Consistency and Evidence

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§I. E=K

Timothy Williamson (2000) argues that all evidence is propositional, and that all and only those propositions one knows to be true are part of one's evidence. Schematically, the argument has the following form:

1. All evidence is propositional
2. All propositional evidence is knowledge
3. All knowledge is evidence

C. Therefore, all and only knowledge is evidence. (E=K)

Each premise is defended with further arguments. Central to Williamson's case for E=K is the claim that one's evidence is that with which hypotheses are consistent or inconsistent. Williamson appeals to this idea in several places in the course of his argument. We first see it at work in defense of premise (1). Only propositions, it is argued, are consistent and inconsistent with hypotheses. It follows, if evidence is that with which hypotheses are consistent or inconsistent, that only propositions can be evidence. We also find Williamson appealing to the claim to argue that only *true* propositions are evidence. If one's evidence included falsehoods it would rule out some truths by being inconsistent with them. But, Williamson argues, our evidence should not outright exclude any truths, even if it may make some truths improbable. Thus, our evidence must consist of only true propositions.

My concern here is not with these arguments[1], but with Williamson's appeal to the claim in support of premise (2). Williamson offers two arguments in support of the claim that all evidence is knowledge, one of which - the 'chain reaction' argument - I will not address here, since I find Joyce's (2004) objections to the claim that it

[1] E=K has attracted its fair share of critics. Here's a sample: Brueckner (2005), Silins (2005), Dodd (2007), Conee & Feldman (2008), Kelly (2008), Neta (2008), Goldman (2009), Comesana & Kantin (2010), Dancy (2011). Comesana & Kantin (2010) argue that if E=K is incompatible with the existence of a certain kind of Gettier cases. Since these Gettier cases exist, they conclude that E=K is false. My argument will also involve Gettier cases, but in a different way.

supports E=K persuasive. My focus is on Williamson's second argument, which I will call the 'consistency argument'. The argument proceeds from the following case:

> Watching a video you see a number of balls drawn from a bag in succession. Each one is replaced in the bag before the next one is drawn. You have seen draws 1 to n (for some suitable value of n); in each case the ball was red. Draw n+1 has been made but you haven't seen the color of the ball. By reasoning probabilistically, you form the belief that the ball drawn was red. Your belief is both true and justified, but you don't know that the ball drawn was red. (Adapted from Williamson (2000) pp. 200)

Now Williamson asks us to consider whether either of the following two false hypotheses is consistent with your evidence at this point:

> *h:* Draws 1 to n were red; draw n+1 was black
> *h**: Draw 1 was black; draws 2 to n+1 were red.

As he points out, it is natural to say that *h* is consistent with your evidence in the case as described, and *h** inconsistent with it. More specifically, it seems to be perfectly consistent with your evidence in this case that draw n+1 was black. But if that's right, then the proposition <draw n+1 was red> cannot be part of your evidence, for then the proposition <draw n+1 was black> would be inconsistent with your evidence. By hypothesis you have a justified true belief that draw n+1 was red. So, Williamson infers, having a justified true belief that p is not sufficient for having p as part of your evidence. Williamson takes this to show that what is needed for evidence is *knowledge* that p. And this is the claim of premise (2).

In order to assess this argument, we need to be careful in interpreting it. Textually, it is unclear exactly how Williamson intends the argument to be taken. On one possible interpretation, he takes it to apply to *all* non-knowledge-constituting justified true beliefs (hereafter 'non-K JTBs'). That is, he thinks that *whenever* one has a non-K JTB that p, it will be natural to describe ~p as consistent with one's evidence Then, with the help of further (implicit) assumptions, he deductively infers that only knowledge is evidence.

I think that it's uncharitable to interpret Williamson as holding that the argument applies to all non-K JTBs, since he doesn't outright say this. Rather, he says that an "obvious" answer to the question of why you don't have <draw n+1 was red> as evidence is that you don't know that draw n+1 was red. So a more plausible interpretation is that an abductive argument is being put forward. On this interpretation, Williamson is arguing that the *best explanation* of the intuitions elicited by the consistency argument is that only knowledge is evidence. When this is combined with the claim - in premise (3) - that all knowledge is evidence, it may well be that Williamson can plausibly maintain that E=K offers the best (simplest, most natural, most elegant etc.) account of the nature of evidence on the market.

Should we be persuaded by this argument? Williamson only considers one case. So the suggestion that E=K best explains the data seems hasty. One might well wonder whether *all* the data about when it is natural to say that a hypothesis is consistent or inconsistent with your evidence agrees with E=K. Does it? I'll argue that, once we consider more cases, we will see that the very considerations that Williamson takes to support E=K in fact provide positive reasons to think that the contents of some non-K JTBs *are* part of one's evidence. E=K *actively conflicts* with intuitions about when a hypothesis is consistent or inconsistent with one's evidence[2].

§II. Against E=K

In order to set up the kind of case I am interested in, we need reflect a little on Williamson's own case. Now, the case as Williamson describes it is somewhat puzzling. As several commentators have observed, unless we are sceptics about inductive knowledge, it is quite hard to see just why you are unable to know that draw n+1 was red, without actually watching the draw. Provided that n has a suitably high value, your inference that draw n+1 was red would seem to be a routine case of inductive knowledge. But if you *are* able to know that draw n+1 was red, then the consistency argument refutes E=K by Williamson's own lights, since it would refute the claim of premise (3) that all knowledge is evidence. Thus a form of inductive scepticism threatens for Williamson[3]. Nevertheless, since my interest is in premise (2), I propose to put this worry aside and grant the assumption that you have a non-K JTB that draw n+1 was red. Once this assumption is granted, the question of just *why* is it that you don't know that draw n+1 was red arises. The most familiar kind of non-K JTBs to us epistemologists are those had in Gettier cases. But notice that Williamson's case doesn't look like a typical Gettier case[4]. To see this, first note that a prominent feature of Gettier cases is that the subject's epistemic environment is such that it is only a matter of luck that they believe truly[5]. But intuitively it is *not* a matter of luck in this case that your belief that draw

[2] As an aside, it is worth additionally noting that if this is correct it also serves to refute the argument on its deductive interpretation (uncharitable though it is). For if we can show that considerations about when it is natural to say that a hypothesis is consistent or inconsistent with one's evidence positively support the claim that the contents of some non-K JTBs are evidence, then we will have shown *a fortiori* that there are counterexamples to the claim that, for the content of every belief that falls short of knowledge, it is natural to say that the negation of that content is consistent with one's evidence.

[3] This point has been made by Dodd (2007), Weatherson (ms.), and McGlynn (forthcoming)

[4] McGlynn (forthcoming) also makes this observation.

[5] Pritchard (forthcoming) describes this as one of the 'master intuitions' driving Gettier cases.

n+1 was red is true only as a matter of luck. In fact, if anything it seems as though you would have been *unlucky* were your belief to have turned out false. Secondly, note that subjects in Gettier cases are typically not in a position to know that they don't know that p. But nothing in Williamson's case as he describes it suggests that you are not in a position to know that you don't know that draw n+1 was red. On the contrary, insofar as it is plausible that you don't know that draw n+1 was red, this seems to be something you could easily know. Thirdly, there is typically a kind of abnormality to a Gettiered subject's epistemic environment of which they are unaware, such that were they aware of it, they would no longer be justified in believing p. By contrast, there is nothing in the case as Williamson describes it suggesting any hidden abnormality. Nothing in the case suggests that you are not aware of all the relevant facts about your environment. Insofar as you can justifiably believe that draw n+1 was red, it seems that you can do so in full awareness of all the relevant facts about the case.

In short, Williamson's case lacks many of the hallmarks of Gettier cases[6,7]. Given this, one may well wonder if the consistency argument is persuasive when run against a case that does have these hallmark features. I don't think it is. To see this, consider the following variation on Williamson's case, where you *do* see draw n+1:

> Watching a video you see a number of balls drawn from a bag in succession. Each one is replaced in the bag before the next one is drawn. You have seen draws 1 to n (for some suitable value of n); in each case the ball was red. You then see draw n+1, in which again a red ball is drawn from the bag. Unbeknownst to you however, between draws n and n+1 the bag was surreptitiously switched. The new bag, from which draw n+1 was made, contained hundreds of black balls disguised as red balls, and one genuinely red ball[8]. By sheer luck, the genuinely red ball was drawn at n+1. You justifiably and truly believe that draw in n+1 was red,

[6] Plausibly, the case is much better understood as analogous to a lottery case - a case where you believe solely on the basis of the probabilities involved that your lottery ticket is a loser. This raises interesting issues in itself, since a number of epistemologists (e.g. Smithies (2012), Smith (2010), Sutton(2007), amongst others) have argues that you not only cannot know that your ticket has lost solely on the basis of the probabilities involved, but you cannot even justifiably outright believe that it has. In that case, we might wonder if Williamson's description of the case as involving a *justified* belief is correct. Regrettably, I cannot go into these issues here. But the important thing to note is that the case bears little resemblance to a typical Gettier case

[7] The phrase 'Gettier case' is sometimes used to refer to any case of a justified true belief that is not knowledge, irrespective of the specific features of the believers epistemic situation. I do not use the phrase in that way. I'm taking 'typical Gettier case' to refer to cases that have the features outlined above. If the reader is unhappy with this, they should mentally replace the phrase 'not a Gettier case' with 'not a case where the subject is lucky that they truly belief that p, nor in a position to know that they don't know that p, nor in an abnormal epistemic environment such that were they aware of the abnormality, they would not longer be justified in believing that p'.

[8] Of course, it might be argued that a black ball disguised as a red ball simply *is* a red ball. I ask the reader to put this concern aside. The case could be easily amended to get around the worry.

> but you don't know this because your belief is Gettiered - you would have believed that draw n+1 was a red ball even if it was really a disguised black ball.

In this case you don't know that draw n+1 was red, because your belief is Gettiered. Now consider the following false hypotheses:

> *h:* draw n+1 was black.

If consistency considerations favour E=K, it should be natural to say that *h* is consistent with your evidence in this new case. Is it? I feel no inclination whatsoever to say that it is, and to my ears it would not be natural to describe it as such. This point alone is troubling for Williamson's argument. But we can go further. Insofar as considerations about when it is natural to say that a hypothesis is consistent with one's evidence are a good guide to what propositions are *not* in one's evidence - and of course Williamson's argument trades on the assumption that they are - then considerations about when it is natural to say that a hypothesis is *inconsistent* with one's evidence must also be a good guide to what propositions *are* in one's evidence. And it seems to me that not only would it not be natural to describe *h* as consistent with your evidence in this case, it would be natural to describe *h* as positively *inconsistent* with your evidence. If that's right, then by Williamson's own endorsed method for establishing just which propositions are and are not part of one's evidence, we get the result that the contents of some non-K JTBs *are* evidence. That is, we get, by Williamson's own method, positive reasons to think that some of these contents are evidence. Thus, if we are to accept the method of the consistency argument at all, we must accept that it gives us positive reasons to think that the contents of some non-K JTBs are evidence, and thus positive reasons to think that E does not equal K.

The verdict of the above case is not a one-off. New cases could be created in which the same intuition is elicited.[9] Although there is no scope for a full diagnosis in this paper, it seems to me that all Gettier cases *of a certain kind* - namely those that involving 'environmental', rather than 'intervening' luck[10] - are cases where it is

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[9] Littlejohn (2012) argues that Goldman's fake barns case, which is structually similar to mine, causes problems for E=K. Littlejohn's argument, however, trades directly on the intuition that the driver has the same evidence when the are driving in real-barn country and fake-barn country, rather than engaging with Williamson's consistency argument.

[10] In my adaptation of Williamson's case, the subject has a veridical experience, but fails to know because they are in an environmental where they could easily have had a non-veridical experience. Hence their belief is 'environmentally' lucky. By contrast, some Gettier cases involve subjects having non-veridical experiences, but forming a belief that is, by a stroke of luck, in fact true. Chisholm's (1966) *sheep in a field* case is one such case. In these cases the luck 'intervenes' to turn the subject's would-be-false belief into a true belief. It is less clear to me that the consistency argument fails to deliver the verdict Williamson needs in such cases. See Pritchard (2010) for more on the distinction between environmental and intervening luck

natural to say that the negation of the subject's belief is inconsistent with their evidence. Note that this is not to say that in *all* Gettier cases it is natural to say that the negation of the subject's belief is inconsistent with their evidence. Gettier cases are a heterogeneous bunch.

Whether or not that last suggestion is a step in the right direction, we can see that Williamson's consistency argument fails to support his conclusion. Whilst we may accept a view on the nature of evidence on the basis of an abductive argument that is silent on some cases, we should be reluctant to accept the view on the basis of an argument that turns out to issue results that *actively conflict* with the view, even if we don't yet have a rival explanation of the data.

Of course, this isn't a knock-down argument against Williamson's position; it doesn't entail that E=K isn't ultimately the right view to adopt. Perhaps rival views that better accommodate the data issued from consistency considerations will falter for different reasons. Or perhaps such views will match E=K in accounting for a wide range of data, but lose out on other theoretical virtues such as simplicity, elegance, and naturalness. Nevertheless, its clear that the consistency argument doesn't motivate E=K. If anything, it motivates E≠K.

§III. References

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