

ON INFERENTIALLY REMEMBERING THAT *P*

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ABSTRACT: Most of our memories are inferential, so says Sven Bernecker in *Memory: A Philosophical Study*. I show that his account of inferentially remembering that *p* is too strong. A revision of the account that avoids the difficulty is proposed. Since inferential memory that *p* is memory that *q* (a proposition distinct from *p*) with an admixture of inference from one's memory that *q* and a true thought one has that *r*, its analysis presupposes an adequate account of the (presumably non-inferential) memory that *q*. Bernecker's account of non-inferentially remembering—that is shown to be inadequate. A remedy lies in strengthening the account by requiring the rememberer to have had prima facie justification to believe that *q*, any defeaters of which were misleading.

KEYWORDS: inferential memory, epistemic justification, inference, memory, Sven Bernecker

According to Sven Bernecker in his recent book on memory,¹ most of our memories are inferential: they are causally based on (conscious or unconscious) inferential reasoning. Inferential memories deserve philosophical attention in light of evidence from cognitive psychology that remembering is often a constructive process in which inferential reasoning plays an important part. Although Bernecker devotes most of his book to memories that are non-inferential, when he does turn to inferential memories, he sets forth an adaptation of the following account tentatively given by Arnold Cusmariu:

Where *p*, *q*, and *r* are logically inequivalent propositions, *S* remembers impurely that *p* iff (i) *S* remembers that *q* & (ii) *S* knows now that *r* & (iii) *S* knows now that *p* inferentially from (i) and (ii), & (iv) the conjunction of *q* and *r* entails but is not entailed by *p*.²

Because Bernecker is opposed to epistemic theories of memory, according to which one remembers that *p* only if one knows and/or justifiedly believes that *p*, he modifies Cusmariu's account as follows:

[W]here *p*, *q*, and *r* are logically inequivalent propositions, *S* [at *t*] inferentially remembers that *p* only if: ... (i) *S* remembers at *t* that *q* & (ii) *S* comes to truly

¹ Sven Bernecker, *Memory: A Philosophical Study* (Oxford: Oxford University Press, 2010), 25.

² Arnold Cusmariu, "A Definition of Impure Memory," *Philosophical Studies* 38 (1980): 307.

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think at t_2 that r & (iii) S comes to truly think at t_2 that p inferentially from (i) and (ii), & (iv) the conjunction of q and r entails but is not entailed by p .³

The account is meant to apply, in the first instance, to cases of what Malcolm labels 'impure memory', where, for example, S at t_1 sees a bird but does not then know that it is a cardinal; later, at t_2 , S remembers from t_1 that he saw a bird having a certain appearance, learns that birds with that appearance are cardinals, and thereupon realizes that he saw a cardinal. If one says " S remembers that he saw a cardinal," this is elliptical for " S remembers that he saw a bird having a certain appearance *and* now he truly thinks that it was a cardinal."⁴

Condition (iv) exposes Bernecker's account to a counterexample that shows the account to be too strong. Let conditions (i), (ii) and (iii) be met as follows. At t_1 Judy sees a skunk through an open window, but because it is twilight she comes to believe only that she sees a small animal, either a cat or a skunk. Shortly thereafter, at t_2 , with the animal no longer in view, she remembers that

(q) either she saw a cat outside or she saw a skunk outside.

Then, catching a whiff of a skunk, she comes to truly think that

(r) there was a skunk outside.

Thereupon she comes to truly think, inferentially from her memory that q and her thought that r , that

(p) she saw a skunk outside.

(Her inference here is abductive: it is an inference to the best explanation from her memory that q and her true thought that r to her true thought that p .) The example, I take it, is an instance of Judy's inferentially remembering that (p) she saw a skunk outside. However, Bernecker's condition (iv), that the conjunction of q and r entails but is not entailed by p , is not met – first because while (in the situation described) the conjunction of q and r provides good reason to think that p , it does not entail p , since it is remotely possible that the skunk she smelled was not the animal she saw; and second because p *does* entail the conjunction of q and r , since p entails r as well as the disjunctive proposition q .

Bernecker's condition (iv) may be emended – to allow S to inferentially remember that p in the case about Judy and, more generally, to accommodate relations of support in addition to entailment – as follows:

³ Bernecker, *Memory*, 96.

⁴ Norman Malcolm, "A Definition of Factual Memory," in his *Knowledge and Certainty: Essays and Lectures* (Englewood Cliffs, NJ: Prentice-Hall, Inc., 1963), 223-224.

- (iv') the conjunction of q and r (but neither q nor r alone) entails p , or provides inductive or abductive support for p .

This is an important emendation to Bernecker's account because accounts of memory retrieval as a reconstructive, inferential process typically speak of processes such as pulling together "bits and pieces of information from various sources,"⁵ or "the filling in of a pattern on the basis of particular (perhaps partial or distorted) input,"⁶ or the memory system making "its best guess as to what [a] scene must have looked like,"⁷ all of which are closer to abductive inference than to the type of simple deductive inference that occurs in Malcolm's case about the cardinal.

Inferential memory that p is memory that q (a proposition distinct from p) with an admixture of inference from one's memory that q and a true thought one has that r . But what about the memory that q ? Is it inferential or non-inferential? While there may be radical constructivist views which hold that all remembering is inferential, that is not Bernecker's view since all but a few pages of his book deal with non-inferential remembering. So let's look at what Bernecker says about non-inferential remembering. For present purposes, what Bernecker requires for S at t_2 to non-inferentially remember that p amounts to the following:

- (Non-Inf) S at t_2 has a representation that p (p being a true proposition) which representation is memory-connected to a sufficiently similar representation that p^* which S had at t_1 .⁸

(p^* and p are sufficiently similar just in case p^* relevantly entails p . Bernecker's example: S at t_1 believes that (p^*) Caesar was assassinated, but at t_2 remembers only that (p) Caesar died of unnatural causes; because p is relevantly entailed by p^* , S 's state at t_2 counts as remembering that p , provided condition (Non-Inf) as a whole is satisfied.⁹) But, according to Bernecker, S need not, either at t_2 or at t_1 , justifiedly believe or have justifiedly believed (even *prima facie*) that p or that p^* , or have or have had any belief at all that p or that p^* .¹⁰

⁵ Daniel L. Schachter and Donna Rose Addis, "The Cognitive Neuroscience of Constructive Memory: Remembering the Past and Imagining the Future," *Philosophical Transactions of the Royal Society B* 362 (2007): 773.

⁶ John Sutton, "Memory," in *The Stanford Encyclopedia of Philosophy* (Winter 2012 Edition), ed. Edward N. Zalta, <http://plato.stanford.edu/archives/win2012/entries/memory/>: 28.

⁷ Kourken Michaelian, "The Information Effect: Constructive Memory, Testimony, and Epistemic Luck," *Synthese* 190 (2013): 2444.

⁸ See Bernecker, *Memory*, 34–42.

⁹ Bernecker, *Memory*, 222.

¹⁰ See Bernecker, *Memory*, 71–96.

A variation on the case about Judy points to a shortcoming in Bernecker's account of non-inferentially remembering that p . Just when (at t_1) a skunk is passing by his window Joe has a veridical hallucination as of just such a skunk passing by – in other words, Joe has a hallucination that just happens to match what he would otherwise see looking out his window – whereupon he comes to believe that (p^*) a skunk passed by. Joe forms this belief despite his knowing that he had ingested a strong hallucinogen and that moments earlier it had seemed to him that an ostrich and then a cow and then a lion had passed by. Joe's true belief that he had ingested a strong hallucinogen is a non-misleading defeater of his prima facie justification for believing that a skunk passed by. Nevertheless, Joe goes on believing that a skunk passed by. Later, at t_2 , Joe has a belief, suitably memory-connected to his belief at t_1 (the time at which he hallucinated), that (p) a skunk passed by. Bernecker's requirement for non-inferentially remembering that p – (Non-Inf) above – is satisfied. Yet it is hardly the case that Joe *remembers that* a skunk passed by. If I am right about this then Bernecker's account of non-inferentially remembering that p is inadequate as it stands.

What needs to be added to (Non-Inf), it seems to me, is a further requirement that S at t_1 had prima facie justification to believe that p^* . Is it necessary for such justification to have been undefeated? If so, this would explain Joe's failure at t_2 to remember that (p) a skunk passed by, since there was a non-misleading defeater of his justification for believing that p^* . Such a requirement, however, would be too strong. For S may well remember that p in certain cases where S 's prima facie justification to believe that p^* was defeated, provided that all such defeaters were misleading. Suppose, in contrast to Joe, that at t_1 Jane falsely believed that she had ingested a strong hallucinogen; suppose too that she actually saw that (p^*) a skunk passed by, and that she believed that this was so despite her belief that she had ingested the hallucinogen. If, at t_2 , by which time she has forgotten about the hallucinogen, she believes that (p) a skunk passed by on the basis of what she saw at t_1 , we allow that she *remembers that* (p) a skunk passed by. The called-for addition to (Non-Inf) is:

S at t_1 had prima facie justification to believe that p^* , and any defeaters of such justification were misleading.¹¹

With this requirement added, (Non-Inf) is strong enough to rule out Joe's case as an instance of remembering that p without also ruling out Jane's case.

¹¹ Andrew Naylor, "Remembering without Knowing – Not without Justification," *Philosophical Studies* 49 (1986): 304.

Such a requirement, in turn, places the following constraint on Bernecker's account of inferential memory: insofar as S at t_2 inferentially *remembers* that p , S at t_1 must have had prima facie justification to believe at least those components of q^* that entail the proposition that q which condition (i) says S remembers at t_2 , and it must be that any defeaters of such justification were misleading. (If S 's memory that q is itself inferential, this same constraint applies to S 's inferentially remembering that q .)

In concluding, let's consider the following case which might seem to pose a difficulty for Bernecker's account in terms of conditions (i–iii) and (iv') if these are taken to be jointly sufficient for inferentially remembering that p . Suppose that at t_2 Jessica remembers from t_1 that (q) Colorado borders Kansas, learns and thus comes to truly think that (r) her friend Jeff won the Epistemology Prize, and comes to truly think, inferentially from her memory that q and her thought that r , that (p) Colorado borders Kansas *and* some friend of hers won the Epistemology Prize. Clearly, Jessica at t_2 does not inferentially *remember* that (p) Colorado borders Kansas *and* some friend of hers won the Epistemology Prize.¹² Yet conditions (i–iii) and (iv') are all satisfied.

Now Bernecker may be able to rule out this case – and other such cases where p is a 'hodgepodge conjunction' – by appealing to his 'entailment condition' (EC), which, he claims,¹³ applies not only to non-inferentially remembering that p but also to inferentially remembering that p :

(EC) p (the proposition S represents at t_2) is relevantly entailed by p^* (the proposition S represented at t_1).

Letting p^* have the same content as q (i.e. Colorado borders Kansas), p^* does not relevantly entail p (i.e. Colorado borders Kansas *and* some friend of hers (Jessica's) won the Epistemology Prize) – which, Bernecker can say, is why Jessica does not inferentially remember that p .

Making (EC) an additional necessary condition for inferentially remembering that p may work well enough in this case about Jessica, but it is questionable that it works as intended in all cases. It does not work, for instance, in the case where Judy does inferentially remember that (p) she saw a skunk outside; for in this case (EC) is not satisfied. To see this, let p^* (the proposition Judy represented at t_1) have the same content as q (the proposition she remembered at t_2 , i.e. either she saw a cat outside or she saw a skunk outside). However, p^* does not, as it should for Bernecker's account to allow this case,

¹² Thanks to Earl Conee for suggesting this type of example.

¹³ Bernecker, *Memory*, 226–27.

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relevantly entail p (i.e. she saw a skunk outside), the proposition she inferentially remembers. So (EC) is not a necessary condition for inferentially remembering that p .¹⁴

¹⁴ I am grateful to Sven Bernecker and Arnold Cusmariu for helpful comments.