Is Memory Purely Preservative?

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§1 Two forms of memory and Goethe's Problem

Let us start with a familiar distinction between two forms of memory: episodic memory (remembering a thing or an episode) vs. factual memory (remembering that something is the case).[1]

Factual memory does not necessarily give rise to the corresponding episodic memories. For instance, we colloquially use formulations such as the following:

(1) I remember (I know) that I broke my leg when I was a child, yet I don't remember the incident itself.

I remember that the incident was painful, but I do not remember the pain. I know that I broke my leg, because I learnt it from my parents, but I have forgotten (in the relevant, episodic sense) the painful experience itself. In general, factual memory that *p* does not imply episodic memory of *x*, where *x* is an objective constituent of the proposition that *p*.

Many things which I know about myself and my own past life I learnt from others. This is especially true of events in my early childhood. A central question in the philosophy of memory is how we should explain the distinction between those of my autobiographical memories (i.e. the memories whose expression requires use of the first-person "I") which are genuinely episodic and those which belong to personal folklore – to things that friends and family members told me at various times after the remembered events.

One suggestion is that the relevant difference between episodic and factual memory has to do with the memory's *causal history* (rather than with its content). Arguably, any memory – episodic or not – which refers to a particular past experience causally derives from

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[1] Various versions of this distinction can be found, *inter alia*, in Russell (1921), Bergson (1939), Ayer (1956), and Malcolm (1963). In what follows, I freely oscillate between saying that a subject remembers an incident and saying that a subject remembers *experiencing* the incident. As we shall see, the latter description is more perspicuous than the former as far as episodic memory is concerned.

that experience itself. (This is a consequence of the causal theory of singular thought.) But there are memories which come *directly* from the subject's past experience, in the sense that neither external testimony (verbal or not) nor internal reasoning are essential links in the causal chain connecting past and present. For instance, my memory that I broke my leg when I was 3 does not come directly from the past incident, since it causally depends on my parents' testimony. My present memory (or knowledge) that the incident was painful does not come directly from the incident either, since I inferred this some time ago, from the parental narration.

I suppose that there is an intuitive notion of "coming directly" from the remembered experience, even if a more precise definition is certainly needed. We can provisionally content ourselves with the following negative definition: a memory comes directly from the remembered experience only if the memory's causal history does not essentially involve testimony or inference.

The envisaged suggestion, then, is that a given memory is episodic if and only if it comes directly from the remembered event – otherwise it is factual. Is this suggestion plausible?

Unfortunately, it is not. To see why, it is worth considering a remark made by Goethe at the beginning of his autobiographical work, *Poetry and Truth*:

> When we wish to remember what happened to us in the early times of childhood, it is often the case that we confuse what we heard from others with what we genuinely know from our own experience.[2]

On one way of reading this passage, episodic memory is not intrinsically associated with a specific *experience* or *feeling*. We have to reject the idea of a "phenomenology of episodic memory", that is the myth of a memory experience immediately recognizable by its phenomenal properties.[3] This reading is compatible with the envisaged suggestion. Episodic memories are those that come directly from the remembered event, but we often confuse episodic memories with factual ones, if only because (it is assumed) memory does not wear its causal history on its sleeves.

However, there is another interpretation of Goethe's remark, which I think brings it closer to the true nature of episodic memory. The memories alluded to by Goethe in this

[2] (1811: translated from p. 15). My attention to this passage was drawn by Anscombe (1974).
[3] This is Anscombe's reading.

passage are precisely *not* episodic. An episodic memory normally appears to the subject *as* coming directly from his own past experience, in a way which excludes the alternative possibility that it is immediately grounded on testimony or reasoning. Episodic memory normally reveals its own immediate origin. In general, I do not *confuse* an episodic memory with a factual memory deriving from external testimony. Of course, a seemingly episodic memory might not trace directly back to the relevant past experience, and I might wonder, at a reflective level, whether this is so with a particular memory of mine.[4] However, if good reasons convince me that this is indeed so, I have to admit that I was somewhat *deluded*. Even if I can recover veridical pieces of factual information from my memory, there was something wrong about it, in so far as it *presented* itself as episodic.

On the proposed reading of Goethe's passage, a factual memory does not become episodic just because it happens to come directly from the remembered event. The following description is not self-contradictory:

(2) I remember (I know) that I broke my leg. For all I know, my memory might come directly from the past incident, yet I don't remember the incident itself.

Goethe's point is that factual memory does not reveal its own immediate origin. So I may presently possess the information that I broke my leg when I was a child, while I have *forgotten* how I acquired this piece of information. I cannot just read off the causal history of my factual memory from that memory itself (or from its content). Therefore, although coming directly from the remembered event is a necessary condition of episodic memory, it is certainly not a sufficient condition, since it can also be satisfied by merely factual memories.

Further reflection on Goethe's remark shows that other claims about episodic memory cannot be sustained. For instance, one might suggest that a given memory is episodic if and only if (i) it comes directly from the relevant past incident, and (ii) the subject *remembers* that it comes directly from this incident. In other words, an episodic memory is defined as a factual memory which comes directly from the remembered experience, and which is the object of a further meta-memory about its immediate origin. (It is a meta-memory in the sense that it is a memory about another memory.) However, this account of episodic memory does not work. Suppose that I spontaneously tell my parents a story about a past incident, without knowing whether the story comes directly from my own experience, or from external testimony. My parents declare that the story must come from me, since (they say) there is no

[4] I do not want to exclude the possibility that Goethe was also thinking of such a case.

way I could have learnt this from someone else. I acquire thus the further, factual meta-memory that my memory (or the set of memories constituting my story) comes directly from my own experience. These memories do not necessarily amount to episodic memory of the relevant incident. The following description may be perfectly accurate:

(3) I remember (I know) that I broke my leg, I also remember (I know) that the first memory comes directly from my past experience, yet I don't remember the incident itself.

This description will be appropriate in a context in which I have forgotten the immediate origin of my meta-memory (for instance, that it comes directly from my parents). Obviously, insisting that I remember that the second-order memory comes directly from my own experience leads us nowhere, because this would simply raise the corresponding question about the causal history of the third-order memory. Episodic memory does not seem to be (easily) definable in terms of a structured set of factual memories, even if some of them are meta-representational.

In general, the possibility that a factual memory comes directly from the remembered experience and the possibility that it does not are *equally* compatible with the memory's being veridical or correct, even warranted. In contrast, the possibility that a seemingly episodic memory does not come directly from the past experience is *not* compatible with its correctness. It follows that the epistemic value of episodic memory is different from the epistemic value of factual memory. Factual memory gives the subject a reason to believe that the remembered event really happened, and is not the result of fiction or imagination. However, genuine episodic memory gives the subject something more: it provides him or her with a reason to believe that the information carried by it does not essentially derive from testimony or inference but comes directly from the subject's own past life.[5]

I shall call "Goethe's Problem" the philosophical problem of accounting for this epistemic gulf between episodic and factual memory. An important task of a theory of

[5] This way of formulating the epistemological difference between episodic and factual memory is all right as far as it goes, but in the light of the main conception presented in this chapter, it does not go far enough. For there is another crucial difference between the two forms of memory. Consider a particular factual memory which involves information originally acquired by perception. If the relevant piece of information has been properly retained and faithfully preserved, but is in fact wrong (and so is a piece of misinformation), all the blame goes to the perceptual experience which introduced the information into the cognitive scene. In contrast, episodic memory is a *sui generis* experience, and as such it is always, so to speak, epistemically responsible for the veridicality of the carried information. Thus, if a seemingly episodic memory carries what is in fact misinformation, there is something wrong with the memory itself (it is at least partly illusory), and not (or not only) with the relevant past experience.

episodic memory is to solve Goethe's Problem, in showing how that form of memory can have the substantial epistemic role it appears to have.

§2 Factual memory is purely preservative

What emerges from these preliminary considerations is that factual memory does not *have* to carry information about its own causal history. Arguably, this is a consequence of the fact that it is *purely preservative*: The piece of information the subject is said to remember must have been originally acquired by other cognitive means (e.g. perception or testimony), retained and faithfully preserved since then. Since most, if not all pieces of information acquired by perception or testimony do not say anything about how they have been acquired, the same is true of information retained and preserved by factual memory.

In this section, I shall make a little more precise the claim that factual knowledge is purely preservative. Although I shall ultimately argue that there is a connection between memories being purely preservative and them *not* being episodic, I do not want to exclude at the outset the possibility that episodic memory is purely preservative (and even is a kind of factual memory).

Let us start with a reasonably straightforward case. I see that there is a book on the table in front of me, and I acquire the corresponding perceptual knowledge. Later, having left the room, I remember that there was a book on the table then in front of me. I have factual memory knowledge about the book. Obviously, in this case, memory is not a *source* of knowledge, since the remembered piece of knowledge has been acquired by cognitive means other than memory, namely visual perception and judgement. As Dummett puts 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; more exactly, it simply *is* the knowledge I had as an eyewitness, maintained in being" (1993: 414-15). If memory were a source of knowledge in this case, we would have to say that each time I remember that there was a book on the table, I *re-acquire* the same piece of knowledge over and again. This seems absurd.[6]

Sometimes, of course, what is preserved from the original acquisition of information to the present memory need not be knowledge, even if the present memory itself is knowledge. Suppose that I did not believe that there was a book on the table when I saw it, because I (wrongly) thought that I was faced with, say, a hologram. I saw that there is a book

[6] Cf. Shoemaker (1967: 272). Factual memory can be a source of knowledge in a different sense, since it is always possible to draw knowledge-preserving inferences from it.

on the table, but I did not *know* it (because I did not even believe it). Later, becoming aware of my mistake, I believe that there *was* a book on the table after all. Intuitively, my present belief is a case of factual memory knowledge, in so far as it carries well-grounded or warranted information faithfully preserved over time.[7] My memory is still purely preservative, since its content is information originally acquired by perception. I remember, and know that there was a book on the table partly because such was the content of my original perception.

A first claim about factual memory, then, is that it involves a *continuous* information-link between the original cognitive state (e.g. visual perception) and the present memory. (I ignore the possibility of innate knowledge and information.) Part of the explanation of why my factual memory is knowledge is that I successfully preserved a single informational state originally capable of grounding knowledge. There should not be any (substantial) interruption in the informational chain. If I have lost track of the relevant information, I have lost track of the memory, and the matter is forgotten (although I might have later another factual memory with the same content). Of course, we might be temporarily unable to retrieve information we in fact possess, as when I have someone's name on the tip of my tongue. This is, so to speak, a performance and not a competence problem. There is a distinction to be drawn between possessing a piece of information we cannot access because of independent and momentary interference, and having completely forgotten the information. Interruption in the informational chain has the latter as a consequence.

A second claim I think we should make about factual memory is that the information-link underlying factual memory is *doxastic*: It is always by means of some *belief* that information carried by factual memory is preserved over time. One motivation for this claim is the following. A central and much-discussed feature of factual memory is that it allows us to retain a propositional content without keeping track of the specific *reasons* for which the content has been originally formed. How is it possible, then, that a *present* factual memory amounts to knowledge? It cannot be knowledge if it is carrying a piece of information which was *merely entertained* by the subject outside any belief context. What epistemic value would we attach to a piece of information which is retained as a merely entertained piece of information (if indeed this makes sense at all), as opposed to something which is actually *believed* by the subject? For all the subject knows, this information might have been once

[7] The fact that information acquired by perception has been retained and preserved over time is among the "ground-floor" conditions on memory knowledge, in the sense defined by Campbell (1994: 234). There are other, "reflective" conditions on memory knowledge, though. The mere fact that warranted information has been retained and preserved is not sufficient for knowledge. What I have to say here about factual memory is compatible with what Peacocke (1986: 161) calls "The Model of Virtual Inference".

entertained in the context of fancy or imagination. (Remember that one can have a factual memory while having forgotten the circumstances in which the remembered information has been acquired.)

A partial solution to this problem has already been suggested by Dummett: sometimes, the present memory is *identical* with a belief that was properly grounded on the relevant past experience. In the first case described above, there is a single belief, to the effect that there is (or was) a book on the table, which is preserved over time as a single piece of knowledge. The case in which I do not believe that there is a book on the table when I see one is more complicated. Here, the formation of the belief that there was a book on the table does not coincide with the acquisition of the corresponding information. This does not contradict the second claim. The information-link between past and present is still doxastic since it is crucially relayed by the meta-representational belief that I have (or had) a visual experience with a definite character and content. When I realized that I was wrong, and that my past experience was veridical after all, I *detached* the belief that there was a book on the table from this meta-representational belief.[8]

Combining the two claims together, we can say that factual memory involves a continuous information-link which is guaranteed, at any time between the past acquisition of the information and the present memory, by some belief carrying the relevant information. Either the present factual memory is the very belief that was grounded on the original cognitive state, or it is a belief which has been validly derived from a set of beliefs which contained the information, until a point has been reached at which a belief is immediately grounded on the original cognitive state. (This is only a rough formulation.) In either case, the memory's epistemic credentials depend on there being a continuous doxastic information-link between past and present.

One consequence is that since beliefs have conceptual contents, the information retained in factual memory is always conceptual (even though it may be partly or fully indexical). Another consequence is that the content of factual memory need not concern the past. The remembered information might have been originally acquired not only through perception but also through testimony or reasoning. For instance, I have been told some days ago that I have an appointment tomorrow. I have kept track of the days, and today I remember that I have an appointment tomorrow, but I am unable to recall the past circumstance in which this information was acquired. Or what I have been told is that I will have an appointment on 9 November 1998, and inferred that it is in three days, then keeping track of the days as

[8] It follows that some, but not necessarily all factual memories depend on meta-representational abilities.

before. In one case, what I remember has been acquired directly through testimony; in the other case, it has been acquired through reasoning based on testimony and other knowledge.

§3 Reflexivity and childhood amnesia

Factual memory is purely preservative. Is it true of episodic memory as well? In this and the following sections, I shall discuss two conceptions which lead to an affirmative answer to this question. As we shall see, both conceptions raise serious problems.

On the first conception of episodic memory to be presented, episodic memory is purely preservative because it is assimilated to a kind of factual memory. At the end of the first section, I envisaged a possible account of episodic memory in terms of a structured set of factual memories. The proposal was that an episodic memory is just a factual memory associated with the further, meta-representational memory that the former memory comes directly from the subject's past experience. Now this proposal has similarities with the theory of episodic memory put forward by Perner in his important book (1991). Suppose for example that the subject remembers, in the episodic sense, a particular word on a list he has seen before. According to Tulving (1985), the subject has access to an "episodic trace information" which Perner (1991: 163) claims is a "metarepresentational comment" on how information was obtained:

(4) I have information that "pear" was on the list, and I have this information because I have seen "pear" on the list.

On Perner's view, an advantage of the meta-comment theory is that it accounts for the phenomenon of "childhood amnesia", namely the fact that adults generally (i.e. statistically) have no memories of the first three or four years of their childhood. The explanation is that before that age children do not have the necessary meta-representational abilities, so they have difficulties in forming long-term memories of their experiences.

There is one interpretation of Perner's theory which invites the objection raised in §1. On this interpretation, we can take (4) as the description of two separate pieces of knowledge – "I have information that 'pear' was on the list" and "I have this information because I have seen 'pear' on the list", the latter involving a representation of the former. The objection is that even if the phrase "I have this information because I have seen 'pear' on the list" is read as meaning that the relevant information (that "pear" was on the list) comes directly from

one's past experience (in the sense already introduced), someone could possess both pieces of information and fail to have an episodic memory of seeing the word on the list.

However, there is another interpretation of Perner's theory which escapes this objection. Instead of saying that (4) describes two pieces of information, we stipulate that it describes a *single* piece of information which refers to itself. The reflexivity of the memory information can be more explicitly indicated as follows:

(5) I have information that ("pear" was on the list and this information comes directly from my past experience of the list).[9]

Reflexivity comes from the deictic term "this information", which refers to the very piece of information it contributes to express. If the information is conceived as a Russellian proposition, it contains as an objective constituent the memory state or event which carries it. The general idea is the following: when I remember *x* in the episodic sense, I have a collection of factual memories not only about *x*, but equally and simultaneously about the fact that this same collection comes directly from my past experience. Episodic memories are reflexive factual memories. Since (arguably) reflexivity entails meta-representation (although the converse is not true),[10] the proposed account can still be invoked to explain childhood amnesia.

Let us grant that the reflexive account of episodic memory deals with Goethe's Problem: the piece of information described by (5) could have been acquired neither by reasoning nor by testimony, at least not while preserving the essential reflexivity. My memory provides me with a reason to believe that *itself* comes directly from my own experience. The question is, is this a plausible account of episodic memory?

Note first that it is essential to Perner's explanation of childhood amnesia (as it is to account for the positive epistemic value of the relevant factual memories) that the retained piece of information was acquired *at the same time as* the remembered experience. If it were allowed that it can be acquired later, it would be unclear, in particular, why people are unable to recall events from a time of their lives (before the age of 3 or 4) when they lacked the capacity to meta-represent. The reflexive account of the distinction between episodic memory

[9] In a later work, Perner (forthcoming) presents something like this refined formulation to avoid the style of objection raised here. Perner's actual formulation is "I have information (that 'pear' was on the list and that I have this information because I have seen 'pear' on the list)". For similar proposals, cf. Searle (1983) and Owens (1996).

[10] For details on this point, cf. my (1997), in which I tried (I now think wrongly) to assimilate episodic memories to reflexive factual ones.

and (mere) factual memory points to different ways in which the remembered events were *encoded* when they were first experienced by the subject. Something like the view that memory is purely preservative is presupposed here. At least, it seems to be required that there be a continuous, reflexive information-link between the remembered experience and the present memory: episodic memory involves the preservation of a special kind of information over time.[11]

However, such a view is a source of difficulties for the reflexive account. In particular, there is the question of how the piece of reflexive information was *acquired* in the past. Consider the following unwelcome consequence of this account. I can remember a particular incident in the episodic sense only if (i) the incident was (consciously) experienced by me, and (ii) I had a roughly simultaneous second-order representation of my experience. This does not fare well with many relevant cases, in which I suddenly remember something to which I barely paid attention when I first perceived it. Suppose I was absent-minded, thinking about something else. Surely I *saw* the book (it was in my visual field), but it is implausible to suggest that my visual representation of it was *at that time* the object of a (reflexive) meta-representation.

In a recent paper (forthcoming), Perner expresses some sympathy for a version of the "higher-order thought" (HOT) theory of consciousness, according to which consciousness of a fact requires awareness of the state with which one beholds the fact.[12] Perhaps, then, he would argue on the following lines. It seems implausible, on phenomenological grounds, that every conscious experience is accompanied by a higher-order representation that makes it conscious, but it is only because we implicitly assume that the latter is itself conscious. HOT theories of consciousness usually reject this assumption. My visual experience of the book was conscious because it was the object of a meta-representation which does not itself have to be conscious. That is why it does not *seem* to me that I have a representation of my visual experience when I simply see the book.

However, it is not clear that this strategy is available in the present case. When I remember having seen the book, I have a fully conscious piece of information, but it is argued that it was unconscious at the time of its acquisition (at least as far as its reflexive component is concerned). In the HOT picture, what makes an occurrent mental state conscious is the fact

[11] In Perner (forthcoming), it is said that one has to "encode *(or later reconstruct)*" (my italics) the meta-representational comment. Reconstructing cannot mean here acquiring the information expressed by such a comment *after* the remembered experience; otherwise, why should I be unable to reconstruct meta-representational comments about experiences I had before the age of 3?

[12] Cf. Armstrong (1980), Rosenthal (1993).

that it is the *object* of a meta-representation. By definition, an essentially reflexive thought is already its own object; it is at once presentational and meta-representational, so to speak. How, then, could the HOT theory allow for it to be unconscious? The point here is not so much that reflexive information cannot be *retained* unconsciously, when the subject does not actually use the information but is merely disposed to retrieve it. It is rather that it cannot be *acquired* unconsciously, because of its essentially reflexive structure. The HOT theory of consciousness must see with suspicion the very notion of acquiring reflexive information unconsciously.

Moreover, one might wonder how my present memory can give me a reason to believe that I saw a book in the past if it emerged, at some point, from unconscious acquisition of the remembered information. For what is the difference, from the subject's point of view, between a memory which *becomes* conscious and a piece of information, or belief, which merely comes to them as something they did not have before? Of course, I might discover that I had an unconscious belief, by realizing that I behaved in surprising ways in various past situations, but such a discovery is possible only if I have the independent means of establishing that my unconscious belief was there for some time. Intuitively, this seems to require genuine episodic memory (of my past behaviour), precisely of the kind that, I shall argue, the reflexive account cannot invoke.[13]

Alternatively, one might claim that there *was* an appropriate meta-representation at the time I saw the book, namely the indexical representation of one's global perceptual experience as *that* experience, or as being *thus*. One might conceptualize an experience as being *thus* but not as containing a representation of the book, even if one's experience contained such a representation. The claim is that I suddenly remember the book by discovering that *that* experience has always contained (*inter alia*) a representation of it. Even if we accept the idea that perceptual experience is always accompanied by a meta-representation of this kind (which I think we should not), it is doubtful that the indexical concept "*that* experience" continuously carries a potentially conscious information about the book if the latter was completely unattended at the time of the experience.

To sum up, Perner's reflexive account faces a dilemma. Either episodic memory is purely preservative, or it is not. In the first case, we are bound to postulate meta-representations formed at the same time as the remembered experiences, but this seems to

[13] This speaks equally to those versions of the HOT theory of consciousness which hold that an unconscious meta-representation about a first-order representation is not enough to make the latter conscious; see Carruthers (1996). As far I as I can see, Carruthers does not explicitly address here the question of how an unconscious piece of information can become conscious.

misdescribe the phenomenology of many relevant cases. In the second case, justice is done to the phenomenology, but we have lost a possible explanation of childhood amnesia. The striking fact that episodic memory emerges at about the same time as the ability to have meta-representations is left unaccounted.

§4 Episodic memory and non-conceptual information

As we have just seen, episodic memory cannot be assimilated to reflexive factual memory. Factual memory is purely preservative, and it is implausible to suppose that everything that we can remember in the episodic sense was initiated by a reflexive experience or state. Our discussion so far strongly suggests that episodic memory is not a kind of factual memory. We should not conclude too hastily, though, that episodic memory is not purely preservative. What we have to examine is the conception according to which, just as factual memory was described as the preservation of doxastic information, episodic memory can be understood in terms of the preservation of a different kind of information – non-doxastic, indeed non-conceptual information.

Consider a proposal that Gareth Evans made *en passant*, in a footnote. He suggests that the distinction between remembering that there was such-and-such a thing and remembering that thing, or between remembering that there was such-and-such an episode and remembering the episode, "turns on the kind of information retained" (1982: 267, note 1). If we read the distinction between factual and episodic memory into this passage, the proposal is that factual memory is the retention of conceptual content, whereas episodic memory carries non-conceptual information about the past. The distinction between factual and episodic memory corresponds to different kinds of content – conceptual in the former case and non-conceptual in the second. Both forms of memory are purely preservative, although different kinds of i nformation are retained. Does this suggestion provide an adequate solution to Goethe's Problem?

To begin with, I think that we should exclude the following explanation as a satisfactory answer to our problem. Suppose that I have an apparent memory, and reason as follows. "This memory has a non-conceptual content, so it *has* to come directly from my own past experience (if it is not illusory). After all, testimony always carries conceptual information, embodied in language, and inference always involves conceptual contents. So if my memory is veridical, it comes directly from the remembered event." Such a reasoning cannot be what makes the difference, among my present memories, between those that are

episodic and those that are not. Episodic memory is *non-inferential* in the intuitive sense that it immediately presents itself as episodic. I do not need to infer its episodic character from features of its content.

Still, one might insist that episodic memory yields a reason to believe that it comes directly from one's own experience precisely in virtue of the fact that it has a special kind of content. There are at least two worries with this proposal, though.

One worry, which I do not want to dwell on here, concerns the sense in which the non-conceptual information carried by episodic memory can immediately ground *past-tense* judgements. Evans (1982: 239) says that when the subject has (what we call) an episodic memory, he is in a "non-conceptual informational state" which puts him in a position to judge, being immune to error through misidentification, "I *was* facing a burning tree".[14] This non-conceptual informational state differs from that which is involved in perception, and which allows us to judge, being equally immune to error through misidentification, "I am facing a burning tree". Both states carry non-conceptual information, but the difference lies precisely in the reference to the past: "If the subject is in the memory state, it seems to him that such-and-such *was* the case". The difficulty, which Evans himself notes, is to understand how there can be such non-conceptual states which are in some sense about the past. The worry is especially pressing if we think that only *conceptual* states, whose contents are wholly expressible in language, can carry past-tense information, at least if that information is about a particular, non-repeatable past event, as opposed to being merely about temporal phases (cf. Campbell, 1994: ch. 2).

Another worry arises even if the notion of non-conceptual information about the past is shown to be intelligible. Evans's proposal raises Goethe's Problem again: How are we to exclude the possibility that such information, which I possess in the present, derives *indirectly* from my past experience? Suppose, for instance, that at some time in the past I was shown photographs and films of an incident in which I was involved before that time, but had completely forgotten. Testimony by films and photographs surely carries non-conceptual information in some sense. It is not impossible, then, that non-conceptual information about the incident has been retained in the present, which I can express with "I remember that fight; it was pitiful". The point is that my present memory may not be *episodic*: I may still wonder

[14] The notion of immunity to error through misidentification comes from Shoemaker (1968). What it means in this context is that my memory cannot ground knowledge of the fact that someone was facing a burning tree without at the same time grounding knowledge that *I* was facing a burning tree. There is no possibility for me to make a mistake as to the identity of the person whose experience I am remembering. On this aspect of memory, cf. also Wiggins (1993).

whether the information preserved in the present memory has been relayed by external testimony, especially if I do not remember that I was shown films and photographs. This hypothesis, as well as the hypothesis that the information-link is direct (in the sense that it does not involve testimony or reasoning), are equally compatible with the veridicality of my memory. Therefore, the mere fact that my memory involves the past-tense demonstrative concept "that fight", based on non-conceptual information about the past, does not make it episodic – in the story just told, it is a factual memory.

I do not wish to dispute the fact that there are many contexts in which understanding past-tense demonstratives *requires* having relevant episodic memories. Evans gives the following example: S prompts A to remember a particular bird they saw together on a hunting trip. S asks "Do you remember that bird we saw years ago?". Eventually, A has the right memory: "Oh yes! Now I remember. You mean *that* bird" (1982: 308). Clearly, in that kind of context, the understanding of "that bird", as used by S, requires an appropriate episodic memory from A. It does not follow that such uses of past-tense demonstratives must be invoked in an *explanation* of what is special about episodic memory as opposed to mere factual memory. On the contrary, we need an independent notion of episodic memory to understand the intelligibility of the dialogue.[15]

In order for Evans's proposal to work, it must be shown that the information carried by episodic memory is of a kind which *cannot* be transmitted by testimony, in particular testimony aided by pictures and (physical) images. It is plausible to suggest that as far as memory is concerned, there is no such information *at the personal level*. At that level, any information carried by episodic memory could in principle be carried by testimony or reasoning.[16] There is no need to invoke non-conceptual contents to account for episodic memory; even if there are such contents, in memory they are always backed up by suitably indexical conceptual contents. It is important to note that this is not an objection to Evans's notion of an information-link. His notion is different from the one used here, since it is specifically introduced to capture the (anti-intellectualist) insight that there is a non-conceptual informational system which constitutes "the substratum of our cognitive lives" (1982: 122). We might sympathize with the insight, but claim that Evans's notion of an information-link is not the key to understanding the distinction between episodic and factual memory. Indeed, a main claim of the present chapter will be that a theory of memory should

[15] For more on memory demonstratives, cf. Campbell, Ch. 6, this volume.
[16] This is true even for reflexive information, although in that case, the content of episodic memory could not have been *taken from* testimony or reasoning (cf. Section 3).

recognize at most two central kinds of link between past and present: doxastic information-links at the personal level, and neuropsychological causal links at the subpersonal level, whose nature is to be investigated empirically. Non-conceptual information-links at the personal level need not enter the picture.

§5 Preservation, acquisition and re-acquisition of information

As we have seen, Goethe's Problem creates difficulties for the view that episodic memory involves, at the personal level, the continuous retention of information acquired by other cognitive means. These difficulties encourage us to explore a different avenue, according to which episodic memory is not in general purely preservative; its epistemic credentials do not depend on there being a personal-level information-link between present and past.

The phenomenological facts are at least compatible with the claim that episodic memory is not purely preservative. Consider the phenomenon of *suddenly remembering* something that is re-considered for the first time since the original perception. When we have such an experience, we have the feeling that we acquire an *original* memory, which we did not have just before. This is very different from the experience of recalling something which we had momentarily forgotten. In the latter case, there is a sense in which the memory was *there*, only we could not access it. In contrast, when we suddenly *realize* that there was a book on the table, to which we barely paid attention, we do not actualize a memory which was already "there" in the same dispositional sense (at the same level of potentiality).

From an epistemological point of view, the rejection of the view that episodic memory is purely preservative means that we have to take seriously the possibility that episodic memory is a "stopping point" in the process of justification (cf. Dummett, 1973: 619). *Pace* Ryle (1949: ch. 8), it is often perfectly all right to declare "I remember it" as an answer to a challenge as to how I know something. Of course, when my answer is intended to express an episodic memory, it presupposes that I previously witnessed something (in the typical case). It does not follow, though, that the information I now possess is just old evidence. On the contrary, it is fresh evidence in the sense that I did not possess that information just before my sudden awareness. My memory has enabled me to *re*-acquire it.

I suggest that episodic memory is a stopping point in the process of justification because it is a genuine source of knowledge and information. We might say that it is analogous to a form of acquaintance like perception. However, surface grammar

notwithstanding, episodic memory cannot be just acquaintance of things. It is true that we tend to report episodic memory using phrases of the form "I remember *x*" rather than of the form "I remember that *p*" (although there are exceptions).[17] Episodic memory, though, must be capable of grounding knowledge about what happened at a particular time, which requires that a concept of a particular time and a concept of what happens then be articulated together. When I have an episodic memory of Pierre, Pierre cannot be the sole object of my conscious awareness. Otherwise, "I remember Pierre" would have the same force as "I can recognize Pierre", which involves no reference to a particular past time. What I am conscious of is meeting Pierre two days ago. In general, the proper object of episodic memory seems to be an event rather than a thing.

There is a significant difference between perception and episodic memory which suggests that the matter is more complicated. This difference concerns the cognitive dynamics of the two faculties. Perception essentially involves the capacity to keep track of things and events in the various states, phases and relations in which they present themselves to the perceiver at different times. For instance, I can compensate for the perceived thing's movement by adjusting my relative position to it. In contrast, memory need not be contemporaneous with a capacity to keep track of the remembered events in this sense. I can remember the flight of a particular bird long after I have perceptually lost track of it. What I keep track of in memory is at best *facts* and not events, but here the notion of "keeping track" has a different sense. There is no need to compensate for spatio-temporal changes in the remembered facts, for a fact has neither a spatial nor a temporal location; it is immutable. This does not mean that the maintenance of a memory over time is automatic. When an occurrent episodic memory is formed for the first time, it can persist after that as a dispositional state. At this point, we might recognize active requirements on grasping the same content over time and maintaining a state of memory knowledge. The description of what it means to grasp the same content over time and to possess persisting knowledge is a task for the theory of concepts and epistemology.

Episodic memory, then, is present awareness of facts which is not grounded on present awareness of events, although it is typically grounded on *previous* awareness of the remembered events. In this sense, my episodic memory of meeting Pierre is a case of direct knowledge of a fact involving an event – meeting Pierre – while I am not at present acquainted with that event (I might have lost track of it). It is analogous, in this respect, to

[17] For instance, I can say that I remember Pythagoras' theorem, but what I mean, of course, is that I have a set of factual memories corresponding to the various propositions which constitute the theorem.

introspective self-knowledge according to Shoemaker, that is a case of knowledge of a fact about oneself which does not simultaneously involve acquaintance with the self.[18]

It might seem that Goethe's Problem is immediately solved by the concession that episodic memory is not purely preservative, but is a form of acquaintance with remembered facts. My having a particular episodic memory is a *sui generis* experience, and if I have no reason to doubt that it is veridical, it is misleading to ask how I know that the remembered piece of information comes directly from my own past life. I am directly "en rapport" with a fact concerning my own past, apparently without the help of reasoning or external testimony. For instance, if I suddenly remember that there was a (previously unattended) book on the table, I know that I am in possession of a piece of information which I did not have just before. The logical form of my memory is the following:[19]

(6) I have a memory experience which carries the information that there was a book on the table.

However, one grossly misrepresents the true nature of episodic memory if one takes (6) as a complete description of the content of my memory experience. At best, (6) would fully describe a very different cognitive faculty, perhaps *clairvoyance* (assuming that the notion of clairvoyance makes sense). Unlike clairvoyance, episodic memory carries, and presents itself as carrying, information which the subject already possessed once. As Campbell (1994: 233) puts it, episodic memory (like factual memory) is *stepwise*: it depends on there being other ways of finding out how things are. More precisely, when there is no continuous information-link at the personal level, it is the *re-acquisition* of a piece of information acquired in the past, that is the faculty of *reproducing* in the present a past informational state. The following description is slightly better as far as this distinctive feature of episodic memory is concerned:

(7) I have a memory experience which carries the information that there was a book on the table, and this piece of information presents itself as something I acquired in a previous experience.

[18] The crucial difference is of course that (in Shoemaker's theory) the self is *never* experienced as a thing. Cf. Shoemaker (1996 : essay 10), where the distinction between awareness of facts and awareness of objects (things or events) is discussed.

[19] In this and the next formulations, the phrases "a book" and "the table" should be read, more realistically, as complex demonstratives: "this book" and "that table".

However, (7) is still incomplete, for it does not *entail* that I have an episodic memory of the book. Suppose that I was perceptually aware that there was a book on the table. Later, when I have *definitely* forgotten this fact, someone tells me that I really did perceive the book. Description (7) might correctly refer to a still later experience in which I re-acquire the information that there was a book on the table and this information presents itself as something I have witnessed in the past. Still, I do not have a genuine episodic memory of the book, since past testimony is among the conditions that make my present memory experience possible (although I may not know it). In this particular example, I can have the experience described by (7) *only if* there is previous testimony – without it, I would be totally unable to *gain* the memory that there was a book on the table.[20]

Of course, this is just Goethe's Problem in a different guise. It shows that the content of an ordinary episodic memory must be more complex than (7) suggests. In particular, it should not be compatible with being completely unable to re-acquire the relevant information between the past experience and the actual, present memory. I would like to claim that when I remember something in the episodic sense, I have a piece of information which presents itself as being *directly* re-acquired from my past experience, in a way which excludes the essential intervention of reasoning or testimony. Thus (8) might be the correct description of (a central case of) episodic memory:

(8) I have a memory experience which carries the information that there was a book on the table, and this piece of information presents itself as being directly re-acquired from my past experience.

If we adopt this description of episodic memory, Goethe's Problem is dealt with in a very special way. Episodic memory is the experience of re-acquiring a piece of information *as* something which is taken directly from the past experience itself, without the essential mediation of reasoning or testimony. More generally, episodic memory gives me a reason to believe that it comes directly from my own past experience because the fact that it does so is presented in the memory experience itself. However, the notion of "coming directly from

[20] Similar points apply to Locke's and William James' theories of memory. For Locke, memory is the capacity of the mind "to revive perceptions, which it has once had, with this additional perception annexed to them, that it has had them before" (Locke, 1997: 148). For James, "memory proper […] is the knowledge of an event, or fact […] with the additional consciousness that we have […] experienced it before" (1890: 648). If I am right, these are crucially incomplete descriptions of episodic memory.

one's own past experience" is interpreted here in a crucially different way than in the accounts presented above in Sections 3 and 4. There is no suggestion that the meta-representational information carried by memory is preserved at the personal level from the time of the past experience to the present; very often, my episodic memory won't involve a continuous information-link from past to present. Of course, there must be some subpersonal link between the past experience and the present memory, but this link is not supposed to ground, at the personal level, an episodic memory at each time between past and present. At best, the link must guarantee that the relevant memory can be *gained*.

It is worth comparing the present account with proposals made by two authors from quite different philosophical horizons. Merleau-Ponty, just after having stressed the non-inferential character of genuine memory ("memory that reaches to the past"), writes about his memory of when he ordered a particular English cloth:

> When […] I find again the concrete origin of the memory, it is because it is replaced in a particular stream of fear and hope which goes from Munich to the war; it is because I go back to the lost time; and it is because, from the considered moment to my present, the chain of retentions and the successive overlapping horizons ensure a continuous path (1945: translated from p. 478).

What Merleau-Ponty seems to suggest is that a genuine memory must enable one to "see through the past" to the remembered experience. He would probably agree that in cases in which the remembered information is essentially relayed by testimony or reasoning, there is no continuous path (once again, at the personal level) leading to the original experience. There is precisely no path of this kind in the example discussed above, when (7) was rejected as a non-perspicuous account of episodic memory.

Some years earlier (in 1927), G. F. Stout proposed a similar account. He draws a distinction between reminiscence, that is what we call here "episodic memory", and retentiveness, which concerns in general the persistence in the present of the results of past mental processes. He writes:

> In remembering past experience as such we are cognisant of it as past relatively to our own actual present in the moment of remembering it. Our total object is a complex unity which includes present and past in relation to each other. We are aware of the

actual present as continued back into a certain past specially connected with it; and of this past as prolonged forward to the present (1930: 175).

I have no objection to this account of episodic memory, except perhaps as far as the notion of retentiveness is concerned. Stout says that retentiveness is an indispensable condition of reminiscence. If "retentiveness" means that there is a continuous causal link, possibly at the subpersonal level, between past experience and present memory, he is surely right. If, on the other hand, he means that there must be an information-link between past and present at the personal level, I disagree. As I said before, the phenomenon of suddenly remembering something seems to indicate that episodic memory involves the re-acquisition of a piece of information which has not been preserved by the *subject*, whether doxastically or otherwise.

Note that the claim that episodic memory presents a piece of information as something which is directly connected to one's past experience does not entail that the subject is always in a position to keep track of the time or date of the original experience. The subject might have the strong feeling that he recently saw the book he is now looking for, without being able to remember exactly when. Indeed, he might remember two past experiences as being connected to the present and be unable to recover from his memory the temporal relations between the experiences, or their relative order.[21] What is important is that at least some episodic memories provide more precise temporal information about the remembered events, and that in general the subject can legitimately impose on his memory a conception of time as linear (cf. Campbell, 1997).

Finally, the present analysis of episodic memory can account for the following situation. I have a visual experience of seeing a book which is a complete hallucination, although I do not know it. Later, I have a memory experience of seeing the book which is not veridical, and I may know it, if I realized in between that my past visual experience was an hallucination. How is it possible, then, to remember my past hallucination itself? I suggest that whereas my past experience was a hallucination, my present memory is only an illusion. Here I mean something like Austin's (1962) notion of an illusion, according to which an experience is illusory if something is perceived as having the wrong properties. Similarly, there is something veridical in my present memory experience: I am not presented with the fact that there was a book on the table (for there was no such fact), but I am presented with the

[21] The matter is different if the content of memory includes specific indexical concepts like "yesterday" or "the day before yesterday".

fact that a piece of information (which is in fact misinformation) comes directly from my past experience. Thus I can remember the past experience itself even though it did not warrant the information that there was a book on the table.

§6 Conclusion

In this essay, I have explored an intermediary position between two antagonist conceptions of memory: on the one hand, a conception of memory as a mere form of knowledge, involving possession of information preserved over time (the "purely preservative" view of memory), and on the other hand, a conception of memory as a genuine source of knowledge and information, possibly acquired for the first time. There is an intimate connection, then, between memories being purely preservative and them being not episodic. The mental state which I am in when I have a factual memory is much like the one I was in before, whereas the fact that my episodic memory has been caused in a certain way has made a difference to what kind of mental state it i s (and not only to what kind of content it has). I do not want to exclude *a priori* the possibility of reflexive factual memories, whose causal history is somehow written into their contents, but we have to realize that the range of episodic memory is in a sense much wider. In particular, I can have an episodic memory of a past scene even though there is no information-link at the personal level (let alone a reflexive information-link) connecting past and present.

Episodic memory requires meta-representational abilities, since its content describes or refers to a previous experience, and is essentially reflexive. The *core* information carried by this form of memory need not be reflexive, though. It is the information originally acquired by the subject, typically through perception. So how should we explain the striking fact that we have episodic memories only of events experienced at times when the meta-representational abilities are in place? As the Editors remind me, the theory that there is a necessary connection between childhood amnesia and the development of meta-representational abilities is actually quite controversial, and the fact that our first memories come on the scene at roughly the same time as these abilities might be a mere coincidence. Still, I shall end this chapter with a brief and speculative remark about why I think the conception of episodic memory sketched here is not utterly incompatible with there being a

connection between episodic memory and the emergence of meta-representational abilities, wherever the truth lies with this particular issue.[22]

As we saw, there is a sense in which (episodic) memory is a kind of "vision" through our past life to the remembered experience. Now perhaps such a "vision" is possible only if the subject is at least *capable* of self-consciousness at any time between the remembered experience and the present. How can we "see" through our past life if it consists in a mere succession of first-order mental states and episodes, neither unified nor bound together by any reflection? In this perspective, episodic memory requires a present exercise of self-consciousness, but it also requires that the capacity of self-consciousness be in place from the remembered experience to the present. Since such a capacity appears to e merge at around the age of 3 or 4, the phenomenon of childhood amnesia would be explained by the presence of a "block", at about that time, beyond which episodic memory is simply blind. Of course, this is merely a speculation, and further work on the role of self-consciousness in episodic memory is called for.

[22] For further reflection on the relationship between self-consciousness and episodic memory development, cf. McCormack and Hoerl (forthcoming).

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