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► To cite this version:

Franck Lihoreau. Skepticism, contextualism and ordinary contingent knowledge. 2006. halshs-00113492v3

HAL Id: halshs-00113492

<https://shs.hal.science/halshs-00113492v3>

Preprint submitted on 14 Nov 2006 (v3), last revised 31 Aug 2007 (v4)

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Skepticism, Contextualism, and ordinary contingent knowledge

FRANCK LIHOREAU

Abstract

According to Lewis' relevant alternatives contextualism, there can be contexts in which a subject counts as knowing a proposition just because in these contexts, every possibility that this proposition might be false is not being properly ignored. The purpose of this paper is to argue that this idea of an ignorance-based knowledge has the untenable consequence of granting non-evidentially based knowledge of contingent truths which intuitively cannot be known but on the basis of appropriate evidence.

Introduction

In "Elusive Knowledge" (1996), David Lewis, one of the leading proponents of epistemological contextualism, offers an intriguing analysis of knowledge, according to which there can be contexts in which a subject counts as knowing

a proposition just because in these contexts, every possibility that this proposition might be false is not being properly ignored. This idea of an “ignorance-based knowledge” is supposed to help us deal with some aspects of the problem of skepticism. In this paper, I hold that it can be of no such help, for it has an untenable consequence: in some cases, it results in granting people non-evidentially based knowledge of ordinary contingent truths about which it is intuitively absurd to think that they could be known in the absence of appropriate evidence.

1. Ignorance-based knowledge

According to so-called “relevant alternatives analyses of knowledge”, knowing requires excluding all relevant possibilities of error, where relevance is defined by some criterion to be made more precise. According to what I will call “relevant alternatives contextualism”, this criterion is a criterion of contextual relevance. In David Lewis’ own version of relevant alternatives contextualism, given a context of knowledge attribution, a relevant alternative is characterized as an error possibility that is not being properly ignored in this context:

[Subject] S *knows* that P iff S’s evidence eliminates every possibility in which not-P – Psst! – except for those possibilities that we [knowledge attributors possibly distinct from S] are properly ignoring (Lewis 1996: 425),

where S's "evidence" mainly consists of the totality of her perceptual experience and memory, and where a possibility is "eliminated" when the evidence at S's disposal in this possibility differs from the evidence which she actually has.

In order to determine the domain of possibilities that may not be properly ignored in a context, Lewis puts forward the following set of "relevance rules"¹:

Actuality	The possibility that actually obtains for the subject may never be properly ignored,
Belief	A possibility that the subject believes or ought to believe to obtain may not be properly ignored,

¹ The rules about to be mentioned are 'prohibitive' rules, telling us which possibilities *may not be* properly ignored. But Lewis also puts forward a set of "permissive rules", telling us this time which possibilities *may be* properly ignored. By the Rules of Conservatism, Reliability, and Method, we may properly ignore (even though defeasibly), respectively: (1) all the possibilities normally ignored by people around us, (2) the possibility of a deficiency in our normally reliable processes of knowledge acquisition (perceptual experience, memories, other people's testimony, etc.), and (3) the possibility (a) that samples on which we base our inductive generalizations are biased or (b) that the best explanation for our evidential data is not the right one. But only prohibitive rules shall matter for the purpose at hand.

- Attention A possibility that is not being ignored *simpliciter* may not be properly ignored,
- Resemblance Given two possibilities resembling each other in a salient way, if one is not being properly ignored (in virtue of the previous three rules), neither is the other.

Now, Lewis' definition of knowledge says that knowing requires having evidence against *some* error possibilities, namely those which may not be properly ignored in virtue of the four rules just mentioned. For instance, in ordinary contexts, in order for me to count as knowing that my car has not been stolen while I was in the bookstore, seeing it parked exactly where I left it a few hours ago will be enough. Of course, seeing it parked there does not eliminate the possibility that my car was stolen and put back in place by an excessively scrupulous thief while I was in the bookstore. But this possibility is not one that needs to be ruled out in most ordinary contexts. For in most ordinary contexts, provided that it is not actually the case that the car was stolen and put back in place, the possibility in question is neither one which is attended to nor one which I believe or ought to believe to obtain. So, it does not have to be eliminated by my evidence for me to count as knowing that my car was not stolen.

But elimination is not the only way in which one can count as knowing something. Lewis himself notices that if knowing requires excluding all contextually relevant alternatives to what is known, this requirement is also satisfied when no alternative is contextually relevant. In other words, Lewis's account of knowledge allows that:

A subject S knows that P, if every possibility in which not-P is being properly ignored².

So, a possibility of error needs only be properly ignored, in accordance with the three rules of Actuality, Belief, and Attention, for us to know it not to obtain, and this is so in the absence of all appropriate evidence and thus in a purely *a priori* way – in a very broad sense of “*a priori*” as “evidence-independent”.

² Here is what Lewis says about this:

Knowledge by presupposing and ignoring is knowledge; but it is an especially elusive sort of knowledge, and consequently it is an unclaimable sort of knowledge. [...] Simply mentioning any particular case of this knowledge, aloud or in silent thought, is a way to attend to the hitherto ignored possibility, and thereby render it no longer ignored, and thereby create a context in which it is no longer true to ascribe the knowledge in question to yourself or others (Lewis 1996, 438).

We can thus distinguish between two ways of coming to know according to Lewis' relevant alternatives contextualism: through elimination, and through (proper) ignorance. In "Knowledge, relevant alternatives and missed clues" (2001), Jonathan Schaffer insists on a problematic aspect of Lewis' notion of an *elimination-based knowledge*, by arguing that Lewis' analysis is unable to deal with "missed clue" cases, in which a subject S's evidence does eliminate every error possibility that is not being properly ignored, but in which we are intuitively inclined to deny knowledge to S because she does not appreciate the decisive character of her evidence³. By contrast, in this paper I want to insist on a problematic aspect of the notion of an *ignorance-based knowledge*. I will argue that because Lewis' relevant alternatives contextualism incorporates this notion, it is threatened by an objection that is quite different from the one offered by Schaffer, but nonetheless devastating if successful. But before we turn to this objection, let us take a look at the crucial role which the supposed possibility of an ignorance-based knowledge is supposed to play in Lewis' approach to skepticism.

³ See Black (2003) for an attempt to immunize Lewis' relevant alternatives contextualism against Schaffer's missed clue objection, by claiming that the latter can be dealt with by appealing to the Rule of Belief.

2. Ignorance-based anti-sceptical knowledge

Lewis suggests accounting for anti-sceptical knowledge as an instance of ignorance-based knowledge. He says that some possibilities of error can never be eliminated but can only properly be ignored. According to him, in ordinary non-philosophical contexts, this is true of sceptical possibilities of massive error:

In general, when S knows that P, some of the possibilities in which not-P are eliminated by S's evidence and others of them are properly ignored. There are some that can be eliminated, but cannot properly be ignored. (...) And there are other possibilities that never can be eliminated, but can properly be ignored. For instance, the possibility that Possum [the cat] is on the desk but has been made invisible by a deceiving demon falls normally into this class (though not when I attend to it in the special context of epistemology) (Lewis 1996, 438).

Of course, the possibility that actually obtains and a sceptical possibility of massive error (such as Descartes' Evil Demon possibility, or Putnam's Brain-in-a-vat possibility) resemble each other in respect of the fact that they cannot be eliminated by the subject's evidence. But as Lewis points out, the Rules of Actuality and Resemblance cannot be used to make a possibility W turn out

relevant only in virtue of the fact that it resembles one's actuality in respect of one's evidence. Here is what he says about such a misuse of these rules:

We must apply the Rule of Resemblance with care. Actuality is a possibility uneliminated by the subject's evidence. Any other possibility W that is likewise uneliminated by the subject's evidence resembles actuality in one salient respect: namely, in respect of the subject's evidence. That will be so even if W is in other respects very dissimilar to actuality. (...) Plainly, we dare not apply the Rules of Actuality and Resemblance to conclude that any such W is a relevant alternative (Lewis 1996, 430).

In particular, a sceptical possibility of massive error cannot turn out relevant just because it resembles our actuality in respect of our evidence. This exception to the Rule of Resemblance is an exception that Lewis willingly admits to be *ad hoc*; but it is an exception without which there would be no context in which one could truly be said to know anything (*op. cit.*, 430).

As a result, in most ordinary contexts in which we ignore a sceptical possibility SK, in which we do not believe and have no reason to believe that SK, we do count as knowing that not-SK. And we count as knowing that not-SK in the absence of all empirical evidence against the possibility that SK.

A powerful reason for rejecting Lewis' account of anti-sceptical knowledge is that the idea of an ignorance-based knowledge, on which the explanation relies,

has an extremely undesirable consequence. It results in granting people non-evidentially based knowledge of contingent truths about which it is obviously absurd to think that they can ever be known but on the basis of appropriate evidence.

3. Ignorance-based knowledge of lottery propositions

Hawthorne (2002) does seem to put forth such an objection to relevant alternatives contextualism, when he discusses Lewis' solution to the "lottery paradox". This paradox can be introduced in the following way, quoting from Lewis:

Pity poor Bill! He squanders all his spare cash on the pokies, the races, and the lottery. He will be a wage slave all his days. We know he will never be rich. But (...) if we know that he will never be rich, we know that he will lose [the lottery]. But (...) we cannot know that he will lose. All the possibilities in which Bill loses and someone else wins saliently resemble the possibility in which Bill wins and the others lose; one of those possibilities is actual; so by the rules of Actuality and Resemblance, we may not properly ignore the possibility that Bill wins (Lewis 1996, 443).

So, this instance of the lottery paradox consists of the following apparently inconsistent triad:

- (1) We know that Bill will never be rich
- (2) If we know that Bill will never be rich, then we (can) know that he will lose the lottery
- (3) We do (/can) not know that Bill will lose the lottery.

Now, here is Lewis' intended solution to this instance of the lottery paradox:

Salience, as well as ignoring, may vary between contexts. (...) When (...) explaining how the Rule of Resemblance applied to lotteries, (...) the resemblance between the many possibilities associated with the many tickets was sufficiently salient. But (...) when we were busy pitying poor Bill for his habits and not for his luck, the resemblance of the many possibilities was not so salient. At that point, the possibility of Bill's winning was properly ignored; so then it was true to say that we knew he would never be rich. Afterward I switched the context. I mentioned the possibility that Bill might win, wherefore that possibility was no longer properly ignored. [...] I was no longer true that we knew he would lose. At that point, it was also no longer true that we knew he would never be rich (Lewis 1996, 443-4)⁴.

⁴ For other contextualist solutions to the lottery paradox, see Cohen (1998, 2004) and DeRose (1996). For a discussion of such solutions, see chapter 2 of Hawthorne (2004).

Let us note that Lewis's solution relies on the idea that there are contexts relative to which no evidence is needed in order to count as knowing that Bill will not win the lottery: those are contexts in which every possibility that Bill might win the lottery is being properly ignored and thus known not to obtain. According to Hawthorne (2002, 246-7), this aspect of Lewis' solution is what makes it problematic, as he tries to show by reflecting on the following case:

Suppose that 5001 lottery tickets are sold, that 5000 of the buyers are friends of Ben, and that the 5001st buyer, John, is not one of Ben's friends. As it happens, John is the one who will win the lottery tonight. Ben knows that each of his 5000 friends who bought lottery tickets has the bad habit of spending his money as soon as he manages to get some. Ben knows that each of them bought a lottery ticket, and he also knows that 5001 lottery tickets were sold. Ben even knows that John is the one who bought the 5001st lottery ticket. Moreover, suppose that Arthur, another character, is as well informed as Ben is about the bad habit of each of Ben's friends, and that he may thus properly ignore every possibility that one of Ben's 5000 friends might win the lottery tonight.

Now, what if Arthur were to say that Ben knows that Bill, one of Ben's 5000 friends, will never be rich? According to Lewis' analysis and given its commitment to the possibility of an ignorance-based knowledge, Arthur's

knowledge attribution to Ben would be true. Relative to the context in which Arthur would make the attribution, Ben would count as knowing that Bill will never be rich, for Arthur would then be ignoring every possibility that Bill might be rich, including those possibilities in which Bill wins the lottery. Similarly, if Arthur were to say that Ben knows that Harry, another one of Ben's 5000 friends, will never be rich, Arthur's knowledge attribution to Ben would also be true. And so on for each of Ben's other 4998 friends.

Thus, on Lewis' account, it is true in Arthur's context that Ben knows that none of his 5000 friends who bought tickets will ever be rich. It would therefore also be true in Arthur's context that Ben knows that none of his 5000 friends who bought tickets will win the lottery tonight. But then, it should also be true in Arthur's context that Ben knows that John, the 5001st ticket buyer, is the one who will win the lottery. So, if Lewis' relevant alternatives contextualism is correct, then there can be cases in which the relevant context is such that one can count as knowing who the winner of a lottery will be. On Hawthorne's opinion, this result is clearly problematic for Lewis' analysis of knowledge. But is it really?

Everyone may not share Hawthorne's intuition on the Arthur and Ben case. After all, if Ben is informed that 5000 out of 5001 lottery tickets were sold to his friends and that John is the one who bought the 5001st ticket, then if we take for granted from the start, just as Hawthorne does, that Ben is in a good enough position to be described in Arthur's context as knowing that none of

his 5000 friends will win the lottery, why not think that Ben is also in a good enough position to be described in the same context as knowing that John will win the lottery? For the context in which Arthur assesses Ben's epistemic position with respect to the proposition *that none of his friends will win the lottery* is supposed to be the same as the context in which Arthur assesses Ben's epistemic position with respect to the proposition *that John will win the lottery*. Since it is the same context, Arthur assesses Ben's epistemic position with respect to both propositions relative to the same epistemic standard, against the same set of contextually relevant possibilities. Thus, one may reply to Hawthorne by saying this: Ben can be truly said to know that John will win the lottery relative to that standard which is lax enough for Ben to be truly said to know that none of his friends will win the lottery. After all, as Lewis himself says elsewhere (Lewis 1979, 245), if it is true enough in a context that Italy is boot-shaped, then it is also true enough in the same context that France is hexagonal. In a similar way, if it is true enough in a context that Ben knows that none of his friends will win the lottery, then it is also true enough in the same context that Ben knows that John will win the lottery. This is a reply which is easily available to the contextualist.

For this reason, I do not think that Hawthorne's objection to Lewis is conclusive. Even though it is intended to show that Lewis' analysis results in counting people as knowing things the knowledge of which we would not be inclined to grant them, Hawthorne's complicated example does not clearly

indicates that relevant alternatives contextualism has the intended troublesome consequence. I nonetheless happen to think that such a consequence can be clearly drawn from Lewis' analysis of knowledge, but through much simpler examples, like the one which I put forward in the following section.

4. Ignorance-based knowledge of ordinary contingent truths

Besides lottery propositions and denials of sceptical hypotheses, there are "ordinary contingent truths", as we may call them, which we would not claim knowledge of unless we do it in the light of appropriate evidence, e.g. that we have hands, that Grandma has moustaches, etc.⁵. The problem is that Lewis' analysis of knowledge predicts that, in some cases, even ordinary contingent truths of the above mentioned kind can be known through mere ignorance, not elimination, of error possibilities.

For instance, we could count as knowing what a person, whose existence we are not even aware of, had for lunch today. Let us consider the following case:

Mr. So-and-so had oysters for lunch today. But I do not know
who Mr. So-and-so is; I do not even know him by name. I am not

⁵ Thinking differently would be absurd, since some do not have hands or do not have a moustached Grand mother, and therefore cannot know at all that they have hands or that they have a moustached grandmother. And this is true of many other propositions as well, especially those pertaining to the external world.

even aware of his existence, and I do not know anyone who knows him. Mr. So-and-so and I live on opposite sides of the Globe. So, I do not have the slightest evidence about what he may have had for lunch today. And honestly, I do not care.

Intuitively, the fact that Mr. So-and-so had oysters for lunch is an ordinary contingent truth, which I cannot know in the absence of appropriate empirical evidence. And since I have not got any evidence regarding Mr. So-and-so, whose existence I do not even suspect, in all likelihood I cannot know what he had for lunch. I take it that everyone will agree about this.

On the contrary, Lewis' analysis predicts that I should know this and that I should know it in a purely *a priori* manner. Indeed, in accordance with the aforementioned relevance rules, in the depicted circumstances I would be properly ignoring every possibility in which Mr. So-and-so *did not* have oysters for lunch. Firstly:

- (1) The possibility that actually obtains is a possibility in which Mr. So-and-so did not have oysters for lunch,

since we take for granted that he actually had oysters for lunch; so here we have the Actuality Rule.

Secondly:

(2) I am ignoring *simpliciter* every possibility in which Mr. So-and-so did not have oysters for lunch,

since after all, I am not even aware that Mr. So-and-so exists; so here we have the Attention Rule.

Thirdly:

(3) I do not believe and I have no reason to believe that Mr. So-and-so did not have oysters for lunch,

since on the one hand I am not even aware of Mr. So-and-so's existence, and since on the other hand I have no evidence at all justifying me in believing that Mr. So-and-so did not have oysters for lunch; so here we have the Belief Rule.

Of course, since I have no evidence at all pertaining to Mr. So-and-so, *a fortiori* all the evidence I have speaks no more against any possibility in which Mr. So-and-so did not have oysters than it does against the possibility that actually obtains and in which he did have oysters; so the two possibilities resemble each other in respect of my evidence. But given the *ad hoc* exception to the Rule of Resemblance, which Lewis himself emphasizes, the Rules of Actuality and Resemblance cannot be used to render a possibility in which Mr. So-and-so did not have oysters relevant, in spite of the fact that the possibility in question and the possibility that actually obtains resemble each other in respect of my

evidence, or more exactly, in respect of my lack of evidence regarding Mr. So-and-so.

Yet, one might reason in the following way: a possibility in which Mr. So-and-so did not have oysters for lunch may resemble the possibility that actually obtains in all respect, except for the fact that he did not have oysters but, say, mussels; thus, in virtue of the Actuality and Resemblance rules, the possibility that he did not have oysters may not be properly ignored and is relevant. But for it to be relevant in virtue of these rules, its resemblance with the possibility that actually obtains must be salient. Now, remember that Lewis holds that salience, like ignoring, is a context-variable matter. We saw this earlier when we touched on Lewis' solution to the lottery paradox. Then, we saw that according to Lewis, the resemblance between the many possibilities of winning the lottery associated with the many tickets, and the possibility that actually obtains in which the subject will lose, could be salient when explaining the oddity of attributing knowledge that she will lose the lottery, and yet not salient when reflecting on the subject's bad habit of spending her money before it is earned. In a similar way, the resemblance between the possibility that Mr. So-and-so did not have oysters and the possibility that actually obtains in which he did have oysters, though salient in the context in which you philosophically reflect on the oddity of attributing knowledge that he did have oysters to me, is not salient at all in my context, the ordinary one depicted in the example, in which I do not give a single thought to Mr. So-and-so. So, since the possibility that

Mr. So-and-so did not have oysters for lunch does not resemble my actuality in a contextually salient way, it is not made contextually relevant by the Actuality and Resemblance rules, when the context of reference is my context as depicted in the example, the one of which I am the attributor (as well as subject), the only one that matters for the purpose at hand.

Therefore, in accordance with Lewis's relevance rules I may properly ignore every possibility in which Mr. So-and-so did not have oysters for lunch. Therefore, in accordance with Lewis' analysis of knowledge I should count as knowing that Mr. So-and-so had oysters for lunch, and I should know this just by properly ignoring and in the absence of all appropriate evidence. This, of course, goes against the intuitively expected result.

In order to defend Lewis' contextualist analysis of knowledge, one may try the following line of reply:

The Rule of Actuality stipulates that the subject's actuality is never properly ignored. And in my actuality – the one depicted in the little story –, it is the case that Mr. So-and-so had oysters for lunch. But in accordance with the little story, this is a possibility which I am ignoring *simpliciter*, for I am not attending to Mr. So-and-so at all. So, according to Lewis's analysis, I do not know anyway that Mr. So-and-so had oysters.

Of course, if this reply is conclusive, the previous objection is short-circuited. I do not think it is a reply that can be drawn from Lewis's analysis, though. But anyway, let us suppose that it is a conclusive reply that can be drawn from Lewis's analysis. Well, all we have to do to come across the undesirable consequence of attributing non-evidentially based knowledge of ordinary contingent truths again is modify our previous story a little bit:

This time, the following information is given: Mr. So-and-so is Mr. Nobody's son-in-law's brother, where Mr. Nobody is the person who invented a revolutionary device for controlling the fourth wheel of supermarket trolleys, you know, the "mad wheel" that systematically goes the wrong direction as if from its own will. Given how useful Mr. Nobody's invention is, everyone, including myself, has heard about Mr. Nobody. On the other hand, I do not know whether Mr. Nobody has a son-in-law, and I know even less that Mr. So-and-so is his son-in-law's brother. Like before, I do not know Mr. So-and-so, not even by name, and I do not know anyone who knows him either: I do not even suspect Mr. So-and-so's existence. He lives on one side of the Globe, I live on the other, and I have no evidence at all about Mr. So-and-so.

But that day, I suddenly happen to consider, as a mere possibility and without giving it any credence at all, the possibility that Mr.

Nobody has a son-in-law, that his son-in-law has a brother, and I thus begin to consider the possible existence of Mr. Nobody's son-in-law's brother. I also happen to consider that the man might have ordered oysters for lunch.

Now, the question is this: do I know that Mr. So-and-so – whose possible existence I ignored until then but which I am now attending to through the description 'Mr. Nobody's son-in-law's brother' – had oysters for lunch? Intuitively no, since I do not have the slightest evidence about Mr. So-and-so/Mr. Nobody's son-in-law's brother and about what he had for lunch.

But once again, Lewis' analysis predicts a counterintuitive result. In the context of my own thought, I may properly ignore every possibility in which Mr. So-and-so did not have oysters for lunch. This is so because I ignore, I do not believe and I have no reason to believe that he did not have oysters for lunch. Moreover, this time, I am not ignoring – since I am attending to it – the only possibility that may not be properly ignored, that is, the possibility that actually obtains in which Mr. So-and-so, whom I am attending to through the description 'Mr. Nobody's son-in-law's brother', did have oysters for lunch. And since Mr. So-and-so did have oysters in the only (and thus in every) possibility that I may not properly ignore, the conclusion to be drawn according to Lewis' analysis is the same as before: in the context in question, I count as knowing that Mr. So-and-so had oysters for lunch. Here again, we get the counterintuitive result of granting non-evidentially based knowledge of an

ordinary contingent truth, but this time, the objection leaves no room for the above mentioned reply.

It is not difficult to think of similar cases involving other ordinary contingent propositions. For instance, we can build contexts for ignorance-based knowledge of contingent propositions about the behavior of a new and still undetected virus, or about the life of the poor lonesome ant on the top of the Eiffel Tower, or about the state of preservation of the still unfound wreck of Commander La Pérouse's ship, etc. In short, the idea of an ignorance-based knowledge seems to have the consequence of granting us, in some contexts, a non-evidentially and ignorance-based knowledge of ordinary contingent truths about which it is nonetheless counterintuitive to think that they can be non-evidentially known, to think that they can be known without consulting all or part of our experience.

4. Conclusion

Lewis' relevant alternatives contextualism allows knowledge without elimination, knowledge by proper ignoring. This idea is meant to be put to use to account for the possibility of anti-sceptical knowledge. But it is problematic, for it leads us to grant *a priori* ignorance-based knowledge of ordinary contingent truths, of which intuitively we can only have an *a posteriori* elimination-based knowledge. For this reason, I do not simply think that Lewis' ignorance-based knowledge cannot be exploited in order to account for

anti-sceptical knowledge. I think that a piece of “cheap” knowledge for which the standards would be as liberal as those for Lewis’s ignorance-based knowledge is no “knowledge” at all.

References

- Black, T. 2003. The relevant alternatives theory and missed clues. *Australasian Journal of Philosophy* 81: 96-106.
- Cohen, S. 1998. Contextualist solutions to epistemological problems: skepticism, Gettier, and the lottery. *Australasian Journal of Philosophy* 76: 289-306.
- Cohen, S. 2004. Reply to Baumann. *Erkenntnis* 61: 429-33.
- DeRose, K. 1996. Knowledge, assertion, and lotteries. *Australasian Journal of Philosophy* 74: 568-80.
- Hawthorne, J. 2002. Lewis, the lottery, and the preface. *Analysis* 62: 242-51.
- Hawthorne, J. 2004. *Knowledge and lotteries*. Oxford: Oxford University Press.
- Lewis, D. 1979. Scorekeeping in a language game. *Journal of Philosophical Logic* 8: 339-59.
- Lewis, D. 1996. Elusive knowledge. *Australasian Journal of Philosophy* 74: 549-67.
- In his *Papers in metaphysics and epistemology* (Cambridge: Cambridge University Press, 1999), 418-45.

Schaffer, J. 2001. Knowledge, relevant alternatives and missed clues. *Analysis* 61: 202-8.