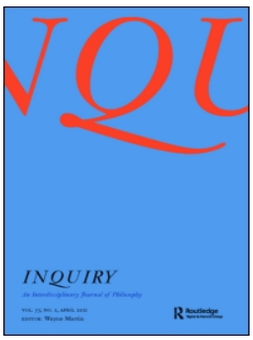

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Demythologizing intuition

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ABSTRACT

Max Deutsch's new book argues against the commonly held 'myth' that philosophical methodology characteristically employs intuitions as evidence. While I am sympathetic to the general claim that philosophical methodology has been grossly oversimplified in the intuition literature, the particular claim that it is a myth that philosophers rely on intuitions as evidence is open to several very different interpretations. The plausibility and consequences of a rejection of the 'myth' will depend on the notion of evidence one employs, the notion of intuition one holds, and how one understands the idea of 'relying on' or 'employing' something as evidence. I describe what I take to be the version of The Myth which is most plausibly undermined by Deutsch's arguments; however, I also argue that the falsity of this myth has only minimal consequences for the viability of the experimental philosophy research project.

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The discipline of philosophy is notoriously hard to define. Appeals to 'love of wisdom' are literal, but uninformative. Subject matter provides little to go on; though biology might be glossed as the 'study of life' and psychology as the 'study of the mind', there is no obvious x for which philosophy is the 'study of x'. One might, however, speculate that philosophy could be distinguished (if not defined) by its methodology – in particular, by its characteristic appeal to 'intuition' as a guide to uncovering the true nature of the motley phenomena with which philosophers have concerned themselves. Intuition, so the traditional story goes, provides our evidence in philosophy.

Max Deutsch's book *The Myth of the Intuitive* argues that this is a misconception. Philosophers, according to Deutsch, essentially *never* rely on

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intuitions as evidence. Instead, they standardly rely on arguments; arguments which, crucially, do not appeal to facts about what is or is not intuitive. This view of philosophical methodology has, of course, implications for how we describe many paradigmatic cases of philosophical inquiry – Gettier's counterexamples and Kripke's Gödel thought experiment are Deutsch's preferred examples. Beyond this, however, Deutsch claims that his view has dramatic consequences for the ever-controversial subdiscipline of experimental philosophy. Specifically, Deutsch argues that experimental criticisms of intuition give us no grounds for worry about the epistemic standing of our methods.

Deutsch's book is a wonderful instance of something I find to be far too rare in philosophical practice – a bold, skeptical examination of a thesis that the majority of the field simply takes as given. And while Deutsch's view is iconoclastic, he's very clearly on to something. Many participants in the intuition debates – both the experimentalists that Deutsch targets and their intuition-phile opponents – have largely adopted an over-simplistic view of the structure of philosophical theorizing. Deutsch isn't alone in noticing the cracks in this picture; several recent contributions to the 'intuition debate' echo not only Deutsch's cynical view on intuition's role in philosophy, but often his image of experimental philosophy's grand folly (see e.g. Cappelen [2012]; Earlenbaugh and Molyneux [2009]; Ichikawa and Jarvis [2013]; Williamson [2007]).

There are, however, a bewildering variety of interpretations one might give to a claim like 'philosophers rely on intuitions as evidence'. And, unsurprisingly, whether the falsity of that claim would have serious implications for experimental philosophy – or any criticism of intuition's use in philosophy, for that matter – turns out to hinge quite squarely on which one of the available interpretations one chooses. Fortunately, we're currently at liberty to focus solely on Deutsch's version. Ultimately, I want to convince you that Deutsch's picture of philosophical methodology is more or less plausible but that its implications for critiques of intuition's epistemic worth are likely minimal. To do so, we first need to get quite a bit clearer on what exactly Deutsch's version of the 'myth' is.

1. Disambiguating The Myth

The 'Myth of the Intuitive' referred to in Deutsch's title can be glossed as follows: philosophers standardly rely on intuitions about thought experiments and cases as evidence for or against philosophical claims. I'll refer to this simply as 'The Myth'. The precise content of this claim, as noted above,

takes a good deal of unpacking. What is evidence, and what it is it for a philosopher to *rely* on something as evidence? What notion of intuition does one have in mind? Philosophers who have urged the falsity of The Myth have sometimes explicitly declined to give answers to one or more of those questions – Cappelen (2012), for instance, claims to remain neutral on the notion of evidence in question. At other times, the relevant questions have not been explicitly addressed at all. I'll focus in the current section on uncovering the interpretation that best fits the claims Deutsch makes in his text; I'll then consider whether Deutsch's version of The Myth is in fact a myth, and whether rejection of that Myth would in fact undermine projects like that of experimental philosophy.

Let's begin with a distinction that Deutsch emphasizes early on in the text – the distinction between 'intuition' as referring to a mental state and 'intuition' as referring to the content of that state, or between intuit*ings* and intuit*eds*. Most experimental philosophers have, unfortunately, failed to disambiguate when making claims like 'philosophers rely on intuitions as evidence'. The same goes for defenders of intuition's evidential role. Deutsch, commendably, takes care to avoid the ambiguity. He is clear that he takes the claim 'intuitions are used as evidence in philosophy' to be true on the 'content' sense of 'intuition' – the propositions that get treated as evidence by philosophers are in many cases propositions that are the contents of intuitions.[1] The relevant interpretation of The Myth, then, claims that intuitions in the 'state' sense are relied on as evidence.

Here, however, we're immediately led into a puzzle – one which involves the ontology of evidence. In common parlance, evidence tends to consist of physical objects like fingerprints, bloody knives and the like. This is not, however, a particularly common view among philosophers. Leaving that view aside, there are perhaps three broad options with regard to what sorts of things can be evidence. The first, perhaps historically the most dominant view, takes evidence to consist of mental states of various sorts – experiences, beliefs or what have you. The second takes evidence to consist of propositions. Thirdly, one might adopt an account according to which evidence consists of states of affairs. Thus, when Smith sees that the room is empty, the three views take his evidence to be, respectively:

(a) the visual experience of the empty room;
(b) the proposition *the room is empty*; and
(c) the state of affairs of the room being empty.

[1] I assume here (without argument) that intuitions are propositional attitudes – one intuits *that p*.

Now, intuitions in the content sense – that is, intuiteds – are propositions. Intuitions in the state sense – intuitings – are mental states. Thus, if the 'mental state' view of evidence is correct, intuiteds aren't the right sort of things to be evidence, and if the 'propositional' view of evidence is correct, intuitings aren't the right sort of things to be evidence. Of course, The Myth doesn't say that intuitings *are* evidence – it says that they are relied on as evidence. The significance of 'relying on' to our interpretation of The Myth will have to be treated in more detail shortly, but for the moment, it's enough to note that the two versions of The Myth that Deutsch has distinguished at least potentially involve two different views on the nature of evidence.

Oddly enough, participants in debates over the evidential status of intuition have, on all sides, largely failed to articulate the conception of evidence they have in mind.[2] And Deutsch, so far as I can tell, offers us no explicit account of evidence either. Yet, his acceptance of the claim that the contents of intuitions are taken as evidence is accompanied by a strong suggestion that philosophers are *correct* to treat those contents as such; and this, in turn, would seem to suggest that he at least tacitly holds evidence to be propositional. Moreover, Deutsch's argumentative strategies strongly suggest a propositional view; Deutsch consistently focuses on the arguments given by philosophers in texts, and the premises that are invoked explicitly or implicitly by those arguments. Premises are, of course, quite plausibly propositional. Finally, certain passages almost demand attributing a propositional view to Deutsch. Here is just one: 'if there is a good argument for p, and someone or some group of people is in possession of it, then they may treat p as evidence, regard p as true and known, and so on' (Deutsch 2015, 75). The only things I am aware of that can be both true and known are propositions.

In fact, Deutsch appears to interpret *both* the 'state' and 'content' versions of The Myth as involving claims about propositions. When Deutsch rejects the claim that intuitions in the state sense are treated as evidence, what he in fact rejects is the following: 'Many philosophical arguments treat the fact that certain contents are intuitive as evidence for those very contents' (Deutsch 2015, 36). Now, it is true that Deutsch uses 'fact' here, rather than 'proposition'; and unfortunately, he does not make clear what he takes facts to be. Interpreting Deutsch as taking facts to be true propositions seems, however, to be the most charitable route, given the clear indications elsewhere that Deutsch's (tacit?) view of evidence is propositional. If so, Deutsch's rejection of the 'state' version of The Myth is in fact a rejection of the following claim:

[2]Williamson (2007) is an obvious exception here; another is Ichikawa and Jarvis (2013).

propositions of the form *it is intuitive that p* are appealed to as evidence in arguments for p. Deutsch's talk of intuitions in the state sense, then, turns out to be frequently misleading; technically, he does not anywhere address the question of whether the mental states we call intuitions are relied on as evidence. But I won't either. We've got enough on our plates.

There's more one could ask about the idea of evidence being employed here. Being a proposition might be a necessary condition on being evidence, but it's obviously not sufficient. Plausibly, some sort of epistemic relation is required between a subject S and a proposition p in order for p to count as a piece of S's evidence – Timothy Williamson has proposed that this relation is knowledge, but there's no particular indication that Deutsch holds this view. For our purposes, though, the epistemic relation required for p's *being* evidence for S isn't quite so important as the epistemic relation required for S's *treating* p as evidence. So let's turn to the various things one might mean by 'treating as evidence', 'relying on as evidence', 'appealing to as evidence' and the like.[3]

The presence of such phrases is of course crucial – both Deutsch and his experimentalist opponents deny that intuitions *are* evidence,[4] but only Deutsch denies that they are treated as evidence. But what exactly is being denied? On one possible interpretation, for instance, if one treats an intuition as evidence for p, then one has a belief with the content *intuition is evidence for p* – or perhaps in the current case, a belief with the content *the proposition that p is intuitive is evidence for p*. Is this meant to be a requirement, on Deutsch's account, on 'treating intuition as evidence'? If not: must one at least believe that p is intuitive, even if one does not have the belief that p's intuitiveness is evidence for p? Or is it possible to treat one proposition as evidence for another even if one does not have a belief in the truth of the former proposition? And with regard to each of these questions, is explicit conscious belief[5] required, or is some sort of subconscious belief sufficient?

It's difficult to be confident in attributing any position on these questions to Deutsch, but we can find some clues in certain aspects of Deutsch's wording. Intriguingly, Deutsch more than once speaks of *arguments*, rather than philosophers, as relying on certain propositions as evidence. Further,

[3] I will use these phrases interchangeably for present purposes. I am not aware of anyone who makes explicit distinctions between them.

[4] On Deutsch's version of the state sense, that is.

[5] The terminology gets muddy here. We speak of 'explicit' and 'implicit' beliefs, but the later may mean either: (a) non-occurrent but mentally represented beliefs (like your belief that 2 + 2 = 4 was until just now); (b) non-represented but easily inferred beliefs (like your belief that there are fewer than 10,000 pink elephants in the room was until just now); or (c) beliefs which are mentally represented which are in some way inaccessible to consciousness (like, perhaps, implicit gender or racial biases). Thus, the questions one might ask regarding the requirements for 'treating p as evidence' quickly multiply.

as noted earlier, Deutsch's consistent argumentative focus is on how to best interpret the arguments philosophers present in texts. These hints suggest the following pleasingly simple interpretation: for Deutsch, the proposition that p is intuitive is treated as evidence for p if it is among the premises used to argue for p.[6]

Now, it is obvious that not all arguments explicitly list all their premises, and Deutsch clearly leaves room for the possibility of unstated, 'hidden' premises in philosophical argumentation. So, our interpretation must allow for the relevant proposition's being an 'implicit' or 'hidden' premise. And here is where the questions posed above arise. How much latitude do we have in ascribing hidden premises? Can we ascribe a premise that the author did not believe to be part of his or her argument? Suppose we were to ask Gettier about his thought process while he was writing his 1963 *Analysis* piece. Suppose he were to report to us that he never once considered whether any of the claims he made in his text were intuitive, much less whether that fact about them provided any support to his conclusions. Suppose we trust his memory of his thought process. Would this report provide more or less conclusive evidence, for Deutsch, that Gettier did not rely on intuition as evidence in his refutation of the JTB theory of knowledge?

I suspect Deutsch *would* in fact take it to essentially vindicate his position. We might consider, for a moment, the conditions under which we would feel justified in attributing a 'hidden' premise of the form *it is intuitive that Smith does not know* to Gettier's argument. Here is one condition – the addition of said premise would improve the strength of the argument. It's quite clear that Deutsch, however, does not believe that such a premise would strengthen Gettier's argument. He states unambiguously that he takes intuition facts to be irrelevant to the status of Gettier's counterexample. The other condition under which we might ascribe hidden premises is that we feel it is part of the author's intention. And this seems to be what Deutsch has in mind as *the* crucial question: he emphasizes the 'important point' that 'neither Gettier nor Kripke says or suggests that they *themselves* take the intuitiveness of their counterexamples to be necessary to their refutations' (Deutsch 2015, 40, emphasis original).

If all this interpretation has been more or less on the right track, we can precisify Deutsch's version of The Myth as follows: The Myth claims that philosophers consciously, intentionally employ propositions about what is intuitive as (potentially hidden) premises in their arguments about cases. For Gettier's case, for example, The Myth claims that the reconstruction of

[6]This proposal leads to some interesting consequences – for instance, it seems to suggest that is possible to treat a proposition p as evidence for its negation (in a reductio).

Gettier's argument that best fits his intention would include a premise of the form *it is intuitive that Smith does not know*.

It should be noted that this is only one of many possible versions of The Myth. Given only our discussion thus far, there are at least five apparent options for *what* is being treated as evidence (a mental state of intuiting, a proposition expressing an intuition occurrence, a proposition that has been intuited, a state of affairs involving an intuition occurrence, a state of affairs which is such that it is intuitive that it holds). There are also multiple possible options for what it is to treat those things as evidence, including explicitly believing that they are evidence, using them as grounds for formation of belief, consciously or unconsciously using them as a premise in argumentation, and so forth. And this is without even considering the possible sense of 'intuition' one might intend; as we'll note later, Deutsch's take on the sorts of things falling under 'intuition' (and thus claimed by The Myth to be used as evidence) is very different from, say, Cappelen's.

2. The evidential and the epistemic

So is Deutsch's version of The Myth false? Probably, at least in the majority of cases. Most philosophical arguments, as Deutsch claims, don't seem to be best characterized as involving either explicit or implicit appeal to some proposition expressing an intuition fact. But opponents of experimental philosophy shouldn't pop the champagne quite yet; rejecting The Myth is very clearly *not* equivalent to rejecting a role for intuition in philosophy. Ultimately, if we construe 'evidential role' as narrowly as Deutsch seems to have done, it becomes overwhelmingly plausible that *there are at least some epistemological roles which are not evidential roles*. In fact, Deutsch even *suggests*, in an offhand remark, that intuitions may fill roles of this type – 'there might be ways of relying on an intuition … that do not involve treating the intuition as evidence for its own content' (Deutsch 2015, 34). Unfortunately, he doesn't further consider what such ways might be, whether any such ways are involved in philosophical method, or whether they have the potential to vindicate criticisms of intuition's use in philosophy.

Let's consider the nature of some such non-evidential epistemic roles. The best approach, I think, is to use ordinary observational knowledge as a test case. Suppose I am walking down the hallway with a colleague, and I make the following remark: 'Professor Smith must be in his office – the door is open'. Perception is clearly involved in my belief formation here, but it is quite plausible that I am not 'treating perception as evidence' in Deutsch's sense. The best representation of the argument I have given would contain a

premise of the form *the door is open*, but it would not also contain a premise of the form *it visually appears to me that the door is open*, from which *the door is open* is inferred. It likely has not even *occurred* to me that I am currently undergoing a perceptual state; thoughts about one's mental states are simply not that common. The content of my perception is treated as evidence, in Deutsch's sense; but no proposition about observation facts is so treated.

But it's clear, nonetheless, that perception (the mental state) plays an epistemic role in the case I've just described. The most natural characterization of that role seems to me to be that it is the *source* of my evidence. It also seems right to say that I here *treat* my perceptual experience as a source of evidence. The two can come apart, as they might if, e.g. I gave the above argument even though I knowingly took a hallucinogenic drug two hours prior. In such a case, I might treat my experience as a source of evidence though it fails to in fact be a source of evidence.

Note that the way in which I am relying on perception contrasts sharply with the notion of 'relying on as evidence' characterized in the previous section. In the current case, my reliance need not involve any thoughts or beliefs whatsoever about my perceptual state – and I certainly need not intend my argument to involve appeal to such a state. It may simply be that my belief that the door is open is caused by my perception, or perhaps that the belief is 'based' on it (where further details of said basing relation are of course up for grabs). We need not settle the details; what is important is that there seems to be some notion which we might call 'treating as a source of evidence' which captures my above behavior and which differs quite dramatically from 'treating as evidence' (in Deutsch's sense).

The distinction between *evidence* and *source of evidence* has frequently been ignored in debates over intuition's role as evidence. Cappelen (2012) notes the existence of the evidence/source-of-evidence distinction, but seems to think it rarely makes a difference in practice – he often uses the two phrases interchangeably. Deutsch uses both phrases with some frequency over the course of his book; yet, he does not give separate consideration to the hypothesis that intuitions are used as a *source of evidence* in philosophy. It's clear he takes that claim to be false:

> the idea that intuitions about thought experiments and cases count, or are treated as counting, as an important source of evidence for the truth about the cases is a popular metaphilosophical view… though the view is false, as I will argue throughout the rest of the book. (Deutsch 2015, xvii)

Despite this assertion, however, it seems to me that what is argued for in the book is not the falsity of the 'source of evidence' claim, but the falsity of the 'evidence' claim.

Just what is a source of evidence? Standardly, one is simply provided with a list of examples: perception, testimony, memory, introspection and the like. Intuition is, of course, generally included on this list. On a 'mental state' conception of evidence, a natural interpretation seems to be that a source of evidence is a mental capacity that generates the particular mental state tokens that constitute evidence. On a propositional view of evidence, this doesn't quite work, however – mental capacities don't generate propositions. Instead, we might view sources of (propositional) evidence as being those mental states, possession of which confers evidential status.[7] For example, if a subjects' visual experience as of p confers evidential status on p for that subject, then that mental state is a source of evidence with respect to p.

Compare this with Cappelen's characterization – if intuitions are viewed as a source of evidence, then 'p is the evidence and the source of that evidence is *that A has an intuition that p*' (Cappelen 2012, 13). This appears to claim that a source of evidence is yet another proposition, or perhaps a state of affairs. I suspect the idea Cappelen has in mind here is in fact closer to that of 'evidence for the evidence' – an idea Deutsch discusses and which we will return to shortly. By contrast, I am suggesting that sources of evidence are mental states, rather than further propositions.

I don't propose to harp on any further details here. It's clear that mental states (rather than the propositions that are their contents) play *some* epistemic role; if the 'source of evidence' account I have sketched doesn't successfully capture that role, surely *some* account will (see for instance Chudnoff, this volume, who proposes that intuitions are justifiers). All I really aim to do here is indicate what I'll argue to be a lacuna in Deutsch's arguments against experimental philosophy – one that is obscured by the various ambiguities we've tried to untangle in the previous section. If intuition is treated as something like a 'source of evidence' in philosophy, then we may simply reframe the experimentalist challenge as targeting *that* aspect of our methods.

So *does* intuition serve as the source of the propositions which philosophers treat as evidence? Some of Deutsch's myth-busting comrades might have resources to deny such a claim. Both Williamson and Cappelen, for instance, seem to take the very idea of an 'intuition' to be part of The Myth – Williamson claims that 'philosophers might be better off not using the word "intuition"' (Williamson 2007, 220), and Cappelen treats 'intuition' is a defective technical term. For both, then, the hypothesis that intuition is a source of evidence is suspect due to the obscurity of the notion of an intuition.

[7]This need not presuppose an internalist epistemology. A reliabilist, for example, might claim that a given visual experience as of p only counts as a source of evidence for p (that is, only grants p evidential status for a subject) if that visual experience was reliably formed.

Deutsch, though, has no such misgivings. Rather than reject the notion of an intuition, Deutsch embraces what he calls a 'no-theory' theory of intuitions – he is content to note that we can quite easily identify clear cases of intuition, even if we lack a theory of their nature. This contrasts sharply with, e.g. Cappelen's strategy of identifying potential candidates for intuitionhood by appeal to features such as special phenomenology or rock-bottom evidential status (see Cappelen 2012). And Deutsch's acceptance of the 'content' version of The Myth indicates that he accepts that philosophers frequently do undergo intuitions whose contents are treated as evidence.

The crucial issue is whether intuition is treated in something like the way perception is treated in the case discussed above. For the moment, let's gloss the target behavior as 'basing' one's belief on the relevant mental state. Though Deutsch is happy to say that we do intuit, e.g. that Gettier's Smith does not possess knowledge, he clearly would not allow that philosophers *base* their beliefs on any such intuition; or at least, he would certainly claim that Gettier himself did not. Gettier's belief that Smith does not possess knowledge was, instead, based on arguments – said arguments constitute the reason why Gettier believes, and the reason why *we* ought to believe, that Smith does not know.

Ultimately, I think this may be correct for some cases – but not all. Though Deutsch is correct that philosophical arguments rarely invoke a premise involving an intuition fact, I think they do frequently take an intuited proposition as a premise without providing further support for that premise. The issue here is over a possible alternate characterization of philosophical argumentation, of which Deutsch is well aware: the 'abductive' characterization. Though Deutsch interprets Gettier as using some form of 'anti-luck' premise to argue for the proposition that Smith does not know, the abductive interpretation would be that the anti-luck claim is *explaining* the truth of the knowledge judgment rather than supporting it. The direction of support, then, would go from *Smith does not know* to *knowledge is incompatible with certain kinds of epistemic luck*.

I won't spend too much time on this issue, since it is discussed both in Deutsch's book and elsewhere (see for instance Cappelen [2012, 169]). But I can't resist noting that, regardless of whether Gettier's text is best interpreted abductively, a very clear instance of abductive argumentation can be found in a quote Deutsch himself uses from Alvin Goldman's (1967) presentation of his causal theory of knowledge.

> Michael Clark, for example, points to the fact that q is false and suggests this as the reason why Smith cannot be said to know p. … I shall make another hypothesis to account for the fact that Smith cannot be said to know p. (Goldman 1967, 358)

Deutsch characterizes this as 'a remarkably clear example of a philosopher arguing for Gettier judgments' (Deutsch 2015, 91). But this doesn't at all seem to me to be an argument for the truth of the Gettier judgment. The fact that Smith cannot be said to know p is here quite clearly taken as given; Goldman disagrees with Clark's explanation, and offers his own *hypothesis* to *account for* the *already-known fact*.

Compare the above passage, for instance, to certain claims one might make about *scientific* hypotheses – say, for instance, the claim that Einstein's hypothesis that light consists of photons better accounts for experimental data on the photoelectric effect than does the hypothesis that light is a wave. Scientific hypotheses aren't used to *argue for* the facts they are claimed to *account for* – the direction of support is the other way round. I don't mean to claim that philosophical reasoning can always be viewed as an exact analog of scientific reasoning; but in this case, at least, the language quite strongly suggests that the mode of argumentation is more or less comparable. Goldman's theory gains confirmation from its ability to explain the Gettier case; Goldman is no more arguing for the truth of the Gettier judgment than Einstein was arguing for the accuracy of the experimental data.[8] The post-Gettier literature is not best characterized as five decades of attempts to further convince us that Smith does not know.

Deutsch is surely right that philosophers frequently provide arguments for case judgments that happen to also be intuitive. But other times, philosophers take (the contents of) intuitive case judgments as starting points, and offer hypotheses to explain their truth.[9] At yet other times, the support is, to some degree or other, mutual. And finally, in a great many instances, philosophers don't rely on intuitive cases at all – no arguments either to or from an intuitive judgment about cases in the current paper, for instance. Philosophy has got many methods; experimentalists are wrong to overemphasize reliance on intuition, but Deutsch seems to me to commit the opposite sin.

3. Of defeaters and double-blinding

Suppose we were to grant Deutsch his interpretation of philosophical argumentation – abandoning, for argument's sake, the abductive interpretation. This still does not eliminate a possible role for intuition in philosophical

[8]This is not, of course, to claim that there can be *no* support in the opposite direction. One might, for instance, have had doubts about the accuracy of experimental findings surrounding the photoelectric effect, and those doubts might have been lessened by learning that Einstein's quantum hypothesis explained the findings.

[9]Note that we need not characterize this as using intuitions as evidence, for reasons already discussed.

theorizing, due to what Deutsch calls the 'relocation problem'. The problem arises as follows. Deutsch claims that the best representation of, e.g. Gettier's argument takes *Smith does not know* to be evidence, rather than *it is intuitive that Smith does not know*. But what is our evidence that Smith does not know? This is termed the 'evidence-for-the-evidence' question, and Deutsch's answer to it is that the evidence-for-the-evidence is argumentation. But what about the 'evidence-for-the-evidence-for-the-evidence'? Yet further argumentation, Deutsch claims. Such a chain can only go on so long, of course, leading to a potential 'relocation problem' – doesn't Deutsch's strategy (and indeed, the strategy of those who offer similar dismissals of intuition) simply 'relocate' the unavoidable, ultimate appeal to intuition? Mustn't there be an end to the chain?

Deutsch accepts that evidential chains must end, but denies that they must end in intuitions. And he's surely right on this point. In fact, given the interpretation of 'evidence' we've pieced together from Deutsch's text, we can probably say that they almost never do. In other words, propositions of the form *I intuit that p* are very unlikely to occur at the ends of those chains. But propositions of the form *I visually perceive that p* are very unlikely to occur at the ends of evidential chains in everyday reasoning about mundane observable occurrences; when one observes that p, one's evidential chain plausibly begins with the proposition *p*. This doesn't show that perception plays no epistemic role when we form beliefs about observables. Whatever the *content* of the final proposition in the chain, it's still an open question whether intuition is in some way epistemically linked to that final proposition – through granting evidential status to said proposition, for instance.

This is not to say that intuition is *always* the source of the propositions that get treated as evidence in philosophy – surely ordinary empirical claims play a large role in philosophy, too. Often Deutsch's claims in this section seem to target the view that all 'rock-bottom' evidence is intuitive, and that intuition therefore must play a role in argumentation quite generally. But this seems to me to be much stronger than what is needed. If at least some fairly significant 'chunk' of the evidential starting points that feature in philosophical inquiry is rooted in intuition, then a critique of intuition's epistemological merits has the potential to be quite devastating.[10]

[10]Deutsch questions whether the evidential starting points that philosophy employs are somehow in a worse epistemic position than the evidential starting points used in the sciences. I *think* he here intends to contrast intuited propositions with observation-based propositions – in which case I can think of several reasons why intuited propositions are likely worse off. But there is of course another important issue in the vicinity – much of science's evidential starting points may be intuition based, as well. I take it that this is simply yet another reason why one mustn't take experimentalist arguments to require a *rejection* of intuition. If what's needed is simply methodological improvement with regard to our use of intuition, then the fact that the same might be required of the sciences as well seems unproblematic.

Deutsch does, however, have a compelling point to make about the effect of his 'relocation' on experimentalist critiques of philosophical method: even if all he has done is pushed the appeal to intuitions back a step, experimentalists still appear to be in trouble. Suppose experimental philosophers have empirical evidence that proposition p's intuitiveness varies by culture. Suppose that philosopher X uses p as evidence for some substantive philosophical conclusion – but suppose we can show that philosopher X *also* provides an argument, to the effect that q provides reason to believe p. Now, experimentalists might note that X provides no extra-intuitive argument for q. But unless experimentalists provide evidence that *q*'s intuitiveness varies by culture, their argument still falls flat. Deutsch here picks up on a point that is often overlooked – showing that intuitions of one type are sensitive to such-and-so factors does not suffice to show that *intuitions,* generally, are sensitive to such-and-so factors. We do not possess evidence that intuitions as a whole are culturally variable – we possess intuitions that certain types of epistemic intuitions, intuitions about reference and so on may be culturally variable.[11]

One thing to note is that this point only undermines current experimental philosophy arguments, and not the entire project of experimental philosophy – in the case above, the experimentalist may simply respond by rolling up her sleeves and investigating intuitions about q. But more importantly, the fact that our philosopher X has provided an argument for p does not eliminate the possibility that intuition has had some epistemically significant impact on philosopher X's attitude toward p. Possession of an argument does not, after all, show that one is free from epistemically problematic influences. It might be the case, for instance, that the intuitiveness of p predisposed philosopher X to accept p; had she found ~p intuitive instead, she would have searched for (and likely found) arguments in favor of ~p.

One might think here of e.g. studies that show that job applications with female names are less likely to result in a job offer than identical applications with male names (see e.g. Steinpreis, Anders, and Ritzke [1999]). Surely the folks who evaluated those applications had reasons (even good ones) for their selection – they may have noted their selected candidate's stellar publication record, for instance. But underlying bias led them to neglect the resumes of women; similarly, a philosopher finding herself intuitively pulled toward p might neglect potential arguments for ~p. I borrow this example from Ichikawa and Jarvis (2013), who in fact argue that even in the case where a male candidate *is* (slightly) better qualified, the prevalence of gender bias is an obstacle to justifiedly believing this to be so.

[11]And this is to ignore completely issues of replication – see e.g. Adleberg, Thompson, and Nahmias (2015), Lam (2010), Nagel, Juan, and Mar (2013), Seyedsayamdost (2015a, 2015b).

Deutsch is certainly aware that judgments of all kinds are affected by a variety of truth-irrelevant factors; he notes, for instance, that judgments on, e.g. political issues vary along all sorts of demographic lines. But he is puzzled by the idea that this might matter: 'if a judgment about a case is made for reasons, if the judgment can be given argumentative support, then why should diversity in judgments about the case … matter in the slightest?' (Deutsch 2015, 143). Deutsch answers his own question as follows:

> So far as I can tell, the only available answer is this: the existence of diversity in judgments about a case, and along truth-irrelevant lines, will always defeat whatever justification might be given for any particular judgment about that case. (Deutsch 2015, 143)

Deutsch rejects this response as obviously incorrect – it would, for instance, imply that most of our political judgments are unjustified.

The defeater approach is, in fact, the angle Ichikawa and Jarvis take in their discussion of the gender bias example.[12] And it may well be the correct thing to say in certain cases. But the defeater approach simply cannot be the *only* available way to characterize the epistemic impact of truth-irrelevant factors. After all, there are numerous instances where the existence of various biases has been recognized as epistemically problematic for a given field – even in the presence of extensive reasoning and argumentative support – without implication that all our judgments in the affected area are unjustified.

Consider feminist critiques of science, which have argued for the existence of widespread androcentric bias within the sciences. Such critiques note, for instance, the presence of tacitly gendered language and symbolism ('hard' science), gender gaps and barriers to the entry and advancement of women in science, and the tendency of androcentrism to lead to neglect or undervaluing of various hypotheses and theoretical topics. Now, some participants in the feminist epistemology literature do indeed take the existence of said problems to imply dramatic negative conclusions about the status of science; but many others clearly do not. Many feminist philosophers of science view their critiques as merely calls for epistemic improvement. Take as an example the following quote from Elizabeth Anderson:

> The normative implications of much feminist epistemology and feminist criticism of science can be modeled on the case of double-blind testing. If a gendered norm is found to influence the production of knowledge claims in ways that cannot be reflectively endorsed, then we have epistemic reasons to reform our knowledge practices so that this norm is changed or its effects are blocked.

[12]Their view is considerably more complex than I give it credit for here – in particular, they claim that said bias defeats only doxastic justification and not propositional justification.

> Feminist empiricist epistemology thus produces arguments of the same logical type as those already accepted by our knowledge practices. (Anderson 1995, 55)

This cannot be charitably interpreted as a claim that all scientific conclusions are unjustified due to the fact that the prevalence of androcentric bias within the sciences serves as a defeater. It is merely a call for epistemic improvement, in much the same way as we improved our scientific practice by the introduction of double-blinding.

And double-blinding is, I think, a perfect example of the attitude one should take toward the influence of extra-evidential yet epistemically relevant mental states. Here, the defeater response is even more clearly inadequate – was no one justified in believing in the efficacy of any therapeutic drug prior to the introduction of double-blind trials, since the existence of experimenter bias and placebo effects defeated any possible justification? Surely, that's too dramatic a conclusion. Once the biasing potential of the placebo effect became well understood, we had reason to believe that error contaminated our practices; but in most cases, we lacked sufficient reason to believe that any *particular* finding was an artifact of placebo response. When one has reason to suspect a source of error in otherwise broadly reliable practices, yet lacks the ability to identify the particular *instances* of error, generally the appropriate response is to devise corrections to methodology – *not* to condemn any particular belief generated by that practice (much less all of them). And this seems to me to be broadly the situation for experimental critiques of intuition; we ought to conclude that there is a need for epistemic improvement, perhaps via appropriate corrective procedures – but this is compatible with the existence of some degree of justification, and does not necessitate rejection of any particular philosophical claim.

One final point needs to be discussed. I have suggested that intuition has an extra-evidential effect on philosophers' acceptance of certain philosophical claims. But certain claims Deutsch makes seem *prima facie* to deny this. I have in mind the brief discussion Deutsch gives of the distinction between the *producer* and the *consumer* of a thought experiment. As *consumers* of thought experiments, Deutsch admits that 'it may be that many of us do make relatively spontaneous, nonreflective, and noninferential judgments when encountering a thought experiment in *someone else's* work' (Deutsch 2015, 98). Yet the *producer* of a thought experiment, Deutsch claims, generally reflects and reasons her way to what others later intuit. Deutsch writes, for instance, that while readers of Gettier's 1963 paper often intuit that Smith does not know, '*Gettier himself did not intuit this*. For Gettier, arriving at that judgment took a considerable amount of ingenuity, careful thought, and inference' (Deutsch 2015, 98, emphasis original). If correct, this

would presumably rule out the possibility that biases arising from intuition adversely affected Gettier's epistemic position with respect the proposition that Smith does not know.

I've got little to offer on this point other than flat-footed disagreement. It's an empirical question, after all, whether any of the mental processes that contribute to the generation of a thought experiment are properly classed as intuitive. I am inclined to an ultra-minimal view of intuition which takes intuitions to be unified by little more than conscious inaccessibility. Given such a notion of intuition, I find it unimaginable to suppose that intuitive cognition is anything less than heavily, heavily implicated in most of our philosophical reasoning (heck, most of our reasoning overall). I suspect that Deutsch and I differ in our introspective recollections of the process of generating a philosophical case – I find the process to be almost entirely opaque, but Deutsch clearly does not. For what it's worth, at least a sliver of psychological evidence backs up my view. Introspective reports of the creative process gathered from experts in multiple fields (including science and mathematics) typically emphasize the difficulty of describing the mental processes involved, and refer to periods of unconscious 'incubation' followed by spontaneous flashes of insight (see e.g. Andreasen [2005] for several such reports). But it's hard to rest confidently on such grounds, given the suboptimal reliability of introspection – not to mention the thorny question of whether any of these reports describe processes of the same general type as those which the experimentalists have studied.

I'm happy, then, to settle for the following conditional conclusion – if intuitive mental processes which have been shown to be sensitive to bias play just about *any* substantive role in the process of constructing one's philosophical thought experiments and/or arguments, this is epistemically problematic and calls for methodological corrections. As to the antecedent of that conditional, its truth is fully compatible with every aspect of Deutsch's view other than his claims about the psychology of thought experiment production – which are, again, empirical. I suggest that we leave it in the hands of experimental philosophers.

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