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Note: this short paper is a defense of my earlier 'Epistemic Rationality as Instrumental Rationality: A Critique', *Philosophy and Phenomenological Research* Vol.LXVI, No.3, May (2003): 612-640, against a critique by Adam Leite, 'Epistemic Instrumentalism and Reasons for Belief: a reply to Thomas Kelly''. Leite's paper and this one will appear together in PPR.

Evidence and Normativity: Reply to Leite

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1. Introduction

According to one view about the rationality of belief, such rationality is ultimately nothing other than the rationality that one exhibits in taking the means to one's ends. On this view, epistemic rationality is really a species or special case of instrumental rationality. In particular, epistemic rationality is instrumental rationality in the service of one's distinctively *cognitive* or *epistemic* goals (perhaps: one's goal of holding true rather than false beliefs). In my (2003), I dubbed this view the *instrumentalist conception* of epistemic rationality.

The instrumentalist conception is in many respects an attractive view. It possesses an undeniable intuitive plausibility; indeed, it can be presented in such a way as to seem almost trivially true. It seems to offer an attractive way of integrating the theory of rational belief with a more general account of rationality; it thus seems poised to deliver the kind of illumination that is characteristic of successful reductions. Moreover, there are various other, more specific philosophical motivations that one might have for finding the instrumentalist conception attractive. For these reasons, the instrumentalist

¹ On this point, see Kelly (2003) 614-620. In particular, for reasons that I document there, the instrumentalist conception has often been enthusiastically embraced by those who are devoted to the project of naturalizing epistemology.

conception enjoys considerable popularity among both epistemologists and philosophers of science.²

Nevertheless, this way of thinking about epistemic rationality is, I think, misguided. We should view its attractions as temptations to be resisted. In my (2003), I developed and attempted to sustain what I take to be the most straightforward objection to the instrumentalist conception: that what a person has reason to believe does not depend on the content of his or her goals or aims in the way that one would expect if the instrumentalist conception was correct.

Adam Leite is not a committed instrumentalist. Nevertheless, he offers a response to my objections on the instrumentalist's behalf, a response which he takes to be sufficient to meet those objections. Here I want to explain why I persist in thinking that the objections have considerably more force than that with which Leite credits them, and why I think that in some respects he underestimates the burden that the instrumentalist must discharge. I have no quarrel with Leite's reading of my argument, which seems to me both fair and accurate, and we share an understanding of the basic contours of the dialectic. I thus turn immediately to the substantive issues that divide us.

2. Evidence as a Normative Concept

In my original paper, I offered a number of examples which it is natural to describe in the following way: one has strong reasons to believe a given proposition even though it is clear that believing that proposition would not promote any of one's goals or aims. Indeed, intuitively, it seems that one can have reasons to believe propositions even when it is clear that believing those propositions would *hinder* or *frustrate* the achievement of one's goals. I suggested that the existence of such cases constitutes at least a *prima facie* difficulty for the instrumentalist.

Thus, to take a simple example that is also discussed by Leite: suppose that you have already seen some newly-released movie but that I have not. Consider two cases. In the first case, I actively desire to know (believe the truth about) how the movie ends, and so I

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² Particularly explicit endorsements include Foley (1987) and Laudan (1990, 1996). See also, among others, Nozick (1993, ch.3), Kitcher (1992), and Quine (1986).

ask you to tell me. Helpfully, you report: 'It was the butler who did it'. In response, I take up the belief that the butler did it; intuitively, my belief is a reasonable one, and the reason that I have for believing the relevant proposition is provided by your testimony. In the second case, I actively desire *not* to know (believe the truth about) how the movie ends, since I realize that doing so would spoil my enjoyment of the movie when I do see it at some later date. Moreover, suppose that I have no goal or aim which would be better achieved by my believing the truth about how the movie ends. Realizing this, I implore you not to 'give away' the ending. Nevertheless, you inconsiderately blurt out the ending in my presence. In response, I immediately come to believe the relevant proposition. Intuitively, my belief that the butler did it is a reasonable one, and it is rationalized by the reason afforded by your well-informed testimony. Indeed, my reason for thinking that the butler did it seems no less strong than in the first case, in which I actively solicit your testimony. With respect to questions about what I have reason to believe, the two cases seem perfectly parallel.

Leite suggests that the instrumentalist should reject this description of the case. What is true of both cases is the following: I have strong evidence that the butler did it. However, the two cases differ sharply with respect to what I have reason to believe. In the first case, I have, in addition to my strong evidence that the butler did it, a reason to believe that the butler did it. In the second case, I have the same strong evidence that the butler did it. But I have no reason to think that he did.

Thus, Leite suggests that the instrumentalist can parry such objections by distinguishing sharply between non-normative questions about *what one's evidence* supports on the one hand, and normative questions about what one has reason to believe on the other (p.xxxx).⁴ On the view suggested by Leite then, the possession of evidence

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³ But doesn't one *always* have some goal which is better achieved whenever one adds some true proposition to one's stock of beliefs? For criticism of this idea, see Kelly (2003 pp.623-625) and Harman (1999 p.100). In any case, *this* point is not contested by Leite's instrumentalist.

⁴ I take it that this is the key move in the reply to my objections that Leite recommends to the instrumentalist; in any case, I will focus my attention on it in what follows. Unfortunately, limitations of space prevent me from addressing several other interesting

does not itself have any normative import. Even if one possesses overwhelming evidence that p is true—and recognizes that one does—one might have no reason to think that p is true.

I agree that this would be a useful distinction for the instrumentalist, given her purposes. However, I think that we should be skeptical that that there is any such distinction to be drawn. For there is an alternative view about the nature of evidence, a view which has, I think, a better claim to our allegiance: that *evidence*, no less than *reason for belief*, is itself a normative concept.

The idea that evidence is a normative concept is not, of course, an uncommon one. It is, for example, endorsed by Jaegwon Kim (1988), according to whom 'a strictly nonnormative concept of evidence is not our concept of evidence: it is something that we do not understand' (p.391). Consider also a standard Bayesian explication of evidence, according to which to treat something as confirming evidence for some hypothesis is to treat it as a reason to increase one's confidence that that hypothesis is true, while to treat something as disconfirming evidence is to treat it as a reason to decrease one's confidence. Given such an explication, there is an internal connection between recognizing something as evidence and recognizing it as a reason to change one's present view.

On a view according to which evidence is a normative concept, there is no gap between possessing evidence that some proposition is true and possessing reasons to think that proposition is true; in offering evidence for a conclusion one is *ipso facto* providing reasons to think that that proposition is true.⁵ In contrast, on the view of

points that are raised by Leite's rich and subtle discussion; I make no pretense to doing full justice to his paper

For more on the theme of evidence as a normative concept, see my (2006), especially sections 2 and 3.

⁵ Indeed, one might think that 'reason for belief' and 'evidence' are more or less synonymous, distinguished chiefly by the fact that the former functions as a count noun while the latter functions as a mass term. Perhaps 'evidence' also has something of an empirical connotation that 'reason for belief' lacks: it sounds more natural (at least to my ear) to describe *a priori* philosophical considerations as reasons for believing some thesis than as evidence for that thesis.

evidence suggested by Leite, statements such as the following should have no whiff of paradox:

I have overwhelming evidence that p is true. But I have no reason to think that p is true.

Leite offers a number of examples of his own, which he thinks it is plausible to describe as cases in which (i) an individual has strong evidence that some proposition is true, (ii) the individual refrains from believing the proposition, and yet (iii) we would not judge the individual unreasonable for so refraining (p.xxxx). What do I say about his cases? While I lack the space to discuss each of them individually, let me offer the following general observation. It is important, I think, that each of the examples is constructed in such a way as to make it natural to assume that the individual has not actually considered the target proposition (thus, in one example the individual is described as 'busy thinking about things of greater interest or importance'; in another as 'obsessed with some other problem', and so on). It is perhaps unsurprising that we hesitate to convict an individual of irrationality for not believing a proposition that is seemingly so far removed from his or her attention. For the instrumentalist, however, what matters is not the presence or absence of attention, but rather the presence or absence of some relevant goal. Consider then an individual who explicitly attends to some proposition p, at that very moment recognizes that she has overwhelming evidence that p is true, yet does not take up the belief that p. Here, I think it is much more difficult to avoid the verdict that the individual has failed to respond rationally, even if it is stipulated that she has absolutely no goal which would be better achieved by believing the truth about whether p. Again, on the view that evidence has no normative force of its own, it is mysterious why an explicit judgement to the effect that one's evidence strongly supports some proposition typically results in a belief that that proposition is true.

On the conception of evidence suggested by Leite, evidence functions as a kind of non-normative substrate for reasons for belief: in cases in which one does have reasons to think that some proposition is true, this is so in part because one has evidence that the proposition is true and in part because one possesses some appropriate goal; but one might have had the same evidence regardless of whether one possessed the goal—

although if one lacked the goal, one would have no reason to believe the proposition in question. In order to avoid begging any questions, let's call this non-normative notion EVIDENCE*. The instrumentalist is not entitled to simply assume that there is a non-normative notion of evidence that stands in exactly this relation to the normative concept of a reason for belief; that is, the instrumentalist is not entitled to simply assume that there is such a thing as EVIDENCE*. To do so is tantamount to assuming that the normative concept of a reason for belief can be factorized into a normative component and a distinct, non-normative component.⁶

But isn't there some readily available non-normative notion of evidence that is suitable for the instrumentalist's purposes? Leite is confident that there is. He mentions, in passing, that the instrumentalist might avail herself of a '...reliabilist theory of evidence, according to which p is good evidence for q just in case it is a reliable indication of the truth of q' (p.xx). I think that we clearly do have such a notion of evidence, and moreover, that this notion is not itself normative. But it is crucial to appreciate that this notion of evidence is *not* in fact suitable for the instrumentalist's purposes; that is, it is not a viable candidate for playing the role of EVIDENCE* as delineated above.

In order to see why this is so, consider claims like

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⁶ On this point, an analogous debate in ethics is perhaps illuminating. Consider 'thick' ethical concepts such as 'cruel' or 'courageous'. It has long been recognized that such concepts constitute at least a *prima facie* challenge for non-factualist accounts of moral discourse, inasmuch as such concepts seem to be both normative or action-guiding (the fact that an action would be cruel is a reason not to perform it) and also clearly possess descriptive content. In the face of such examples, some non-factualists have adopted 'two factor' theories of the relevant concepts, according to which such concepts can in principle be analyzed into a purely descriptive, non-normative component and a distinct, normative component which lacks any descriptive content. However, the non-factualist is not entitled to simply assume that such two factor accounts of the relevant concepts are available; the viability of this non-factualist response ultimately depends upon whether adequate analyses of the relevant kind are to be had. In a similar manner, the instrumentalist response on offer is hostage to the availability of a non-normative notion evidence that stands in exactly the right relation to the normative concept of a reason for belief.

(1) Koplik spots are evidence of measles.

On what is perhaps its most natural reading, this claim is synonymous (or very nearly synonymous) with

(1') Koplik spots are a reliable indication of measles.

On such a reading, the truth of (1) was an empirical discovery of medical science. At a certain point in time, it was discovered that Koplik spots are strongly correlated with, and hence, a reliable indication of, measles—something which was true, presumably, long before the discovery in question. Here, the evidence relation is understood as a relation that either obtains or fails to obtain independently of what anyone knows or believes about its obtaining.⁷

This notion of evidence—call it 'indicator evidence'--is an important one, and one that I have discussed elsewhere (Kelly 2006). However, the present point is that indicator evidence cannot fill the role of EVIDENCE*, and therefore, is not the notion that the instrumentalist requires. Why not? Recall that, on the instrumentalist's picture, the non-normative notion of EVIDENCE* and the normative concept of *what it is reasonable to believe* are related in something like the following way: given some appropriate cognitive goal, one's possession of EVIDENCE* that some proposition is true tends to make it reasonable for one to believe that proposition. However, the notion of evidence as reliable indicator fails this test. For it will often be the case that, even when one has some appropriate goal, one's possession of arbitrarily strong indicator evidence that some proposition is true has no tendency to make it reasonable for one to believe that proposition.

For example, suppose that I know that

⁷ Compare Achinstein's (2001) concept of 'veridical evidence': 'in this respect the present concept...functions like 'sign' or 'symptom'. A rash may be a sign or symptom of a certain disease even if the medical experts are completely unaware of the connection and so are not justified in believing that the disease is present, given what they know' (p.25).

The patient has Koplik spots on her skin.

Moreover, suppose that it's very important to me to have true beliefs about the patient's medical condition. Does it follow from this that I have a reason to believe that

The patient has measles (?)

It does not follow. In particular, whether my knowledge that the patient has Koplik spots on her skin has any tendency to make it reasonable for me to believe that she has measles depends crucially on whether I'm aware of the correlation between Koplik spots and measles. If I am ignorant of that there is such an empirical correlation, then it would not be reasonable for me to become more confident that the patient has measles upon learning that she has Koplik spots. (Notice that everyone was in this position prior to the relevant medical discovery. And of course, we currently stand in exactly the same position with respect to countless other, as-yet-undiscovered empirical correlations.) In general, the sense of 'evidence' in which 'x is evidence for y' is more or less synonymous with 'x is strongly correlated with y' or 'x is a reliable indication of y' is not a viable candidate for filling the role of the instrumentalist's EVIDENCE* because it does not track the possession of reasons for belief for those with the right goals.

This, of course, does not show that there is no non-normative notion EVIDENCE* that stands in the requisite relation to the normative concept of a reason for belief and is thus suitable for the instrumentalist's purposes. But it would be unwarranted to simply assume that there *must be* some such thing.⁸

⁸ What would really be useful for an instrumentalist who pursues the tack suggested by Leite, I think, is something like Carnap's (1950) notion of *degree of confirmation*, which Carnap conceived of as a wholly non-normative, logical relation of support between propositions, of which entailment was taken to be a limiting case. Given a Carnapian inductive logic, the instrumentalist might attempt to simply identify epistemic rationality with the instrumental rationality of employing such a logic. But Carnap's original vision has long since been abandoned, and those who are arguably his closest contemporary successors, objective Bayesians like Horwich (1982), typically seek to explicate degree of confirmation in terms of the normative notion of rational credence. Here again, there would seem to be an internal connection between the concept of evidence and that of a reason for changing one's doxastic states.

Towards the end of his paper, Leite suggests that the most plausible version of the instrumentalist view will take a form that mirrors *rule utilitarianism* in its structure (p.x). According to such a view, our reasons to follow certain general rules of belief revision are instrumental reasons, reasons that are provided by the fact that following the rules in question would best promote our cognitive goals over time. Crucially, we retain our instrumental reasons to follow these rules even on those particular occasions when it is clear that doing so would *not* promote our cognitive goals. (Hence the analogy with rule utilitarianism.) I agree that this is a natural move for the instrumentalist to make, and that a view along these lines is well worth considering. Although I lack the space for anything like an adequate discussion in the present paper, I want to close by noting how such a move intersects with the issue with which we have been concerned, viz. whether evidence, correctly understood, is itself a normative notion.

Again, on the envisaged view, the instrumentalist will attempt to state general rules that it is instrumentally rational for us to follow given our cognitive goals. Question: Are there any constraints on the kinds of concepts which the instrumentalist might invoke, in attempting to state such general rules? The following, I think, is one such constraint: if the thesis that epistemic rationality is instrumental rationality is to be vindicated, then it must be possible to state the relevant rules without employing any concepts that are themselves epistemically normative, e.g., the concept of an epistemic reason. That is, if the instrumentalist is to make good on her claim that epistemically rationality just is, at bottom, nothing other than instrumental rationality in the service of one's cognitive goals, then it clearly would not suffice to show that (e.g.) our cognitive goals would be best promoted by adhering to norms such as the following:

One should believe all and only those propositions that it is epistemically rational for one to believe.

⁹ Indeed, I explored such a view at some length in my doctoral dissertation, *Epistemic Rationality and the Ethics of Belief*.

After all, even a non-instrumentalist could freely accept the claim that our cognitive goals would be best promoted if we followed *this* norm. ¹⁰

But what about norms which explicitly invoke the concept of *evidence*? Consider, for example, norms such as the following, each of which is endorsed by Leite at one point (p.x):

- (a) Don't believe without adequate evidence.
- (b) Don't believe in a way that flies in the face of the total evidence in your possession.
- (c) Don't reach a conclusion without having gone to appropriate lengths to seek out countervailing evidence.

Let's assume that we do have cognitive goals that would be best promoted by our consistently following these norms. Does this have any tendency to show that the epistemic rationality is nothing other than instrumental rationality in the service of those goals? Here again, everything depends upon the correct view about the nature of evidence. If Leite is correct in thinking that evidence is not a normative notion, then such norms are fair game for the instrumentalist. On the other hand, suppose that I am correct in thinking that the possession of evidence is itself something which has normative import, and that to possess strong evidence that some proposition is true is *ipso facto* to have reason to think that that proposition is true. In that case, it is simply a mistake to

Insofar as I have the goal of being a moral person, it is instrumentally rational for me not to perform any action that I have overriding moral reasons not to perform.

But no one would be tempted to conclude from this that morality *just is* instrumental rationality, or some such thing. (After all, even a Platonist about moral reasons would presumably accept this claim.) Analogously, the mere fact that one's having certain cognitive goals might make it in one's interest to scrupulously conform to what is in fact a genuine epistemic norm does not itself have any tendency to show that epistemic rationality just is instrumental rationality. I believe that confusion on this point has sometimes given the instrumentalist conception an undeserved air of triviality, briefly remarked upon above.

¹⁰ Compare: the following claim is presumably true

think that our having cognitive goals that are best promoted by following norms such as (a)-(c) has any tendency to show that epistemic rationality just is instrumental rationality. For that would be akin to thinking that the mere fact that our cognitive goals are best promoted by following rules such as *believe all and only those propositions that it is epistemically rational to believe* suggests that epistemic rationality is nothing other than instrumental rationality in the service of those goals.

REFERENCES

- Achinstein, Peter 2001: The Book of Evidence. (Oxford: Oxford University Press).
- Carnap, Rudolf 1950: *Logical Foundations of Probability* (Chicago: The University of Chicago Press).
- Foley, Richard 1987: *The Theory of Epistemic Rationality*. (Cambridge: Harvard University Press).
- Harman, Gilbert 1999: "Pragmatism and Reasons for Belief", reprinted in his *Reasoning*, *Meaning*, *and Mind* (Oxford: Clarendon Press), pp.93-116.
- Horwich, Paul 1982: *Probability and Evidence*. (Cambridge: Cambridge University Press).
- Kelly, Thomas 2001: *Epistemic Rationality and the Ethics of Belief*. Doctoral dissertation, Harvard University.
- Kelly, Thomas 2003: "Epistemic Rationality as Instrumental Rationality: A Critique", *Philosophy and Phenomenological Research* Vol.LXVI, No.3, May 2003.
- Kelly, Thomas 2006: "Evidence" in the Stanford Encyclopedia of Philosophy.
- Kim, Jaegwon 1988: "What is 'Naturalized Epistemology?" in *Philosophical Perspectives* vol. 2, pp.381-405.
- Kitcher, Philip. "The Naturalist's Return", in *The Philosophical Review* 101, pp.53-114.
- Laudan, Larry 1990: "Aimless Epistemology?", *Studies in History and Philosophy of Science* 21, pp.315-322.
- Leite, Adam 2006: "Epistemic Instrumentalism and Reasons for Belief: a reply to Thomas Kelly 'Epistemic Rationality as Instrumental Rationality: A Critique'" in *Philosophy and Phenomenological Research*, xxx.
- Laudan, Larry 1996: *Beyond Positivism and Relativism* (Boulder, Colorado: Westview Press).
- Nozick, Robert 1993: The Nature of Rationality (Princeton: Princeton University Press).