

(Penultimate draft. Forthcoming in *Mind*. Please do not cite this version.)

Knowing Without Evidence

Word Count: 6674

Andrew Moon

In this paper, I present counterexamples to the evidence thesis, the thesis that S knows that p at t only if S believes that p on the basis of evidence at t . The outline of my paper is as follows. In section 1, I explain the evidence thesis and make clear what a successful counterexample to the evidence thesis will look like. In section 2, I show that instances of nonoccurrent knowledge are counterexamples to the evidence thesis. At the end of section 2, I consider the primary thesis of my paper – that the evidence thesis is false – to be successfully defended. In section 3, I consider three variations of the evidence thesis. The first variation restricts the evidence thesis to occurrent knowledge; the second requires for knowledge that one's belief could be based on evidence; and the third requires for knowledge that the belief was based on evidence at a suitable prior time. The secondary thesis of this paper is that these variations are also subject to serious objections.

1. Introduction

Virtually all epistemic internalists affirm the following,

Evidence Thesis: S knows that p at t only if S believes that p on the basis of evidence at t

where 'evidence' is understood in an internalist way.¹ Here is one way to explicate this *internalist understanding of evidence*:

IUE: S believes that p on the basis of evidence E at t only if S can become aware that he has E by way of introspection at t

I take IUE to be a decent test for whether a theory of evidence violates an internalist understanding of evidence. Suppose someone says that states like *being produced by a reliable process* can count as evidence for a belief. Or consider John McDowell's (1995)

¹ On the other hand, few externalists are sympathetic to the evidence thesis. For example, the theories of Goldman (1967), Armstrong (1973), Dretske (1981), Nozick (1981), Goldman (1986), Plantinga (1993b), Zagzebski (1996), Sosa (2007), and Greco (2009) all entail the falsity of the evidence thesis. On each of these theories, it is possible for S to know that p without believing that p on the basis of evidence.

view that *factive* states such as a person's *seeing that p* and *remembering that p* are evidence for *p*. These views violate IUE because these candidates for evidence are not things a believer can become aware that he has by way of *introspection*. More importantly, they are clearly not internalist understandings of evidence.

I will now make a terminological point and a clarificatory point. Following Alvin Plantinga (1993a, p. 3), it will be useful to let 'warrant' be a term of art for whatever precisely it is that makes the difference between knowledge and mere true belief. A proponent of the evidence thesis will thereby likely hold that a belief is warranted only if it is held on the basis of evidence. Here is the clarificatory point. If *internalism* is understood as the view that justificational properties supervene on internal properties, then internalists are not obviously committed to accepting the evidence thesis. I see no good argument for an entailment relation between internalism and the evidence thesis that does not depend on a controversial premise. So, despite the fact that virtually all existing internalists today *do* accept the evidence thesis, it is worth remembering that they might not be committed to it.²

In this paper, I will argue by way of counterexample that the evidence thesis – where 'evidence' is understood in an internalist way – is false. To accomplish this, my counterexample must overcome two hurdles. First, consider Richard Foley's (1987, pp. 168–70) chicken sexer case. Some chicken sexers, upon picking up a chicken, can

² Michael Bergmann (1997) argues that internalism is best understood as the view that at least one internal condition other than the no-defeater condition is necessary for warrant. On this understanding, the evidence thesis (where evidence is understood in an internalist way) clearly entails internalism since the evidence thesis specifies an internal condition for warrant that is not a no-defeater condition. On the other hand, internalism does not entail the evidence thesis. It is *possible* that the internal condition on warrant (beyond the no-defeater condition) is not *evidence* upon which the belief *is based*. However, this possibility is extremely unlikely since there is no other good candidate for that internal condition. So, internalism, conjoined with some extremely plausible premises, entails the evidence thesis. If Bergmann's understanding of internalism is correct, then this explains both why virtually all internalists accept the evidence thesis and also why they might be committed to it.

reliably form a true belief about the chicken's sex. To some, this is an intuitive case of knowledge that is not based on evidence. The problem, however, is that most internalists are not likely to share the intuition. Once it is specified that the chicken sexer is not basing his belief on *any* evidence (e.g., on beliefs about his past history of success or on some hard-to-identify perceptual markers), the intuition that the chicken sexer knows is greatly weakened. A *convincing* counterexample will be one where it is clear to both externalists *and* internalists that knowledge is present.³

Second, consider the following example by William Alston:

On considering the proposition that two quantities equal to the same quantity are equal to each other, this seems obviously true to me; and I shall suppose, though this is hardly uncontroversial, that in those circumstances I am justified in believing it. But where are the adequate grounds on which my belief is based? It is not that there are grounds here about whose adequacy we might well have doubts; it is rather that there seems to be nothing identifiable as grounds. (Alston 1985, p. 106)

Although Alston is talking about *justified belief*, his example could be presented as an intuitive case of knowledge without evidence. In response, the proponent of the evidence thesis will likely agree that this is a case of knowledge, but he will then say that these beliefs *are* based on evidence. Consider Alston's response to himself:

Here I think that we can take the *way* the proposition appears to one, variously described as 'obviously true', 'self-evident', and 'clear and distinct', as the ground on which the belief is based. I accept the proposition because it *seems* to me so obviously true. (pp. 106–7)

Alston is proposing that the relevant belief is in fact based on evidence, specifically, the proposition's seeming to be true. So, a convincing counterexample to the evidence thesis

³ William Alston (1988a, pp. 177–178) would probably agree that his case of Percy the weather-clairvoyant fails this first hurdle because he admits that others won't share his intuition that Percy knows. I believe that Michael Bergmann's (2006, pp. 63–64) God-caused belief and water belief examples also fail to overcome this first hurdle with respect to justification.

must be one where it is clear *both* that knowledge is present, *and also* that the knowledge is not based on any evidence.

The rest of my paper proceeds as follows. In section 2, I show that an instance of *nonoccurrent knowledge* is a counterexample to the evidence thesis. At the end of section 2, I consider the primary thesis of my paper – that the evidence thesis is false – to be successfully defended. In section 3, I consider three variations of the evidence thesis. The first variation restricts the evidence thesis to *occurrent* knowledge; the second requires for knowledge that the belief *could be based* on evidence; and the third requires for knowledge that the belief *was based* on evidence at a suitable prior time. The secondary thesis of this paper is that these variations are also subject to serious objections.

2. The main argument

2.1 The counterexample presented

My argument is best understood if I explain what it is for a mental state to be *occurrent*. A mental state T is occurrent for S if and only if T is present to S's consciousness.⁴ My being appeared to redly, my experiencing pain, and my current belief that *I am writing a sentence* (as I currently type this sentence) are all occurrent mental states. Some mental states, like belief, can be *either* occurrent or nonoccurrent. A few minutes ago, my belief that *oranges have vitamin C* was nonoccurrent; now it is occurrent. My being appeared to redly, however, can only be occurrent; it is *essentially* occurrent.

Here, now, is my argument against the evidence thesis. Tim, a freshman college student enrolled in an introductory logic course, is asked to consider for the first time the law of noncontradiction, the proposition that *for any proposition p, it is not the case that*

⁴ I draw this definition from Senor 1993, p. 461: 'A belief is occurrent at t iff it is conscious at t'.

p and $\sim p$. The proposition seems clearly true to him and he comes to believe it. Tim immediately lies down and falls asleep from all of the excitement. Here is the argument:

- 1) Tim knows that *the law of noncontradiction is true* (LN) while he naps (Premise)
- 2) Tim does not believe LN on the basis of any evidence while he naps (Premise)
- 3) Tim knows LN while he naps, and he does not believe LN on the basis of any evidence while he naps (1,2)

If (3) is true, then the evidence thesis is false. I will stipulate that Tim's nap (and any other instances of sleeping that I mention in this paper) is dreamless.

Premise (1) is plausible. Both internalists and externalists should agree that this is a clear and intuitive case of knowledge. It is extremely counterintuitive to say that Tim does not know LN when he naps, or even worse, during any time that his belief in LN is nonoccurrent. (Note that there is nothing special about the fact that Tim is sleeping; this is just a dramatic way of making clear that Tim's belief is nonoccurrent.) Premise (2) will be more controversial and is defended in 2.2–2.6.⁵

2.2 *Seemings*

How do we come to know LN in the first place? What George Bealer says about de Morgan's laws applies to LN:

[W]hen you first consider one of de Morgan's laws, often it neither seems to be true nor seems to be false; after a moment's reflection, however, something happens: it now seems true (Bealer 1996, p. 123)

I remember, as a high school student, having this experience when I first considered LN. I considered LN, it seemed true, and then I came to *know* LN upon believing it. This is so for Tim.

⁵ A precursor of this argument can be found in Senor 1993, p. 470 and Senor 2009, Sect. 4.1.

A large number of epistemologists have recently argued that its seeming to a person that p is evidence for p .⁶ Note that seemings are distinct from beliefs; it might seem to the moral nihilist that *Asha's slapping Tim was wrong*, even if he does not believe that it was wrong due to theoretical reasons. Unfortunately, Tim does not know LN on the basis of a seeming *while* he naps.⁷ Seemings are essentially occurrent. Consider the event of its seeming to you that *the law of noncontradiction is true*. Can this event occur when you are dreamlessly asleep? It seems impossible. So, Tim does not know LN on the basis of a seeming while he naps. (This argument assumes the hidden premise that one can know p on the basis of a seeming at t only if the seeming *exists* at t ; I will examine this premise in the next section.)

One might object that there are contexts in which we appropriately make seeming ascriptions to sleeping people. Suppose I am debating with you about whether God exists; looking over to my sleeping theist friend, I assert, 'Well, it sure seems to *her* that God exists!' Call the sentence I assert 'S'. The fact that S seems appropriate to say is evidence that a proposition can seem true to a person while she sleeps; *a fortiori*, it is evidence that seemings are not essentially occurrent.

I have three responses. First, the proponent of this objection must still deal with the intuition mentioned in the paragraph before last. It seems impossible that the event of its seeming to you that LN, or any other seeming, could occur while you dreamlessly

⁶ In addition to Alston's brief defense, which I quoted earlier, see Tolhurst 1998, Swinburne 1999, Huemer 2001, 2005, 2007, and Tucker 2010. I should note that Huemer's (2005, pp. 120–1) remarks indicate that he would not *call* seemings 'evidence'.

⁷ Since 'seem' and 'seems' is used in ordinary English only as a verb, it makes nounal forms of the verb sound awkward. So to be clear, I am using 'a seeming' or 'seemings' to refer to whatever mental state we are in when a proposition seems true to us. This usage has become common in the literature.

sleep. At best, this intuition and the fact that S seems appropriate to say cancel each other out as evidence either for or against the claim that seemings are essentially occurrent.

Second, suppose I say of my sleeping friend, ‘While she sleeps, it continues to seem to her that God exists’ or ‘While she sleeps, it does not seem to her that God exists’. Intuitively, the first sentence is false and the second is true. Compare these with the sentence, ‘While she sleeps, she continues to believe that God exists’, which seems true. (Note also that it seems true to say of a sleeping logician, ‘While she sleeps, she continues to know that the law of noncontradiction is true’.) This, in my mind, detracts from the evidence provided by the above objection and tilts the balance of reasons in favor of the view that seemings are essentially occurrent.

Still, my argument seems to have the unfortunate implication that S is false. This leads to my third response. Don Locke writes the following about *speaking*:

we can say of a man who is sound asleep or silently absorbed in a book, that he speaks fluent French, and although we are not referring to anything he is doing at the time, this does not show that speaking is not an occurrence ... Rather, to say that he speaks fluent French is to say that he can do it and on occasion does do it. (Locke 1971, p. 34)

When I appropriately say of sleeping Fred, ‘Fred speaks French’, I have not said something false. When I appropriately say S, I also need not have said something false. On reflection, it seems independently plausible to me that S expresses the proposition that *at times when she considers whether God exists, it seems to her that God exists*. Hence, my view does not entail the counterintuitive implication that S is false; it could simply lead me to accept that S expresses a different proposition than it initially seems to. So, the

overall balance of reasons favors seemings to be essentially occurrent.⁸ To sum up, although one way to resist my argument is to deny that

i) Seemings are essentially occurrent

such a denial is implausible.

2.3 Past seemings

I affirm the following:

ii) *S* believes that *p* on the basis of evidence *E* at *t* only if *E* exists at *t*.

(ii) seems plausible to me. However, one might deny (ii) by saying that *S* believes that *p* on the basis of evidence *E* at *t* if *S* believed that *p* at a suitable earlier time *t'* on the basis of *E*; *E* need not exist at *t*. According to Marshal Swain's (1981, p. 74) account of basing, as long as *E* played a causal role in the initial formation of the belief, that is enough for it to be based on *E* at later times, *even if E* does not exist at those later times. Perhaps, then, Tim believes on the basis of a seeming that does not exist but *did* exist before he napped.

I have two responses. First, if *E* ceases to exist and plays no causal role in the *sustaining* of the belief at those later times, then it seems to me that the belief is not based on *E* at those later times.⁹ So, someone who rejects (ii) must reject the following plausible thesis:

⁸ Thanks to Peter Markie for the initial objection, thanks to Richard Fumerton, George Pappas, and Philip Swenson for helping me appreciate its seriousness, thanks to Matthew McGrath for help with the first response, thanks to Chris Gadsden for the example given in my second response, and thanks to John Greco and Peter Markie for help on the third response.

⁹ Consider Alston's (1985, p. 100) point about the basing relation: 'I mean "based on" to range over both what initially gave rise to the belief, and what sustains it while it continues to be held. To be precise, one should speak of *what the belief is based on at time t*. If *t* is the time of acquisition, one is speaking of what gave rise to the belief; if *t* is later than that, one is speaking of what sustains the belief'.

iii) If S believes that p on the basis of evidence E at t , then E causally sustains the belief that p at t ¹⁰

Swain might simply deny (iii), so I turn now to my second response. Recall IUE, the internalist requirement that S believes that p on the basis of evidence E at t only if, at t , S can become aware that he has E by way of introspection. One cannot access the past by way of introspection; it seems that the past is, in an important sense, external. So, to reject (ii) would be to give up an important internalist intuition; this way of resisting my argument should not be an easy one for the internalist.¹¹

2.4 Beliefs

Suppose someone says that the evidence for LN is the belief in LN itself. This might be affirmed by *epistemic conservativists*, who think that the mere holding of a belief can confer some degree of positive epistemic status to that belief.¹² But even if epistemic conservatism is correct, it is another thing to say that a belief gains positive epistemic status in virtue of *being based on* itself. And it does not seem that *Tim*, in my example, believes LN on the basis of the belief itself. He believed it on the basis of a seeming, and then the belief continued to exist nonoccurrently. There is no indication that the belief

¹⁰ A referee of *Mind* suggests that belief in LN might be causally sustained by the past seeming in virtue of the past seeming leaving some trace T and belief in LN's being causally sustained by T . In response, even if the belief in LN is causally sustained by T , it is not causally sustained by the past seeming because the past seeming does not exist at the present time. The following example illustrates this. My parents played a causal role in the current existence of my heart, and my heart currently causally sustains my existence, but my parents do not currently causally sustain my existence; my heart does. Similarly, the past seeming might have played a causal role in trace T 's existing, and T might currently causally sustain the belief's existence, but this does not imply that the past seeming is currently causally sustaining the belief's existence.

¹¹ Consider also that most internalists think that whether a person has based his belief on his evidence makes a difference to the belief's *justificational* status. On Swain's account, therefore, there is a factor which is completely outside of a believer's ken (since it exists only in the past) that makes a difference to whether his belief is justified. That should be a hard pill for the internalist to swallow. This reason for accepting (ii) should be accepted even by people who do not accept a causal requirement for basing.

¹² For defenses of epistemic conservatism, see Chisholm 1980, Harman 1986, McCain 2007, and McGrath 2007.

somehow became based on itself in the process. Since there is no reason to think that appearances are deceiving, we have good reason to think that this sort of evidence, if it is right to call it 'evidence', does not count against (2).

Perhaps Tim believes LN on the basis of *other* beliefs. But what belief could serve that role? There are no plausible candidates. One might say that Tim believed LN on the basis of belief in *instances* of LN; for example, he might have believed that *it is not the case that (oranges have vitamin C and oranges do not have vitamin C)*, and *it is not the case that (Santa exists and Santa does not exist)*, and so on, and then concluded LN by way of inductive reasoning. But that is simply not my example. In my example, Tim simply considered LN, it seemed true, and he came to know it.

Notice that nothing hangs on my use of *LN*. If someone pressed the objection in the previous paragraph, I could just change my example from the belief in LN to the belief that *it is not the case that (Santa exists and Santa does not exist)*. More generally, I only need an instance of knowledge that is not based on another belief; most epistemologists think that such foundational knowledge exists.¹³ I could then just use that instance of knowledge in my argument. Tim would come to know that proposition noninferentially, and then he could fall asleep right afterward.¹⁴ So, although one could resist my argument by denying

iv) There are some instances of noninferential knowledge

(iv) is extremely plausible.

¹³ This point can be supported by the argument found in Bergmann 2006, pp. 185–7. Consider also that even many coherentists, those who think that a belief acquires a necessary condition for warrant in virtue of standing in coherence relations to other beliefs, might still agree that some beliefs are warranted even though they are not held *on the basis* of another belief. In fact, Plantinga (1993a, pp. 78–80) takes coherentists to just be specifying necessary conditions for a belief that is not based on another belief (a basic belief) to be warranted.

¹⁴ Thanks to Richard Feldman for helpful discussion on this point.

2.5 Impulsional evidence, intuition, and rational insight

Alvin Plantinga describes *impulsional evidence* in the following way:

Consider again the belief that $2+1=3$... there is also something like a certain *felt attractiveness* of the belief; it *feels* right... $2+1=3$ has about it a sense of rightness, or fittingness, or appropriateness. Perhaps the thing to say is that there is a sort of felt inclination, or impulse, to accept this proposition as opposed to others. (Plantinga 1996, pp. 359–60)

In this passage, I think that Plantinga is defining ‘impulsional evidence’ by way of ostension; he describes the experience we undergo when we consider a certain proposition, and he labels that experience ‘impulsional evidence’.¹⁵ For simplicity, we can say that one has impulsional evidence for p if and only if one has a *felt inclination to believe p* . And perhaps the belief that $2+1=3$ is based on impulsional evidence, i.e., our felt inclination to believe it. Unfortunately, impulsional evidence will not help the defender of the evidence thesis. Tim cannot have the *felt* inclination to believe LN unless Tim has a certain feeling, and feelings are essentially occurrent. Impulsional evidence is not the sort of thing that Tim can have when he naps.¹⁶

Another candidate for evidence is *intuition*. I believe that what Timothy Williamson describes in the following passage applies to my belief in LN:

¹⁵ Some epistemologists think that seemings and impulsional evidence are identical. In other words, S 's having impulsional evidence for p just *is* its seeming to S that p . For examples of this identification, see Plantinga 1993b, p. 192; Sosa 2007, pp. 47–8; and Williamson 2007, p. 217. For arguments which suggest the contrary, see Michael Huemer 2007, p. 33. Fortunately, I do not need to resolve this question for my argument to be successful.

¹⁶ Plantinga (1996, p. 359) uses the example of a person's warranted belief that $2+1=3$ as a belief that is not supported by evidence. Conee and Feldman (2001, p. 243) demur, writing, ‘We have evidence about our success in dealing with simple arithmetical matters... we have learned these sorts of things as children and we have not had our more recent assertions about them contradicted by others’. So we do have evidence for our simple mathematical beliefs. This might be constituted by beliefs about our previous successes with math or our not having been contradicted by our peers. In response to Conee and Feldman, it still seems that a person *could* know that $2+1=3$ even if he did not have beliefs about his previous successes with math or about his not having been contradicted by peers. Regardless of whether Conee and Feldman are right about Plantinga's example, I prefer my example because Tim comes to know LN even without a track record of success in knowing logical truths or before he had time to not be contradicted by his peers.

When contemporary analytic philosophers run out of arguments, they appeal to intuitions. It can seem, and is sometimes said, that any philosophical dispute, when pushed back far enough, turns into a conflict of intuitions about ultimate premises: ‘In the end, all we have to go on is our intuitions.’ Thus intuitions are presented as our evidence in philosophy. (Williamson 2007, p. 214)

It is plausible that LN is an example of such an ultimate premise. So, perhaps Tim’s belief in LN is based on intuition while he sleeps.

But what, exactly, is an intuition? Peter van Inwagen (1997, p. 309) and Laurence Bonjour (1998, p. 102) seem to understand intuition to be a type of *belief*; if that is what intuitions are, then I already discussed this option in the previous section. Michael Huemer (2005, pp. 102–5) and George Bealer (1996, p. 123) identify intuitions with seemings; Bealer writes, ‘For you to have an intuition that A is just for it to *seem* to you that A’. Seemings were discussed in section 2.2. Sosa (2007, pp. 47–8) also understands intuition to be a type of seeming (specifically, an intellectual seeming), which he goes on to describe as a *felt pull* to believe. These options have already been discussed. Therefore, an appeal to intuition will not help the attack on (2).¹⁷

Laurence Bonjour (1998) thinks that we gain a priori knowledge by way of ‘rational insight’, by which we are able ‘to see or grasp or apprehend directly and immediately that the proposition in question must be true’ (p. 103). Earl Conee (1998) discusses in detail the mental phenomenon of *seeing a truth*. We can just see, for example, that *all objects are self-identical* or that *every golden trumpet is a trumpet*. I think that Bonjour and Conee are talking about the same phenomenon. Unfortunately, seeings, graspings, and apprehendings are not the sorts of things that can be nonoccurrent. Hence, Tim does not know LN on the basis of these mental phenomena while he sleeps.

¹⁷ Other ways of understanding intuition can be found in DePaul and Ramsey 1998.

2.6 Memory

Perhaps Tim knows LN on the basis of *memory*.¹⁸ Now, it is notoriously difficult to properly characterize what memory is.¹⁹ It follows that it should be very difficult to understand what it is for a belief to be *based on* memory. I will delineate some options and show that none of them provide a good reason to deny (2).

Sometimes, we use ‘memory’ to refer to a faculty, such as when someone says, ‘My memory has not been working very well’. Memory is a faculty just as reason and perception are faculties. Now, perhaps a belief is based on memory if and only if the belief is produced by the faculty of memory. I think that this is what people normally mean when they say, ‘I know on the basis of my memory’. On this understanding, however, memory does not seem to be the sort of evidence that internalists care about. More specifically, memory would not be an internal state that is introspectively accessible to the agent; the faculty of memory includes all sorts of mechanisms that are outside of the agent’s ken. So, this understanding of memory does not create a problem for (2).²⁰

To say that a belief is based on memory might be to say that the belief is *stored in memory*. Memory would then be a kind of storage unit (i.e. a belief box) in which our nonoccurrent beliefs (and other information) exist. However, on this understanding, memory is not the sort of thing that is evidence. It seems false to say that the storage unit is the evidence upon which the belief is based.²¹

¹⁸ Thanks to the referees and editor of *Mind* for pressing the need to respond to this option. Thanks to Chris Gadsden, Peter Markie, Matthew McGrath, Andrew Melnyk, Philip Robbins, and Chris Tucker for help in discussing the issue of memory. Special thanks are due to Kevin McCain and Philip Swenson.

¹⁹ For some of the difficulties, see Senor 2009 and Bernecker 2010, Ch. 1.

²⁰ Thanks to Andrew Melnyk, who pointed out to me that ‘memory’ sometimes refers to a faculty.

²¹ In his well-used psychology textbook, Peter Gray writes, ‘Memory, defined most broadly, is an individual’s entire mental store of information and the set of processes that allow the individual to recall

Some philosophers use the expressions ‘propositional memory’ and ‘personal memory’, although it is unclear how to best define these expressions.²² I will avoid getting mired in that discussion and focus instead on whether there is some understanding of these terms according to which it turns out that Tim’s knowledge of LN is based on memory in a way that helps the internalist’s attack on (2).

At the very least, propositional memory (sometimes called ‘semantic memory’ or ‘factual memory’) is a propositional attitude.²³ A student who has memorized facts about Augustine for his test and is able to competently answer that *Augustine lived for seventy-six years* will have propositional memory with *Augustine lived for seventy-six years* as its content. Arguably, propositional memory is the sort of thing that can exist nonoccurrently. And perhaps Tim has propositional memory with LN as its content.

This approach will not help the attack on (2). On the very widely accepted theory of propositional memory, the *epistemic theory of memory*, Tim’s knowledge that LN just *is* his propositional memory.²⁴ They are identical. Hence, Tim does not know LN on the *basis* of propositional memory. Even if we endorsed a different theory of propositional memory according to which Tim’s propositional memory is identical to his *belief* in LN, we still would not have a suitable evidential basis for Tim’s knowledge of LN. Sven Bernecker (2010, pp. 65–103) argues that propositional memory is a type of *thought*. But the thought that LN is no more a suitable evidential basis for Tim’s knowing that LN than his believing or knowing it. A bad answer to the question, ‘How do you know that

and use that information when needed’ (p. 315). Gray’s ‘mental store of information’ seems to be the same as what I am calling ‘a storage unit’. I would describe ‘the set of processes’, as the ‘faculty of memory’. So, my first two understandings of ‘memory’ are in the spirit of Gray’s.

²² See Bernecker 2010, pp. 11–9, for discussion.

²³ It may be that some philosophers and psychologists are not referring to the same thing with these expressions. Fortunately, I am confident that the minimal things I say about propositional memory will also apply to semantic memory and factual memory, even if they are different.

²⁴ See Bernecker 2010, p. 66, n. 1, for a bibliography that lists the many proponents of the epistemic theory.

Goldbach's conjecture is true?' would be to say, 'I have the *thought* that it is true'. So, an appeal to propositional memory provides no help to the internalist.

Personal memory (sometimes called 'episodic memory' or 'experiential memory') is memory *of* an event that one has, in some sense, personally experienced.²⁵ I can have a memory *of* meeting Gloria or a memory *of* the Cubs winning the World Series.

Linguistically, personal memory is most naturally referred to by the word 'memory' when it is used as a *count noun*; this distinguishes personal memory from the other types of memory we have so far discussed.²⁶ I can have *a* memory of meeting Gloria or *memories* of my childhood home. Now, perhaps, while Tim is asleep, his belief in LN is based on a memory of *its having seemed to me that LN* or a memory of *having come to believe LN*.²⁷ This suggestion does not have the same problem that appeal to propositional memory had since these personal memories are distinct from the belief in LN.

In response, either personal memories are essentially occurrent or they are not. Suppose they are. This is taken to be the case on many classical accounts of memory, according to which memories always involves conscious experiences.²⁸ For example, on Bertrand Russell's (1921) view, a memory requires 'an image ... a specific feeling or sensation or complex of sensations' (p. 186). More recently, Sven Bernecker (2010) has noted that 'personal memory involves qualitative experiences and imagery' (p. 138). Qualitative experience and imagery are not the sorts of things that Tim can have *while* he is sleeping because they are essentially occurrent.

²⁵ What I say in n. 23 can be applied here.

²⁶ This insightful linguistic point about 'memory' is drawn from Locke 1971, p. 81.

²⁷ I am thankful to a referee of *Mind* for this specific objection.

²⁸ For a summary of these accounts of memory, see Senor 2009 and Locke 1971, Ch. 1.

On the other hand, suppose personal memories are not essentially occurrent.²⁹ I find this option to be plausible. A personal memory seems to be the sort of thing that can be *recalled* or *brought to mind*. We sometimes speak of a place ‘bringing back a lot of memories’, and we appear to be talking about personal memory. My memory of meeting Gloria seems to be the sort of thing that exists in my mind even before I recall it. On this understanding, personal memories can be nonoccurrent. And perhaps Tim’s memory of *its having seemed to me that LN* exists nonoccurrently. (For ease, call this memory ‘M’.) Furthermore, perhaps Tim believes LN on the basis of M while he sleeps.

Although I think it is plausible that M *exists* while Tim sleeps, I do not think that Tim believes LN *on the basis* of M while he sleeps. I will defend this point in the following three paragraphs. (Those who find the current objection less than compelling can skip these three paragraphs with little interruption in the flow of the paper.) Consider some clear cases where basing does and does not occur. Matthew McGrath (2007, p. 13) gives the following example: ‘[S]ometimes we do form beliefs based on memorial imagery (“Yes, I can see it, Sally was at the party after all”).’³⁰ In McGrath’s example, he recalls a personal memory of Sally being at the party, and then on the basis of that memory, he comes to believe that Sally was at the party. Suppose that McGrath takes a nap immediately afterward. I am sympathetic to the view that, while he naps, McGrath’s nonoccurrent belief that Sally was at the party is held on the basis of his nonoccurrent memory of Sally being at the party. So, I am sympathetic to the view that *some* nonoccurrent beliefs are held on the basis of nonoccurrent memories.

²⁹ Some might say that ‘personal memory’ denotes something that is essentially occurrent by definition. Even if this is the case, there is a clear sense of ‘memory’ according to which I can have a memory of meeting Gloria, and it is plausible that *this* memory, whether we call it ‘personal memory’ or not, can be stored in my brain even when it is nonoccurrent.

³⁰ I believe that the first instance of this type of example was given in Locke 1971, p. 54.

Now, consider a revision of the story. Note that McGrath already had the nonoccurrent memory of Sally being at the party before he recalled it. That's how there was something for him to recall. But suppose that instead of McGrath forming the belief that *Sally was at the party* on the basis of that memory, he instead came to believe it because someone told him that she was there. His being told this does not bring up or trigger the memory of Sally being at the party. In this case, although McGrath has both the belief that Sally was at the party as well as the memory of Sally being at the party, McGrath's belief is not based on that memory. This would be so even if both the belief and memory became nonoccurrent. Now, if McGrath's being told that Sally was at the party *had* triggered his memory of Sally being at the party, if he had said, 'Ah, you're right, Sally *was* at the party', then McGrath's belief that Sally was at the party would be based both on the testimony as well as on the memory.

Let us now examine the case of Tim in more detail. There seems to be no time at which belief in LN becomes based on M. Let t_1 be the time at which Tim forms the belief in LN because it seems to him that LN. At t_1 , Tim's belief is not based on M because M does not exist yet. At t_2 , Tim still occurrently believes LN, and the nonoccurrent personal memory, M, begins to exist; the event at t_1 of its seeming to Tim that LN causes M to exist at t_2 . However, there is no sign that Tim's belief in LN becomes based on M during this period; the belief is still based only on the seeming. This is like the case in which McGrath believes that Sally was at the party on the basis of testimony, he has the memory of Sally being at the party, but the belief is not based on the memory. It seems equally plausible to me that, in both cases, no belief is based on a memory. Let t_3 be the time at which belief in LN becomes nonoccurrent and the seeming ceases to exist. At t_3 ,

note that Tim's occurrent belief in LN becomes stored *just like* any other belief gets stored. There is no indication that the belief suddenly becomes based on M at t_3 . Finally, at t_4 , M and belief in LN continue to exist nonoccurrently. And, once again, there is no sign that the belief in LN somehow becomes based on M during this time. So, it seems that there is no time at which the belief in LN becomes based on M. I admit that it *might* be that, contrary to appearances, the belief in LN becomes based on M at one of these times. However, since there is no reason to think that appearances are deceiving, we should accept that no basing occurs. The case is in all relevant ways like my revised McGrath case except that in that case, the memory already existed from the beginning; in the Tim case, the memory forms after the belief was formed. And in both cases, it seems that the belief is not based on the memory.

Let me sum up. We can understand memory as a) a faculty, b) a storage unit, c) propositional memory, d) an essentially occurrent personal memory, or e) a nonoccurrent personal memory. We have seen that no matter how we understand memory, Tim's belief is not based on it. So, although one could resist my argument by denying

- v) Tim does not believe LN on the basis of memory

I have argued that (v) is plausible.

2.7 How should the internalist respond?

To conclude the discussion of my main argument, I will lay out what I think are the best ways for an internalist to respond. One can attack (1) (deny that knowledge is present) or attack (2) (deny that evidence is absent). To deny (2), one must deny one of the following:

- i) Seemings are essentially occurrent
- ii) S believes that p on the basis of evidence E at t only if E exists at t

- iii) If *S* believes that *p* on the basis of evidence *E* at *t*, then *E* causally sustains the belief that *p* at *t*
- iv) There are some instances of noninferential knowledge
- v) Tim does not believe LN on the basis of memory

I have already given my reasons for thinking that (i)–(v) are plausible. However, an internalist might find the denial of the evidence thesis to be so implausible that she thinks that it is better to deny (1) or one of (i)–(v). I acknowledge that an internalist can do this. At the very least, however, I will have shown that the proponent of the evidence thesis is committed to controversial (and, I think, implausible) implications.

I will conclude section 2 by speculating as to why most epistemologists have overlooked the sort of argument I am giving. When epistemologists give attention to noninferentially formed beliefs, they tend to focus on perceptual beliefs or beliefs at the time they were formed. There is voluminous literature on how perceptual experiences contribute to the warrant of our perceptual beliefs. A smaller but still substantive amount of literature addresses how various candidates for evidence might contribute to the warrant of our a priori beliefs when they are formed.³¹ But there is little literature that discusses what evidence would contribute to the warrant of these beliefs *when* they are nonoccurrent. William Alston (1988b, p. 229) has written that ‘the role of post-origination bases in justification is a complex matter, one not at all adequately dealt with in the epistemological literature’. I believe that, over two decades later, this matter has *still* not at all been adequately dealt with, and I hope that proponents of the evidence thesis will turn their eyes toward these sorts of cases.³²

³¹ For example, see Plantinga 1993b, pp. 103–8; BonJour 1998, pp. 100–6; and Conee 1998.

³² My argument resembles one presented by Plantinga (1996, pp. 358–61), which was criticized by Conee and Feldman (2001, pp. 241–3). One might worry that my argument is vulnerable to Conee and Feldman’s objections to Plantinga’s argument. However, my argument does not contain the following two claims with which Conee and Feldman find fault in Plantinga’s argument: that all beliefs meet an evidentialist condition

3. Revisions of the evidence thesis

Suppose I am correct that the evidence thesis is false. Perhaps there is still a true thesis that carries the spirit and intent of the original evidence thesis. In section 3, I consider three alternative theories and argue that they are also subject to serious objections.

Consider the following *revision of the evidence thesis*,

RET₁: *S* *occurrently* knows that *p* at *t* only if *S* believes that *p* on the basis of evidence at *t*

RET₁ is not vulnerable to my counterexample since RET₁ is only about nonoccurrent knowledge. I will raise two problems for RET₁. First, a similar counterexample could still be raised. Suppose that after Tim wakes from his nap, he is asked to skim through the steps of a logic proof as fast as he can. He very quickly skims through a premise, LN, and moves on to other more interesting steps of the argument. It is clear that his belief in LN became occurrent as he skimmed through the premise. It is not clear to me that he had anything like impulsion evidence or a seeming or an occurrent memory of *its having seemed to me that LN* during this process; Tim was racing against the clock and he was focusing on other aspects of the argument. Tim's occurrent belief that LN would not be based on evidence, but it seems to be an instance of knowledge.³³

on knowledge if impulsion evidence counts as evidence, and that all beliefs have impulsion evidence. Since my argument does not make these claims, Conee and Feldman's criticisms of them are irrelevant to my argument. Conee and Feldman's other criticism of Plantinga's argument is discussed in n. 16.

³³ This example is inspired by Senor (1993, p. 459), who argues against John Pollock's view that all memory beliefs have a distinctive phenomenological state. He considers a person who, while concentrating on philosophy, is asked whether he teaches on Wednesdays. He answers, 'No, I don't', and his memorial belief that he doesn't teach on Wednesdays becomes occurrent. Yet, since he is busy concentrating on philosophy, no special phenomenal state arises. In my assessment, Senor's example correctly raises a problem for Pollock's view, but I cannot use it in my argument. This is because I think the person's belief that he does not teach on Wednesdays is held on the basis of further nonoccurrent beliefs, such as his nonoccurrent beliefs that *I have not taught on Wednesdays all semester* and *I did not teach last Wednesday* and *nobody ever told me that I was supposed to teach on Wednesday*. It is at least arguable that the person in Senor's example believes on the basis of these other beliefs; it is harder to argue for this with my example. See also Don Locke's (1971, p. 37) examples.

Not everybody will be convinced by the previous counterexample; perhaps it is hard to imagine the belief becoming occurrent without its being based on a seeming, impulsive evidence or a relevant personal memory. So I now turn to the second and more serious problem for RET₁, which is that it has counterintuitive implications. The proponent of RET₁ who agrees with my main argument against the evidence thesis must accept the following proposition:

- 4) Believing on the basis of evidence is not necessary for a belief to be warranted if the belief is nonoccurrent, but believing on the basis of evidence is necessary for a belief to be warranted if it is occurrent

This proposition seems implausible. If believing on the basis of evidence isn't *required* for warrant when the belief is nonoccurrent, then what could make it so that it is required when a belief is occurrent? There is no plausible factor that could make such a difference between occurrent and nonoccurrent beliefs. The proponent of RET₁ who agrees with my main argument must also deny

- 5) If a nonoccurrent belief has whatever it takes to be warranted when nonoccurrent, then it will not lose whatever it takes to be warranted *merely* by becoming occurrent

Consider this question: How could a belief lose a necessary condition for warrant *merely* by becoming occurrent? It is implausible that it would. But the proponent of RET₁ (who agrees with my main argument) *is* committed to this claim. I find these considerations convincing enough to conclude that RET₁ is false.

Here is a second revision of the evidence thesis:

RET₂: *S* knows that *p* at *t* only if *S* can believe that *p* on the basis of evidence at *t*.

RET₂ should be attractive to those who think that warrant requires only that evidence be *accessible* to the believer. They can further say that although Tim's nonoccurrent belief in LN is not based on evidence while he naps, still he *can* gain evidence for the belief.³⁴

However, the problem with RET₂ is that it does not retain the spirit of the original evidence thesis. RET₂ does not require for knowledge that a belief *actually* be based on evidence; it only requires that it *possibly* (in some relevant way) be based on evidence. And traditionally, internalists have thought that a belief meets a necessary condition for warrant only by *actually* being based on evidence. The standard epistemology textbook does not say, 'It is not required for knowledge that a belief *is* based on evidence, only that it *could* be based on evidence'. This sounds too weak. So a problem with RET₂ is that no proponent of the original evidence thesis should think that it makes a strong enough requirement on knowledge.

Here is a final suggested revision:

RET₃: *S* knows that *p* at *t* only if *S* believes that *p* on the basis of evidence either at *t* or at some time prior to *t*³⁵

My counterexample does not count against RET₃. If we specify that Tim *never* believed in LN on the basis of evidence, even when he formed the belief, then it is no longer clear that he *knows* LN when he takes his nap.

³⁴ One minor problem with RET₂ is that it is not clear what is meant by 'can'. There is a clear sense of 'can' according to which Tim *can't* gain the relevant seeming while he naps. He is unconscious! However, there are probably ways to specify the 'can' in RET₂ so that it turns out that he can gain evidence for his belief while he naps. Perhaps this can be done by specifying the 'can' in terms of an agent's ability. Or perhaps it is whatever sense of 'can' that is used in the following statement: *S* believes that *p* only if *S* can occurrently believe that *p*. Thanks to Peter Markie for this suggestion.

³⁵ Don Locke (1971, p. 97) seems to endorse this view. He writes, 'So the claim that in order to know a fact a man must have evidence that it is a fact, has to be modified. The most that can be claimed is that he must *have had* evidence for it'.

First, RET₃ does not retain the internalist intuition expressed by IUE. Most internalists think that the evidence which contributes to the warrant of a belief must be accessible to the believer. Yet, if it is only required that the belief be based on evidence at some earlier time, then that evidence will not be accessible. Barring the possibility of time travel, you cannot access something that exists only in the past; as Alvin Goldman (1999, p. 280) writes, ‘All past events are “external” and therefore irrelevant according to internalism’.³⁶ So, RET₃ violates an important internalist intuition. (Recall that there was a very similar problem with denying (ii).)

Second, RET₃ does not retain the spirit of the original evidence thesis. RET₃ does not require that a belief *presently* be based on evidence in order to be warranted; it only requires that it was based on evidence in the *past*. And just as proponents of the original evidence thesis might dislike RET₂ because it does not require that one *actually* believe on the basis of evidence, they might also dislike RET₃ because it does not require that someone *presently* believe on the basis of evidence. The standard epistemology textbook does not say, ‘It is not required for knowledge that the belief is *presently* based on evidence, only that it *was* based on evidence’. This sounds too weak. Therefore, a problem with RET₃ is that no proponent of the original evidence thesis should think that it is strong enough.

Third, we can formulate a new counterexample to RET₃. We can imagine a demon creating a molecule-by-molecule replica of Tim while he is sleeping. Plausibly, Tim’s sleeping duplicate has the same beliefs that he has; furthermore, it seems that his duplicate also believes LN. It is also plausible that if *Tim* knows LN while he is sleeping, then his duplicate also knows LN. This is a counterexample to RET₃.

³⁶ See also Greco 2005 and Goldman 2009, pp. 237–8.

However, I am not optimistic about the persuasiveness of this example. First, perhaps Tim's duplicate does not have *beliefs* (specifically, the belief in LN). Some think that in order to have intentional states, Tim's duplicate must have had a specific type of history; it may be that his duplicate has never had this history. Others might hold that a person can believe that p at t only if the belief that p was occurrent at some prior time.³⁷

Second, perhaps my duplicate believes LN, but the belief is unwarranted. Perhaps a belief is warranted only if the belief was formed by a specific type of process, and the duplicate's belief was not formed by such a process.³⁸ I will not explore these ways of responding to my example and leave that for future discussion. I believe that my first two objections to RET₃ are sufficiently serious.

4. Conclusion

In section 1, I said that a convincing counterexample to the evidence thesis must overcome two hurdles: it must be clear *both* that knowledge is present, *and* that the knowledge is not based on any evidence. I have argued that my example with Tim overcomes these hurdles. My secondary thesis was that revisions of the evidence thesis are subject to serious difficulties. I believe that I have convincingly shown either that these revisions give up the spirit of the original evidence thesis or that we have reason to think they are false.³⁹

³⁷ Michael Huemer (1999, p. 356, n. 15) holds this view.

³⁸ I find this response to be plausible.

³⁹ Thanks to Richard Feldman, Christopher Gadsden, Travis Gilmore, John Greco, Peter Markie, Kevin McCain, Matthew McGrath, Andrew Melnyk, George Pappas, Ted Poston, Joshua Rasmussen, Chris Tucker, John Turri, Paul Weirich, and Julie Zykan for helpful written comments and correspondence; to Mylan Engel, Richard Fumerton, Travis Gilmore, Jessica Kaiser, Justin McBrayer, Philip Swenson, and Jonathan Vertanen for helpful conversation; to the audience at the 2009 Alabama Philosophical Society for probing questions and critique, especially William Melanson and Joshua Smith; to the referees and editor of *Mind* for very detailed and helpful comments; and especially to Kevin McCain for helpful written comments both on multiple drafts of this paper and also on my responses to the referees and editor of *Mind*.

Bibliography

Alston, William 1985: 'Concepts of Epistemic Justification'. In Alston 1989, pp. 81–114.

Originally published in *The Monist*, 68, pp. 57–89.

—1988a: 'Justification and Knowledge'. In Alston 1989, pp. 172–82. Originally

published in *Proceedings of the XVIIth World Congress of Philosophy*, 5.

—1988b: 'An Internalist Externalism'. In Alston 1989, pp. 227–45. Originally

published in *Synthese*, 74, pp. 265–83.

—1989: *Epistemic Justification*. Ithaca: Cornell University Press.

Armstrong, David 1973: *Belief, Truth, and Knowledge*. New York: Cambridge University Press.

Bealer, George 1996: 'A Priori Knowledge and the Scope of Philosophy'. *Philosophical Studies*, 81, pp. 121–42.

Bergmann, Michael 1997: 'Internalism, Externalism and the No-Defeater Condition'. *Synthese*, 110, pp. 399–417.

—2006: *Justification without Awareness*. New York: Oxford University Press.

Bernecker, Sven 2010: *Memory: A Philosophical Study*. New York: Oxford University Press.

BonJour, Laurence 1998: *In Defense of Pure Reason*. Cambridge: Cambridge University Press.

Chisholm, Roderick 1980: 'A Version of Foundationalism'. *Midwest Studies in Philosophy*, V, pp. 543–64.

Conee, Earl 1998: 'Seeing the Truth'. *Philosophy and Phenomenological Research*, 58, pp. 847–57.

- Conee, Earl and Richard Feldman 2001a: *Epistemology: Internalism and Externalism*. Kornblith, Hilary (ed.) Oxford: Blackwell.
- 2001b: 'Internalism Defended'. In Conee and Feldman 2001a, pp. 231–60.
- DePaul, Michael and William Ramsey (ed.) 1998: *Rethinking Intuition*. Lanham, MD: Rowman & Littlefield Publishers.
- Dretske, Fred 1981: *Knowledge and the Flow of Information*. Cambridge: MIT Press.
- Foley, Richard 1987: *The Theory of Epistemic Rationality*. Cambridge: Harvard University Press.
- Goldman, Alvin 1967: 'A Causal Theory of Knowing'. *The Journal of Philosophy*, 64, pp. 355–72.
- 1986: *Epistemology and Cognition*. Cambridge, MA: Harvard University Press.
- 1999: 'Internalism Exposed'. *Journal of Philosophy*, 96, pp. 271–93.
- 2009: 'Internalism, Externalism, and the Architecture of Justification'. *Journal of Philosophy*, 106, pp. 309–38.
- Greco, John 2005: 'Justification is not Internal'. In Steup and Sosa 2005, pp. 257–70.
- 2009: *Achieving Knowledge*. Cambridge: Cambridge University Press.
- Gray, Peter 1999: *Psychology*. New York: Worth Publishers.
- Harman, Gilbert 1986: *Change in View*. Cambridge, MA: MIT Press.
- Huemer, Michael 1999: 'The Problem of Memory Knowledge'. *Pacific Philosophical Quarterly*, 80, pp. 346–57.
- 2001: *Skepticism and the Veil of Perception*. Lanham, MD: Rowman and Littlefield Publishers, Inc.
- 2005: *Ethical Intuitionism*. New York: Palgrave Macmillan.

- 2007: ‘Compassionate Phenomenal Conservatism’. *Philosophy and Phenomenological Research*, 74, pp. 30–55.
- Kvanvig, Jonathan (ed.) 1996: *Warrant in Contemporary Epistemology*. Lanham, MD: Rowman and Littlefield.
- Locke, Don 1971: *Memory*. Garden City, NY: Anchor Books.
- McCain, Kevin 2008: ‘The Virtues of Epistemic Conservatism’. *Synthese*, 164, pp. 185–200.
- McDowell, John 1995: ‘Knowledge and the Internal’. *Philosophy and Phenomenological Research*, 55, pp. 877–93.
- McGrath, Matthew 2007: ‘Memory and Epistemic Conservatism’. *Synthese*, 157, pp. 1–24.
- Nozick, Robert 1981: *Philosophical Explanations*. Cambridge: Harvard University Press.
- Plantinga, Alvin 1993a: *Warrant: The Current Debate*. New York: Oxford University Press.
- 1993b: *Warrant and Proper Function*. New York: Oxford University Press.
- 1996: ‘Respondeo’. In Kvanvig 1996, pp. 307–78.
- Russell, Bertrand 1921: *The Analysis of Mind*. Allen and Unwin.
- Senor, Thomas D. 1993: ‘Internalistic Foundationalism and the Justification of Memory Belief’. *Synthese*, 94, pp. 453–76.
- 2009: ‘Epistemological Problems of Memory’. In *Stanford Encyclopedia of Philosophy*, <http://plato.stanford.edu/entries/memory-episprob/>, September 4, 2009 version.

- Sosa, Ernest 2007: *A Virtue Epistemology: Apt Belief and Reflective Knowledge*. Oxford: Oxford University Press.
- Steup, Matthias and Ernest Sosa (ed.) 2005: *Contemporary Debates in Epistemology*. Malden, MA: Blackwell Publishing Ltd.
- Swain, Marshall 1981: *Reasons and Knowledge*. Ithaca: Cornell University Press.
- Swinburne, Richard 2001: *Epistemic Justification*. New York: Oxford University Press.
- Tolhurst, William 1998: 'Seemings'. *American Philosophical Quarterly*, 35, pp. 293–302.
- Tucker, Chris 2010: 'Why Open-Minded People Should Endorse Dogmatism'. *Philosophical Perspectives*, 24, pp. 529–45.
- van Inwagen, Peter 1997: 'Materialism and the Psychological-Continuity Account of Personal Identity'. *Philosophical Perspectives*, 11, pp. 305–19.
- Williamson, Timothy 2007: *The Philosophy of Philosophy*. Oxford: Blackwell.
- Zagzebski, Linda 1996: *Virtues of the Mind*. Cambridge: Cambridge University Press.