception in an important respect. Drawing on Bernecker (2010), one might hold that accuracy judgments of episodic memory, may involve truth and authenticity, as there is always an event component and an experience of that event component. How might memory be accurate in terms of truth? Consider the following example. I have a memory of Domingo giving the correct answer in class. The memory is accurate if Domingo did in fact answer the question correctly in class. How might memory be accurate in terms of authenticity? Here the idea is that memory might be accurate in so far as it is authentic with respect to an experience. Furthermore, there may be a type of memory, what Bernecker calls introversive memory, where these two things can come apart. An example of how a memory might be authentic without being true is as follows: Capsule had a hallucinatory experience in which it seemed to him that p. When he remembers this occasion, he has a belief that p and a belief that it seemed to him that p. While his memory is inaccurate, in the sense it is untrue that p, it is accurate, in the sense that the memory is authentic, with respect to his past experience. Perhaps some readers will have the intuition, based on the case, that there is a sense in which Capsule has memory knowledge of the proposition that it seemed to her that p even if the factivity constraint (understood as being about whether p was the case) is not satisfied. We think the key here is that the memory of the event can be evaluated separately from the memory of the experience and on that basis be judged as satisfying ED-M or not. We can, for example, ask whether memory of the experience matches with what the experience was. The implication being that there are different propositions to be evaluated in the case above rather than the same proposition. We thank a reviewer for *Episteme* for raising this with us.

[8]For a discussion of know-how and memory, see Williamson and Stanley (2001).

[9]There may be cases in which it is challenging to know where exactly to place them in a taxonomy. Memory-based relearning of the sort described in Martin and Deutscher (1966) is one such case. We expect that cases that are difficult to categorise may be so precisely because they are non-paradigm cases. We thank a reviewer at *Episteme* for raising this point with us.

support is factive in that if one remembers that Paris is the capital of France, then it is true that Paris is the capital of France and of course remembering this is something that is reflectively accessible to S. After all, she is able to be aware of the rational support underlying her belief. Now she may not remember when she was told, anything about the context in which she learnt that Paris is the capital of France, and so on. This does not, however, imply that she cannot remember that Paris is the capital of France, nor that she is unable to be aware of her memory that Paris is the capital of France underlying her belief. The above is an example of semantic memory, although there is nothing about the description of the case that means that episodic memory could not equally be a basis for knowledge.

If all this is right, and we will consider some challenges, then ED-M holds for declarative memory. Can we say it holds for memory in general? Here the essential point is about what can count as propositional memory knowledge in the first place, as that is the sort of memory knowledge that is of interest to us. The most important question here is what sort of memory can produce propositional memory knowledge in the first place. On the face of things, practical memory cannot, although it can produce knowledge-how. The obvious candidates for the sorts of memory that can produce propositional memory knowledge are semantic and episodic memory. Nonetheless, our position is simply that a requirement for any paradigm case of propositional memory knowledge is that the relevant agent has knowledge that p in virtue of being in possession of rational support, R, for this belief that p, which is factive, R's obtaining entails p, and reflectively accessible to the agent.

As discussed, memory can produce knowledge that fits within an ED-M framework. Our claim is that any paradigm case of memory knowledge can be handled by the epistemological disjunctivist framework. We claim this on the basis that paradigm memory knowledge cases are such that the subject meets the disjunctivist requirements for memory knowledge. That is, the subject has propositional memory belief that p by virtue of possessing rational support R, remembering that p, which is factive and the subject is able to be aware of R underlying her belief, just as is the case for perceptual knowledge. Assuming that remembering that p is factive, we do not see a challenge to ED-M in cases in which the subject is unable to be aware of her rational support for her belief but the knowledge is memory knowledge. This brings us to the next point.

There are cases that might at first blush seem to be memory knowledge that are in fact not memory knowledge. These are the sorts of cases where although the agent remembers that p, what underlies their belief is not their memory that p but rather an alternative source such as an inference for p, perhaps informed by memory q, or even informed by memory that p but underlain by the inference, rather than by the memory that p. A similar point holds for deduction. The case in which an agent remembers that the ketchup is either in the fridge or is in the living room, and the agent sees that it is not in the fridge and so believes it is in the living room is not a case of memory knowledge. The relevant proposition has not been remembered, but it has been inferred.

There is also, however, a more difficult challenge that can arise from how we think about the link between memory and belief. One might hold that memory that p does not entail a belief that p. Rather the belief only comes about through a process of inference. Of course one can say the same about perceptual belief. One can hold that having the perception that p is quite separate from the belief that p. After all, sometimes one does not believe one's eyes. One may believe, wrongly, that one is hallucinating. If the

equivalent for memory is a problem for ED-M, it is a problem for ED-P.[10] Recall, our argument is merely that if ED-P is successful then ED-M can be successful too.

4. The case for parity

Let us consider the case for parity of agreement between ED-P and ED-M. ED-M is the following position:

> *ED-M*
> In paradigmatic cases of memory knowledge, S has memory knowledge that p in virtue of being in possession of rational support, R, for this belief that p, which is both factive, R's obtaining entails p, and reflectively accessible to S.

As stated in this formulation, like ED-P, ED-M provides a necessary condition for memory knowledge in paradigm cases. Correspondingly, in the formulation of ED-M, reflective accessibility is a requirement according to which S should be able to be aware of the rational support underlying her memory belief; factivity requires that the rational support S possesses for her belief that p entails that p.

ED-M is attractive in three aspects just as ED-P. First, if ED-M is true, it can satisfy both epistemological internalist and externalist intuitions: after all, reflective accessibility is an internalist requirement and factivity is an externalist requirement.

Second, ED-M makes sense of common practice regarding justifying memory beliefs. Analogous with ED-P, a common practice in justifying one's memory belief that p is to appeal to one's remembering that p. More importantly, these common practices can be illuminated by ED-M. For one thing, remembering that p is factive as well; S cannot remember that p unless p is true.[11] For another, in paradigm cases of experiential memory knowledge, S can know by reflection alone that S remembers that p. Those common practices hence provide grounds for us to adopt ED-M.

Third, ED-M can also offer a satisfactory way to cope with Pritchard's radical sceptical paradox as it pertains to memory knowledge:

> *Underdetermination-based scepticism about memory knowledge*
> (UM1) One does not have rational support that favours one's memory belief in an everyday proposition E over an incompatible radical sceptical hypothesis H.
> (UM2) If S knows that E and H describe incompatible scenarios, and yet S lacks a rational basis that favours E over H, then S lacks rationally grounded memory knowledge that E.
> (UM3) One has widespread rationally grounded memory knowledge E.

The plausibility of (UM1) stems from the idea that we are unable to subjectively distinguish normal cases of memory knowledge from radical sceptical hypotheses (say, the scenario in which the world is created five minutes ago, and all of one's memories of events prior to this time are illusory).[12] Given this, it seems difficult for us to possess any rational support that favours our memory beliefs over the five-minutes-world hypothesis. At the same time, (UM3) seems generally acceptable.

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[10]See Martin and Deutscher (1966) for a discussion of relevant cases relating to memory.
[11]The factivity of propositional memory is defended by Bernecker (2008: Ch. 8).
[12]This hypothesis is initially presented in Russell (1921: 159).

(UM2) is the very same statement as (UP2). If we accept (UP2), (UM2) should be accepted. (UM2) is of course the source of the conflict between (UM1) and (UM3). While each of the statements in the underdetermination-based sceptical paradox regarding memory knowledge seem plausible, there is an inconsistency between them, for the denial of (UM3) is entailed by (UM1) and (UM2).

Just like the strategy ED-P deploys to deal with the underdetermination-based sceptical paradox regarding perceptual knowledge, we can reject (UM1) by accepting ED-M. According to ED-M, in paradigm cases of memory knowledge, S's rational support for her memory belief that p is factive, which is not available to her counterpart situated in the five-minutes world. Granted that the rational support S possesses is factive, it favours the belief that p over the five-minutes-world hypothesis. Therefore, ED-M is preferable for it presents a satisfactory way to cope with the paradox above.

Based on the considerations above, we have three reasons for adopting ED-M if it is available. As we shall now see, however, ED-M faces three familiar worries.

Being similar to ED-P, ED-M encounters the access problem, the distinguishability problem, and the basis problem. As Milburn and Moon (2019) point out, the presence of both the access problem and the distinguishability problem has nothing to do with what kind of knowledge the version of disjunctivism is about. In other words, what gives rise to these two problems is that disjunctivists maintain that S can form beliefs about contingent truths with rational supports which are factive and reflectively accessible to S. If this is the case, ED-M can deal with these two problems by rejoinders similar to ED-P's.[13]

Along with the two problems above, ED-M must have a satisfactory response to the basis problem which is similar to ED-P so as to establish the parity thesis. As mentioned previously, by rejecting (SK), ED-P blocks the presence of the basis problem. In the same vein, if ED-M can reject the claim that remembering that p entails that knowing that p (RK), then ED-M can also block the presence of the basis problem.

As we have seen, Pritchard (2012: 26–8, 2016: 127–8) argues against (SK) by making the case that S can see that p without believing that p. The example of this possibility was that S wrongly believes that her faculty is malfunctioning due to the presence of a misleading defeater. So while S sees that p, and p is thus true, she rejects what she sees as grounds for p. The very same approach can be taken with memory. S remembers that p but fails to believe p on the basis, say, that she has mistakenly treated the sort of memory she has as being very unreliable. Remembering that p thereby fails to entail knowing that p, given that knowledge implies belief but remembering does not. Since (RK) is false, the basis problem is therefore dissolved just as ED-P's rejecting (SK) dissolves the basis problem.

5. Objections to ED-M

ED-M faces challenges. As previously discussed, Milburn and Moon (2019) distinguish between experiential memory knowledge and store memory knowledge. While they argue the case for an epistemological disjunctivism of experiential memory, they regard epistemological disjunctivism of store memory knowledge (ED-MS) not to be viable. Below is their articulation of an epistemological disjunctivism of store memory:

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[13]For more details to ED-M's responses to the access problem and the distinguishability problem, see Milburn and Moon (2019: 287–8).

ED-MS
In paradigmatic cases of stored memory knowledge an agent, *S*, has stored memory knowledge that *p* in virtue of being in possession of rational support, *R*, for her belief that *p* which is both factive (i.e., R's obtaining entails p) and reflectively accessible to *S* (Milburn and Moon 2019: 291).

ED-MS provides a necessary condition for stored memory knowledge in paradigm cases. According to ED-MS, *S* has stored memory knowledge that *p* only if *S*'s belief that *p* is formed through having rational support which is reflectively accessible and factive. Milburn and Moon (2019: 192) argue that an epistemological disjunctivism of memory does not succeed for what they describe as non-deductive inferential stored memory and non-inferential stored memory knowledge. We will deal with the latter charge here — see section 3 for our response to the former.

The authors offer the example of Michael who remembers that snow is white. Actually this example is essentially the same as the example of knowing that Paris is the capital of France discussed previously. If pressed for rational support for the claim that snow is white, Michael is likely to appeal to having seen or remembering that snow is white. But this would not do according to the authors, after all here we are interested in stored memory rather than experiential memory. Stored memory is often unconscious. What if Michael is taking a nap?

Here the authors identify a general problem for access internalists. Presumably the thought though is that experiential memory by definition never falls foul of such a problem given what is required for experiential memory – qualia and experience of reliving. Someone then cannot be experiential remembering when in dreamless sleep, as she cannot have the experiences that are part of experiential memory in such a case. Still, this also produces the result that I only have memory knowledge of the day I graduated, where I was on 11 September 2001, or whatever, when not asleep, and so on. The challenge here then is a general one for the access internalist, rather than a challenge that is specific to ED-MS.

Perhaps the sleeping example is an unnecessary distraction from a more serious challenge to a general ED-M or an ED-MS in particular. Even at the best of times – for example, when one is awake and alert – one cannot access unconscious memory, whereas this is obviously not the case with experiential memory. Does this then show that there is a problem for ED-MS? After all, how can S be said to be in possession of rational support for her belief that *p* which is both factive and reflectively accessible? It is true that S does not have reflective access to a particular memorial experience that can serve as rational support for her belief. Nonetheless, it is not obvious that this is what is necessary. S after all has reflective access to the fact that he remembers.

Consider again the case of Michael. Michael remembers that snow is white without, let us suppose, remembering a particular occasion of discovery or even a particular experience of seeing or hearing that snow is white. So it is not as if the memory of discovering that snow is white or a particular experience of being told snow is white is reflectively accessible for his belief that snow is white. Michael does, however, have reflective access to the fact that he remembers. That this is devoid of the experiential component that is part of experiential memory does not lessen the rational support that it provides for his belief that snow is white. When challenged as to how he knows snow is white, Michael can say that he remembers that snow is white.

Following the previous discussion, it might be argued that the problem with ED-M is not that it's overly permissive but rather that it's overly restrictive. Key to our answer

above was that Michael has reflective access to the fact that he remembers. Let us consider a different case – one in which he does not have access to the fact that he remembers. Suppose upon being asked a question on a quiz show, he finds himself with an answer. His answer is that Elizabeth I died in 1603.[14] He is not sure why he thinks this, perhaps he even thinks it is just a guess. In any case, let us stipulate that he does not have reflective access to the fact that he remembers this. Of course, he is right that Elizabeth I died in 1603. Should we say that he knows in this case? If he does know, then why think ED-M is a necessary condition for memory knowledge?

A natural response is to either deny that he knows or say that this is a non-paradigmatic case. While the former is a natural response for epistemologists with internalist sympathies, it is not for those with externalist sympathies. The alternative answer is that it is not a paradigmatic case of memory knowledge and epistemological disjunctivism only aims to handle paradigmatic cases. Indeed, epistemological disjunctivism requires reflective access for paradigm cases. The sort of case in which paradigmatic perceptual knowledge is gained, is the sort of case in which the agent possesses rational factive support from seeing that p (Pritchard 2012: 31). Pritchard (2012: 37, 46) makes clear that for a case to be a paradigm case, such rational support must satisfy the reflective access requirement. In other words, the agent must be capable of being aware of the rational support underlying her belief. By parity with ED-P, ED-M would deny that the quiz case is a paradigmatic case, as, according to the description of the case, the protagonist lacks reflective access.[15]

The claim that it is not a paradigmatic case neither commits ED-M to say that it is a case of knowledge or that it's not. Once it is not a paradigmatic case, then it falls outside the scope of epistemological disjunctivism.[16] Our account of ED-M is saved from the objection, as are the theoretical benefits that come with adopting that account.

6. Conclusion

In this paper, we have examined the prospects of a unified disjunctivist account of memory knowledge (ED-M). In particular, Pritchard's ED-P has three theoretical advantages – it satisfies both internalist and externalist intuitions in epistemology, fits common practices in justifying beliefs, and offers a satisfactory way to cope with underdetermination-based radical scepticism. As shown, ED-M is preferable in these three aspects as well. ED-M also can make use of the responses in defence of ED-P to the three main worries (the access problem, the distinguishability problem, and the basis problem) that ED-P faces.

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[14]We see strong similarities between this type of case and Radford's (1966) famous case.

[15]For more on paradigm cases in Pritchard's epistemological disjunctivism, see Pritchard (2012: 29–34). Here Pritchard discusses paradigm cases as 'good+ cases', or 'good cases' in his (2016). Two main conditions must be met for a case to be a good+ case: First, objectively epistemically good conditions require that the subject S's relevant cognitive faculties are not malfunctioning and S is in an environment where she can be in a position to reliably form true beliefs. If this condition is met, then S sees that p and so S's perceptual experience is veridical. Second, a subjectively epistemically good condition requires that no defeater, doxastic or normative, occurs. In light of this, it is possible for S to be in an objectively epistemically good scenario without knowing that p since the scenario may be subjectively epistemically bad.

[16]Interestingly, an analogous type of case for perception is conceivable. One could believe that p from seeing that p but one could lack reflective access to that rational support for p. Suppose one has a form of brain damage that ensures this. Again, a suitable answer is that this is not a paradigm case of perceptual knowledge.

In addition, we replied to two objections. One of which is proposed by Milburn and Moon's (2019), which says that one can have memory knowledge that *p* without being able to access her experience related to *p*, especially when she is sleeping. Yet, we pointed out that such an objection is a general challenge for access internalism rather than a specific one for ED-MS (and also ED-M). Furthermore, the objection sets an unnecessary restriction, which ED-M can deny, that S must be able to access to a particular memorial experience so as to acquire the related knowledge. A different objection states that ED-M is too restrictive by requiring that the subject's rational support is reflectively accessible to her. However, we showed that ED-M treats such cases as non-paradigmatic case and as such doesn't offer a verdict as to whether they should be considered cases of memory knowledge or not.[17]

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