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# Knowledge Despite Falsehood

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**Abstract**

Some authors contend that we sometimes acquire knowledge from falsehood. I examine two representative cases invoked in support of this contention. In each case, the subject *S* infers a proposition *q* from a false proposition *p*. I argue that from the facts that *S* knows that *q* and that *S* formed the belief that *q* on the basis of the false belief that *p*, it does not follow that *S*'s knowledge that *q* owes its epistemic status to the belief that *p*. In each of the two cases, I argue, there is a proposition *p'* in the neighborhood of *p* that *S* (dispositionally) believes. If *S* knows that *q*, *S*'s false belief that *p* is not essential to S's cognition, which is instead due to *S*'s belief that *p'*. *S* thus knows *despite* her false belief. The widely-accepted and plausible principle that inferential knowledge requires known premises is unscathed.

## 1. Introduction

A number of authors have recently argued that inferential knowledge can be based on false beliefs. If they are right, then not only should we give up the well-accepted epistemic principle

(1) Inferential knowledge of a conclusion requires known relevant premises,

but we should also renounce the weaker principle

(2) Inferential knowledge of a conclusion requires true relevant premises.[1]

Advocates of "knowledge from falsehood" (KFF) imagine several examples in which false beliefs seem to make essential contributions in the production of knowledge. I will defend both (1) and (2) against these alleged counterexamples. I will focus on two representative cases and argue that in each case either (i) the subject does not have the knowledge in question, or (ii) the subject does have knowledge but this knowledge is based not on a false belief but on a related true belief.

**2. Two Cases**

I will examine the following two cases:

> *Fancy Watch*: I have a 7pm meeting and extreme confidence in the accuracy of my fancy watch. Having lost track of the time and wanting to arrive on time for the meeting, I look carefully at my watch. I reason: 'It is exactly 2:58pm; therefore I am not late for my 7pm meeting'. Again I know my conclusion, but as it happens it's exactly 2:56pm, not 2:58pm. (Warfield, 2005, p. 408.)
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> *Appointment*: On the basis of my apparent memory, I believe that my secretary told me on Friday that I have an appointment on Monday with a student. From

[1] See, among others, Arnold (2013), Fitelson (2010), Hilpinen (1988), Klein (2008), Warfield (2005). Luzzi (2010) argues against what he calls *counter-closure*:

> Necessarily, if (i) *S* knows that *p* entails *q* and (ii) *S* comes to believe *q* solely on the basis of competently deducing it from *p*, and (iii) *S* knows *q*, then *S* knows *p*.

Luzzi's counter-closure is one way to spell out (1) more precisely. However, I want to allow for cases in which the premise *p* provides good inductive, rather than deductive, evidence for *q*.

> that belief, I infer that I do have an appointment on Monday. Suppose, further, that I do have an appointment on Monday, and that my secretary told me so. But she told me that on Thursday, not on Friday. I know that I have such an appointment even though I inferred my belief from the false proposition that my secretary told me on Friday that I have an appointment on Monday. (Klein, 2008, p. 36.)

Each case involves these two key features:

(3) Subject *S* infers *q* from a false premise *p*;

(4) *S* knows that *q*.

Hence, it seems that knowledge is sometimes based on false premises. However, I will argue, this is not how we should understand the cases: although it is plausible that *S* knows that *q*, the falsehood *p* is not *essential* in producing that knowledge. This is because in each case, there is a true proposition *p'*, somewhere in the neighborhood of *p*, that suffices to justify the known proposition *q*. There are several plausible candidates for such a proposition in *Fancy Watch*, but let us stipulate that *p'* is that it is about 3pm (say, it is 3pm ± 15 min). As we will see shortly, nothing hangs on this specific stipulation. In *Appointment*, our true proposition *p'* will be that Peter's secretary told him (on some day or other) that he has an appointment on Monday. In each case, *S* has good evidence for *p'*, and *S* (at least) dispositionally believes *p'*.

Ted Warfield (2005) considers four versions of this "resistance strategy." I will defend a variant of the fourth one. According to this resistance strategy, *S* knows that *q*, despite the fact that *S* infers *q* from a falsehood *p*, because *S* (at least) dispositionally believes a truth *p'* that is

well supported by the evidence available to *S*, and *p'* obviously entails (*Fancy Watch*) or supports (*Appointment*) *q*.

Before I consider Warfield's objection against this response, I need to say a few words about dispositional beliefs. We should probably regard *S* as having the disposition to believe that *p'* rather than as having an antecedently held but non-occurrent belief that *p'*.[2] In our two cases, *S* is disposed to affirm *p'* without hesitation and would thus, for practical purposes, count as believing that *p'*. In other words, the relationship between *S*'s evidence and *p'* is straightforward: we can safely assume that *S* would not be tempted to form the belief that *p'* from a lucky guess or by questionable means such a crystal ball reading. Furthermore, our practice of knowledge attribution would count *S* as knowing any true proposition that (i) *S* is readily disposed to believe—because it obviously follows from *S*'s occurrent beliefs or is obvious given *S*'s current perceptual experience—and (ii) with respect to which *S*'s epistemic position suffices for knowledge. For example, you know that there are more than 57 trees in the Amazon Rainforest, even though this thought never occurred to you. And seeing a tennis ball on the grass, you know that there are more than two blades of grass near it, even though you are not currently entertaining this proposition. These considerations show that the specific choice we make for proposition *p'* ultimately does not matter: in *Fancy Watch*, Ted

[2] See Audi (1994) for this distinction. He writes, "The suggested difference between a dispositional belief and a disposition to believe is in part that between accessibility of a proposition by a retrieval process that draws on memory and its accessibility only through a belief formation process" (ibid., p. 420).

dispositionally believes (and knows) not only that it is 3pm ± 15 min, but also that it is 3pm ± 16 min, that it is 3pm ± 17 min, etc.[3]

Now, the fact that your knowledge that there are more than 57 trees in the Amazon Rainforest is not based on any inference you actually performed arguably entails that it is not a case of *inferential* knowledge. I have no objection against this stricter terminology. Readers who favor it should understand my position as holding that in *Fancy Watch* and *Appointment*, the subject's knowledge that *q*, like your knowledge that that there are more than 57 trees in the Amazon Rainforest, is not inferential.

Warfield contends that the fourth strategy fails "catastrophically" in Gettier cases. He writes:

> I seem to see a dog in the yard. On this occasion I form the belief that there is a dog in the yard and then reason to the conclusion that there is at least one animal in the yard. My belief is false (there is no dog, only the toy) and my conclusion though true, because of the squirrel behind the brush, is not known. The fourth resistance strategy gets this clear 'no knowledge' case wrong. It implies that I know that there's at least one animal in the yard. After all, there is a justified and dispositionally believed truth that is both evidentially supported by and entailed by my false belief that there is a dog in the yard: the truth is 'there is a dog or squirrel in the yard'. The fourth resistance strategy rules that

[3] We could even stipulate that *p'* and *q* are one and the same proposition, in which case, the belief that *p'* would be occurrent rather than dispositional. However, for expository purposes, it is preferable to assume that *p'* and *q* are distinct.

> this belief epistemizes my conclusion. I therefore am judged to have knowledge in this case, which goes against the standard and correct Gettier verdict. (2005, p. 412, slightly edited.)

There is, however, a crucial difference between a Gettier case and our two cases. In the former, the dispositionally believed truth, namely that there is a dog or squirrel in the yard, is *not* known. In *Fancy Watch*, the dispositionally believed truth *p'* is known: Ted knows that it is about 3pm. Similarly, in *Appointment*, Peter knows that his secretary told him that he has an appointment on Monday. Or, more carefully, in both *Fancy Watch* and *Appointment*, the claim that *S* knows *p'* is just as plausible as the claim that *S* knows that *q*. We must thus understand the fourth resistance strategy as holding that *S* not only (dispositionally) believes but *knows* that *p'*. This way, we avoid Warfield's objection. This is as it should be: as I wrote in section 1, my position is that inferential knowledge requires not just true but *known* premises. In other words, I defend both (1) and (2) against the counterexamples proposed by the advocates of KFF.

**3. Harmless Falsehoods**

The proponent of KFF might protest that *S* actually arrives at her belief that *q* from the belief that *p*. The fact that *S could* reason differently, that is, from *p'* to *q*, does not alter the fact that *S* actually gains knowledge from a falsehood.[4]

First, we need to be clear about the relevant intuitions here. I seriously doubt that we intuit that it is *S*'s inferring *q* from the false belief that *p* that grants *S* knowledge that *q*. Our intuition is less specific: in the proposed scenario where *S* infers *q* from *p*, *S* counts as knowing

[4] See (Coffman, 2008, p. 191), (Klein, 2008, § 4) and (Luzzi, 2010, p. 678).

that *q*. Hence, intuition alone does not support the claim that *S* acquires knowledge that *q* by inferring *q* from *p*. To put the point differently, following the strict terminology I alluded to in the previous section, our intuition is not that *S* has *inferential* knowledge that *q*, but merely that S knows that *q*.

Second, it is crucial to distinguish an explanation of a subject's knowledge from an explanation of how her corresponding belief was formed. Suppose I form the belief that I did not win the lottery, based on the low probability that my ticket number was drawn. At this point, I do not know that I did not win; however, I acquire such knowledge when I am later informed of the lottery result. I now know that I did not win the lottery, even though the probability considerations I initially invoked to form the corresponding belief did not confer that knowledge to me.

*Fancy Watch* and *Appointment*, I will argue, bear important similarities to the following case:

> *Extra Reasons*: Smith has two independent sets of reasons for thinking that someone in his office owns a Ford. One set has to do with Nogot. Nogot says he owns a Ford, and so on. As usual, Nogot is merely pretending. But Smith has equally strong reasons having to do with Havit. And Havit is not pretending. Havit owns a Ford, and Smith knows that he owns a Ford. (Feldman, 2003, p. 33.[5])

Smith forms the belief that someone in his office owns a Ford (*q*) by inferring it from the belief that Nogot owns a Ford (*n*) and the belief that Havit owns a Ford (*h*). But Smith does not know

[5] This example was originally presented in (Lehrer, 1965, p. 170).

that *q* on the basis of both his belief that *n* and his belief that *h*. He knows that *q* in virtue of the fact that *q* trivially follows from *h*, which he knows. Richard Feldman writes that "Smith has two independent lines of thought that lead to the same conclusion. One line of thought, concerning Nogot, does depend on a false proposition. The other line of thought, involving Havit, does not depend on anything false. In this case, Smith's belief that someone owns a Ford does not *essentially* depend upon the falsehood. This is because there is a justificatory line that ignores the falsehood" (2003, p. 36).[6]

Peter Klein does not dispute this analysis of *Extra Reasons*, and grants that Smith's false belief that Nogot owns a Ford is "harmless," or "non-essential." It is no simple task to state precisely what it is for a belief to be essential in producing knowledge, but the following (rough) characterization will serve our purposes:

(5) A belief that *p* is essential in producing a subject *S*'s knowledge that *q* just in case *S* knows that *q* but would no longer do so if the belief that *p* were simply removed from *S*'s set of beliefs.[7]

Hence, if *S*'s false belief that *p* is non-essential in producing *S*'s knowledge that *q*, then *S* would still know that *q* if *S* were to suppose that *p* is false or to suspend judgment on *p*.

Now, I need to address one possible misunderstanding. Contrary to what E.J. Coffman (2008, p. 191) suggests, to say that the belief that *p* is not essential in producing the knowledge that *q* is *not* to say the following:

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[6] See Feit and Cullison (2011, p. 288) for a similar criterion.

[7] See (Klein, 2008, p. 41). See also (Lehrer, 1965, p. 174).

(6) If *S*'s inferential belief that *q* had been based on the belief that *p*', the inferential belief would (still) have constituted knowledge.

Branden Fitelson (2010, p. 667) argues that (6) is vulnerable to counterexamples. He imagines a case similar to *Fancy Watch*, except that it involves a Campanile clock. While Branden is confident that his fancy watch is *exactly* accurate, he believes that the Campanile clock is merely approximately accurate, within, say, two minutes. From here, the story goes:

> Having lost track of the time and wanting to arrive on time for the meeting, I look out of my office window (from which the Campanile clock is almost always visible). As luck would have it (owing, say, to the fluke occurrence of a delivery truck passing by my window), the Campanile clock is obscured from view at that instant (which *is* exactly 2:56pm). So, instead, one minute later, I look carefully at my watch, which (because my watch happens to be running one minute slow) reads exactly 2:56pm. I reason: 'It is exactly 2:56pm (*p*) therefore (*q*) I am not late for my 7pm meeting'. Thus (supposing Warfield is right), I have inferential knowledge that *q*, based on a relevant premise *p*, which is a falsehood. (Fitelson, ibid., p. 667.)

But, Fitelson points out, had his inferential belief that *q* been based on his belief that *p*'—that it is 2:56pm ± 2 min—then it would have been based on his reading at exactly 2:56pm of the Campanile clock. But unbeknownst to him, the Campanile clock has been and would have been stuck at 2:56pm for some time. Fitelson's intuition is that he does not obtain inferential knowledge of *q* (that he is not late for his 7pm meeting) on the basis of his belief that *p*' in this

case. He concludes that, contra (6), if his inferential belief that *q* had been based on the belief that *p'*, the inferential belief would not have constituted knowledge.

Fitelson's case shows that (6) is false, but it does not affect the position I defend here. When the belief that *p* is not essential in producing the knowledge that *q*, then, *in the actual world*, there is a line of thought, or evidential path, involving the belief that *p'* but not the belief that *p*, which grants *S* knowledge that *q*. We can of course imagine a counterfactual scenario in which *S*'s belief that *p'* has a lower epistemic status and does not grant *S* knowledge that *q*. But this counterfactual possibility is compatible with the fact that in the actual scenario, *S* knows that *q* on the basis of his (dispositional) belief that *p'*. Let us now return to each of our two cases and assess whether it is plausible to hold that *S* knows that *q* on the basis of his false belief that *p*.

**4. *Fancy Watch***

In *Fancy Watch*, let us recall, Ted believes the falsehood that it is exactly 2:58pm (*p*) based on what his watch indicates. He (arguably) knows that he is not late for his 7pm meeting (*q*), but he also dispositionally believes the true proposition that it is about 3pm (*p'*). It is natural to think that Ted has ample *independent* evidence for his belief that *p'*: daylight; how hungry he feels; his "internal clock"; etc. But this is not how the case should be construed. I will thus suppose that these sources of evidence are not available to him: Ted is indoors and just waking up from a nap of unknown duration. Hence, the only evidence Ted has regarding time comes from what his watch indicates. We can thus stipulate that Ted's evidence is:

$e_1$: Ted's watch reads '2:58pm.'

But this is not enough to justify his belief that it is exactly 2:58pm. Ted also needs to have good evidence that his watch is exactly accurate. In other words, Ted's evidence includes something like this:

$e_2$: Ted has it on good authority that his watch is exactly accurate.

To make things vivid, we may suppose Ted is told (by a reliable source) that his watch is equipped with a very small antenna that receives radio signals allowing the watch to synchronize itself with the atomic clock at the National Institute of Standards and Technology in Colorado. Ted's watch is thus extremely accurate in general.

Now, if this case were typical, Ted would also be justified to believe that if his watch is not *exactly* accurate, it is *approximately* so. A typical watch owner justifiably believes that if her watch is not exactly accurate, then it is either a little slow or a little fast, but not wildly inaccurate. So Ted's evidence plausibly also includes:

$e_3$: If Ted's watch is not exactly accurate, it is (extremely likely) at least approximately so. [8]

In this scenario (call this *Scenario 1*), there are two evidential paths leading to the conclusion that Ted is not late for his 7pm meeting:

Path one: $e_1 \,\&\, e_2 \rightarrow p \rightarrow q$

Path two: $e_1 \,\&\, e_2 \,\&\, e_3 \rightarrow p' \rightarrow q$[9]

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[8] Ted also needs a justified belief about the amount of time it would take him to get to his meeting from where he currently is. I will ignore this complication.

[9] Path two shows that the assumption that $p'$ is distinct from $q$ is not mandatory, for $q$ could be directly inferred from $e_1 \,\&\, e_2 \,\&\, e_3$.

If we understand *Fancy Watch* this way, then Ted's belief that it is exactly 2:58pm (*p*) is *not* essential in producing the knowledge that he is not late for his 7pm meeting (*q*). Like *Extra Reasons*, *Fancy Watch* involves a harmless falsehood. In *Scenario 1*, Ted's knowledge that he is not late for his 7pm meeting is completely explained by evidential path two, which does not involve his false belief that it is exactly 2:58pm.

But proponents of KFF may protest that this is not how *Fancy Watch* should be construed.[10] They may insist that Ted's belief that it is exactly 2:58pm must be construed as essential in producing his knowledge that he is not late for his 7pm meeting. In other words, Ted's belief that it is about 3pm must be evidentially dependent on his belief that it is exactly 2:58pm. On this construal of the case, call this *Scenario 2*, there is no evidential path leading to Ted's belief that he is not late for his 7pm meeting that involves the belief that it is about 3pm but does not involve his belief that it is exactly 2:58pm. Path two is unavailable to Ted, because he lacks evidence $e_3$: Ted does not justifiably believe that when his watch is not exactly accurate, it is at least approximately accurate. We may stipulate for instance that Ted was never informed about what happens when radio transmission between Colorado and his watch fails. We thus have:

$e_1 \,\&\, e_2 \rightarrow p \rightarrow p' \rightarrow q$

The problem with *Scenario 2* is that there is an undercutting defeater for Ted's belief that he is not late for his 7pm meeting (*q*), namely the true proposition that it is not exactly 2:58pm: if this proposition were added to Ted's beliefs, then Ted would no longer be justified to

[10] See (Arnold, 2013) and (Klein, 2008, p. 44-47).

believe that he is not late for his 7pm meeting. So in *Scenario 2*, Ted lacks knowledge that he is not late for his 7pm meeting.

Klein concedes that the evidential path that goes through the false belief that it is not exactly 2:58pm ($p$) has an undercutting defeater. But he does not take this to rule out knowledge that Ted is not late for his 7pm meeting. He writes: "The path [going through the true belief that $p'$ but not involving the false belief that $p$] is the path not taken, but in this case its mere existence makes it possible for [Ted] to acquire knowledge [that $q$] by having taken the other, defeated path" (2008, p. 49). Klein's claim suggests a slightly different construal of *Fancy Watch*, which we will call *Scenario 3*. In this scenario, whatever justifies the proposition that it is exactly 2:58pm ($p$) is also what justifies the proposition that it is about 3pm ($p'$).[11] *Scenario 3* thus involves the following two evidential paths:

Path one: $e_1 \,\&\, e_2 \rightarrow p \rightarrow q$

Path two: $e_1 \,\&\, e_2 \rightarrow p' \rightarrow q$

Path two, the "path not taken," involves only truths. The problem with *Scenario 3* is that just like path one, path two has an undercutting defeater. If the true proposition that it is not exactly 2:58pm were added to Ted's beliefs, then Ted would no longer be justified to believe that it is about 3pm ($p'$), or that he is not late for his 7pm meeting ($q$). This is because under this scenario, Ted does not justifiably believe that if his watch is not exactly accurate, it is at least approximately so ($e_3$). Hence, in *Scenario 3*, Ted does not know that he is not late for his 7pm meeting.

[11] See (Klein, 2008, p. 52).

By contrast, in *Scenario 1*, Ted justifiably believes $e_3$, and for this reason his belief that that he is not late for his 7pm meeting has no undercutting defeater. In this case, adding the true proposition that it is not exactly 2:58pm to Ted's evidence would not rob him of justification for his conclusion that he is not late for his 7pm meeting, for Ted would remain justified in believing that it is about 3pm.[12] I conclude that Ted knows that he is not late for his 7pm meeting only in *Scenario 1*, that is, only if Ted's belief that it is exactly 2:58pm is not essential in producing his knowledge that he is not late for his 7pm meeting.

Before I move to the next case, it is worth addressing one worry. Some may be concerned that in *Scenario 1*, the evidential path responsible for Ted's knowledge that he is not late for his 7pm meeting, i.e., path two, is not *causal*, since by assumption, path one is the causal path by which Ted's belief that he is not late for his 7pm meeting is formed. But this concern is misplaced. Although path two is not involved in the forming of that belief, it is a *sustaining* cause of it: Ted would still believe that he is not late for his 7pm meeting if he learned that it is not exactly 2:58pm. Hence, my claim that path two of *Scenario 1* grants Ted knowledge is compatible with the requirement that the epistemizing relation be causal.

**5. *Appointment***

*Appointment* involves the following propositions:

*p*: Peter's secretary told him on Friday that he has an appointment on Monday.

*p'*: Peter's secretary told him that he has an appointment on Monday.

*q*: Peter has an appointment on Monday.

[12] Feit and Cullison (2011, p. 295) also point out the absence of undercutting defeaters regarding a similar example.

$e_1$: Peter seems to remember that his secretary told him on Friday that he has an appointment on Monday.

Evidence $e_1$ does not offer sufficient support for any of the propositions $p$, $p'$ and $q$. Peter also needs to justifiably believe that his apparent memory is reliable:

$e_2$: When Peter seems to remember that $p$, it is (very) likely that $p$.[13]

Peter's memory is, of course, not infallible. But there are ways in which Peter's memory is unlikely to fail him. If he is like us, then when his apparent memory about what a person told him on a certain day is incorrect, what Peter is most likely wrong about is the day of the conversation. In other words, if Peter were informed that his apparent memory that his secretary told him on Friday that he has an appointment on Monday is mistaken, he would justifiably believe that the mistake concerns solely the day of the conversation, and would thus justifiably believe that his secretary told him on some day other than Friday that he has an appointment on Monday. Let us suppose that in *Scenario 1*, Peter's evidence includes:

$e_3$: When Peter's apparent memory that *S* told him that $q$ on day $d$ is incorrect, it is still very likely that *S* told him that $q$ on some day other than $d$.

*Scenario 1* involves the following two evidential paths:

Path one: $e_1 \,\&\, e_2 \rightarrow p \rightarrow q$

Path two: $e_1 \,\&\, e_2 \,\&\, e_3 \rightarrow p' \rightarrow q$

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[13] Peter's memory may not be reliable when the truth of $p$ does not matter to him, but let us ignore this complication. Let us also ignore the fact that Peter should also justifiably believe that his secretary is trustworthy (at least with respect to his appointment dates).

Peter plausibly knows that he has an appointment on Monday in *Scenario 1*. Unfortunately for the proponents of KFF, Peter's false belief that his secretary told him on Friday that he has an appointment on Monday is not essential to his cognition in this scenario. This case is like *Extra Reasons*. His knowledge that he has an appointment on Monday is based on his knowledge that his secretary told him that he has an appointment on Monday (path two).

But Klein insists that *Appointment* is not a case of harmless falsehood. He writes (2008, p. 45-46) that Peter's belief that his secretary told him that he has an appointment on Monday should be construed as evidentially dependent on his belief that his secretary told him on Friday that he has an appointment on Monday. In other words, Peter would not justifiably believe that his secretary told him that he has an appointment on Monday if he were informed that it is not the case that his secretary told him on Friday that he has an appointment on Monday. Hence, on Klein's interpretation of *Appointment*, $e_3$ is not part of Peter's evidence.

This leaves us with two possible scenarios. *Scenario 2* involves the following evidential path:

$e_1$ & $e_2 \rightarrow p \rightarrow p' \rightarrow q$

And *Scenario 3* has two evidential paths:

Path one: $e_1$ & $e_2 \rightarrow p \rightarrow q$

Path two: $e_1$ & $e_2 \rightarrow p' \rightarrow q$

Unfortunately for the proponents of KFF, each of these three paths has an undercutting defeater, namely the true proposition that Peter's secretary did not tell him on Friday that he has an appointment on Monday. Upon learning that, Peter could not justifiably believe any of

the propositions *p*, *p'* and *q*. Peter thus lacks knowledge that he has an appointment on Monday if we do not assume that $e_3$ is part of his evidence.

By contrast, if we assume that $e_3$ is part of his evidence and thus interpret *Appointment* according to *Scenario 1*, then Peter's plausibly knows that his secretary told him that he has an appointment on Monday. In such a case, the true proposition that his secretary did not tell him on Friday that he has an appointment on Monday is not an undercutting defeater for Peter's belief that he has an appointment on Monday. He would still be justified in believing that he has an appointment on Monday if he learned that proposition. (In such a case, given $e_3$, he would justifiably believe that his secretary told him on some other day that he has an appointment on Monday.) This shows that Peter's false belief that his secretary told him on Friday that he has an appointment on Monday is not essential to his cognition.

**6. Conclusion**

In both *Fancy Watch* and *Appointment*, the subject *S* infers *q* from a false proposition *p*. But in each case, there is a proposition *p'* that is in the neighborhood of *p* and that *S* (at least dispositionally) believes. If we assume that the evidence for *S*'s belief that *p'* is completely based on his belief that *p* (or is the same evidence as the evidence in support of the belief that *p*), then, I have argued, *S* does not know that *q*. If, on the other hand, we make the plausible assumption that further evidence is available to *S*, then that evidence, together with whatever evidence supports the belief that *p*, initiates an evidential path that involves the belief that *p'* (but not the belief that *p*) and yields knowledge that *q*. This means that *S*'s knowledge, if he has any, is based not on his belief that *p*, but on his belief (and knowledge) that *p'*. *S* knows *despite*

his false belief. The widely-accepted and plausible principle that inferential knowledge requires known premises is unscathed.

**References**

Arnold, Alexander (2013) "Some Evidence if False," *Australasian Journal of Philosophy* 91, 165-172.

Audi, Robert (1994) "Dispositional Beliefs and Dispositions to Believe," *Nous* 28, 419-434.

Coffman, E. J. (2008) "Warrant without Truth?," *Synthese* 162, 173-194.

Feit, Neil and Andrew Cullison (2011) "When Does Falsehood Preclude Knowledge?," *Pacific Philosophical Quarterly* 92, 283-304.

Feldman, Richard (2003) *Epistemology*. Upper Saddle River, NJ: Prentice Hall.

Fitelson, Branden (2010) "Strengthening the Case for Knowledge from Falsehood," *Analysis* 70, 666-669.

Hilpinen, Risto (1988) "Knowledge and Conditionals," *Philosophical Perspectives* 2, 157-182.

Klein, Peter (2008) "Useful False Beliefs," in Q. Smith (ed.), *Epistemology: New Essays*. Oxford: Oxford University Press, 25-62.

Lehrer, Keith (1965) "Knowledge, Truth and Evidence," *Analysis* 25, 168-175.

Luzzi, Federico (2010) "Counter-Closure," *Australasian Journal of Philosophy* 88, 673-683.

Warfield, Ted (2005) "Knowledge from Falsehood," *Philosophical Perspectives* 19, *Epistemology*, 405-416.