

## Intuition in Gettier

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Abstract: Gettier's paper, "Is Justified True Belief Knowledge?," is widely taken to be a paradigm example of the sort of philosophical methodology that has been so hotly debated in the recent literature. Reflection on it motivates the following four theses about that methodology: (A) Intuitive judgments form an epistemically distinctive kind. (B) Intuitive judgments play an epistemically privileged role in philosophical methodology. (C) If intuitive judgments play an epistemically privileged role in philosophical methodology, then their role is to be taken as given inputs into generally accepted forms of reasoning. (D) Philosophical methodology is reasonable. Negative experimental philosophers have empirically challenged (D). Radical responses to their challenge include Williamson's rejection of (A) and Cappelen and Deutsch's rejection of (B). Here I follow traditionalists in maintaining (A), (B), and (D), but suggest questioning (C), which has largely been taken as a fixed point in the literature.

Gettier's paper, "Is Justified True Belief Knowledge?" is widely taken to be a paradigm example of a certain kind of philosophical methodology. Circumscribing the methodology is somewhat difficult. It was prominent in late 20th century analytic philosophy. But it can also be found in Plato's Socratic dialogues. Counterexamples to proposed analyses of concepts, such as the analysis of the concept of knowledge as the concept of justified true belief, figure in it. But not all practitioners pursue the negative task of refutation and not all practitioners see analyzing concepts as particularly central to philosophy. One often finds talk about intuitive judgments in instances of the methodology, but, as we will see, what intuitive judgments might be and whether they really play a central role in the methodology are contested issues. The methodology incorporates thought experiments, but just what doing so amounts to also remains a contested issue.

Here is one thing I think we can say with confidence. Gettier's paper is widely taken to be a paradigm example of the kind of philosophical methodology exhibited in works that take his paper and other works such as Kripke's *Naming and Necessity*, Putnam's "The Meaning of 'Meaning'," Burge's "Individualism and the Mental," Thomson's "A Defense of Abortion" and "The Trolley Problem," Jackson's "Epiphenomenal Qualia," etc--as research landmarks. This is the kind of methodology people who have been discussing philosophical methodology in the

recent literature have been most concerned with. For convenience, in this paper I'll just call it philosophical methodology without any qualification. My characterization of the methodology isn't intended to help just anyone no matter how unfamiliar with it to understand what I have in mind; here I am simply locating my topic for those already somewhat familiar with it.

Gettier doesn't talk about intuitive judgments in his paper. Instead, after a bit or preliminary discussion, he describes two familiar cases, the first in which Smith forms a belief in (e) and the second in which Smith forms a belief in (h):

(e) The man who will get the job has ten coins in his pocket.

(h) Either Jones owns a Ford, or Brown is in Barcelona.

With respect to the first case Gettier writes "In our example, then, all of the following are true: (i) (e) is true, (ii) Smith believes that (e) is true, and (iii) Smith is justified in believing that (e) is true. But it is equally clear that Smith does not *know* that (e) is true..." and with respect to the second case Gettier writes "Smith does *not* know that (h) is true, even though (i) (h) *is* true, (ii) Smith does believe that (h) is true, and (iii) Smith is justified in believing that (h) is true" (Gettier 1963). On the basis of these judgments about the cases Gettier concludes that justified true belief is not sufficient for knowledge.

There is a standard view about the philosophical methodology of which Gettier's paper is supposed to be a paradigm. On this view Gettier's judgments about his cases are *intuitive* judgments, and reflection on the role they play in his discussion *prima facie* motivates the following four theses about such intuitive judgments and the philosophical methodology in which they figure:

(A) Intuitive judgments form an epistemically distinctive kind.

(B) Intuitive judgments play an epistemically privileged role in philosophical methodology.

(C) If intuitive judgments play an epistemically privileged role in philosophical methodology, then their role is to be taken as given inputs into generally accepted forms of reasoning.

(D) Philosophical methodology is reasonable.

It is difficult to deny the *prima facie* motivation. (A) Gettier's judgements about his cases do seem to be epistemically different from other kinds of judgments. They are not obviously perceptual, introspective, or based on memory, testimony, or inference. (B) The judgments do

seem to drive his argument: it is in light of them that he motivates his main thesis, that justified true belief is not sufficient for knowledge. (C) It seems that Gettier takes his judgments as givens. He does not argue *for* them. Rather, using standard logical reasoning, he argues *from* them. Logically it just can't be that both justified true belief is sufficient for knowledge and Gettier's judgments about his cases are true. (D) Gettier's paper is very convincing. It convinced almost everyone who read it that justified true belief is not sufficient for knowledge, and this consensus is on its face a reasonable one.

So we have what I'll call the standard view of philosophical methodology and its motivation by taking Gettier's paper as a paradigm. The standard view has come under criticism from a number of different directions in recent years. Williamson (2004, 2008, 2013) has criticized (A). Cappelen (2013) and Deutsch (2010, 2015) have criticized (B). Negative experimental philosophers have criticized (D) (here I take Swain et al. 2008 to be representative). (C) has been something of a fixed point, however. If (C) is true, then the reasonableness of philosophical methodology depends on the quality of intuitive judgments as given inputs into generally accepted forms of reasoning. Negative experimental philosophers make a garbage in, garbage out argument. Defenders of the standard view such as Bealer (1998), Bengson (2013), Goldman and Pust (1998), Ludwig (2007), Nagel (2012), Sosa (2007a, 2007b), etc respond by denying the garbage in step.

My own view is that (C) is mistaken. I will discuss that in due course. But first I want to explore some of the arguments against the other pieces of the standard view of philosophical methodology. I will suggest that these pieces of the standard view hold up under scrutiny, though our understanding of them will have to shift somewhat in light of the rejection of (C). Here is how I will proceed. I will discuss (A) and (B) in order, first setting out the negative experimental challenge to (D) as a framework within which to see recent challenges to them. Then I will come to my own worries about (C), which will suggest an alternative account of how to defend (D) in response to work by negative experimental philosophers.

### The Negative Experimental Challenge

Experimental philosophy now encompasses many different projects. Here I am interested in what's called negative experimental philosophy. This is the kind of experimental philosophy that mounts challenges to philosophical methodology on the basis of data about the results of surveys posing the sorts of thought experiments figuring in that methodology to their

participants. The data are supposed to provide a basis for challenging philosophical methodology because they suggest that intuitive judgments about philosophical thought experiments are biased by factors such as cultural background, socioeconomic status, emotional state, and order of presentation that are philosophically irrelevant.

Consider, for example, what (Swain et al 2008; 140 - 141) say in light of their own and others' experimental results from surveys:

To the extent that intuitions are sensitive to these sorts of variable they are ill-suited to do the work philosophers ask of them. Intuitions track more than just the philosophically-relevant content of the thought-experiments; they track factors that are irrelevant to the issues the thought-experiments attempt to address. The particular socio-economic status and cultural background of a person who considers a thought experiment should be irrelevant to whether or not that thought-experiment presents a case of knowledge. Such sensitivity to irrelevant factors undermines intuitions' status as evidence.

Nothing I say will hinge on details about the surveys or the experimental methods that negative experimental philosophers have employed. My interest is in the reasoning that proceeds from data about the results of the surveys to the conclusion that philosophical methodology is flawed, and here I will take Swain et al's discussion to be representative. It will be useful to zoom in a bit and reveal some of its fine structure, however.

One of the main novelties in experimental philosophers' own methodology is that they do not just survey the judgments of professional philosophers. They survey the folk. So the first phase in their reasoning focuses on folk judgments and folk intuitions, where I use "folk judgments" to mean the answers folk give to the surveys and "folk intuitions" to mean the intuitions whose contents those answers are supposed to express. We might render the first phase in negative experimental reasoning as follows:

- (1) Surveys show that folk judgments about thought experiments are influenced by factors that do not track the truth about their subject matter.
- (2) If folk judgments about thought experiments are influenced by factors that do not track the truth about their subject matter, then this is because folk intuitions about thought

experiments are influenced by factors that do not track the truth about their subject matter.

- (3) So folk intuitions about thought experiments are influenced by factors that do not track the truth about their subject matter.

Some defenders of philosophical methodology critique the negative experimental challenge at this first phase. They might reject (1) by criticizing the experimental support for it (Sosa 2007a, 2007b, Nagel 2012). Or they might reject (2) and (3) by arguing that patterns of judgments in surveys are not good guides to patterns of intuition (Ludwig 2007, Bengson 2013, Chudnoff 2013, but see also Weinberg and Alexander 2014).

The aim of negative experimental philosophy is to pose a challenge to philosophers, not the folk. So there needs to be some bridge connecting the conclusion about folk intuitions to a claim about philosophers' intuitions. This is the second phase:

- (4) Folk intuitions and philosophers' intuitions are subject to the same influences.  
(5) So philosophers' intuitions about thought experiments are influenced by factors that do not track the truth about their subject matter.

Some defenders of philosophical methodology object to this second bridging phase. They think that philosophical training and practice protects philosophers' intuitions from the biases that influence folk intuitions. This is at least one aspect of the so called "expertise defense." Early proponents include (Kauppinen 2007; Ludwig 2007; Sosa 2007a, 2007b). (Nado 2014) is a helpful review of further developments.

Finally, while claims such as (3) about folk intuitions and (5) about philosophers' intuitions are interesting in themselves, the result of the negative experimental challenge should be about philosophical methodology, not intuitions. Hence the third phase of the negative experimental reasoning:

- (6) If philosophers' intuitions about thought experiments are influenced by factors that do not track the truth about their subject matter, then it is unreasonable to accord intuitive judgments expressing them an epistemically privileged role in philosophical methodology.

- (7) Philosophers' intuitive judgments about thought experiments are accorded an epistemically privileged role in philosophical methodology.
- (8) So philosophical methodology is unreasonable

Some defenders of philosophical methodology object to the third phase of the negative experimental reasoning. Their criticisms of negative experimental philosophy are radical, however, in that they derive from criticisms of what I've been calling the standard view of philosophical methodology. The strategy is to undermine the negative experimental challenge by rejecting the standard picture of philosophical methodology that it presupposes.

One form this strategy takes is to deny (B) in that picture (cf. Cappelen 2013; Deutsch 2010, 2015). This is the claim that intuitive judgments play an epistemically privileged role in philosophical methodology. If this is untrue, then the negative experimental challenge breaks down at (7) since philosophers' intuitions about thought experiments in particular are not accorded an epistemically privileged role in philosophical methodology. A second form that the strategy takes is to deny (A) in the standard picture (cf. Williamson 2004, 2008, 2013). This is the claim that intuitive judgments form an epistemically distinctive kind. If (A) is untrue, then the negative experimental challenge breaks down at (7) once again, but for a different reason: there is no epistemically distinctive class of judgements that might or might not be accorded an epistemically privileged role in philosophical methodology. Philosophers do rely on their judgments about thought experiments. But since there is nothing epistemically distinctive about these judgments, there can be no grounds for skepticism about them that do not disastrously generalize to grounds for skepticism about our judgments in general (cf. Williamson 2004, 2008).

In the next two sections I consider these radical defenses of philosophical methodology, focusing on Williamson's challenge to (7) via a challenge to (A) first, and Cappelen and Deutsch's challenge to (7) via a challenge to (B) second.

### The Nature of Intuitive Judgments

What are intuitive judgments? There is a traditional answer. Suppose we ask: what are perceptual judgments? The natural answer is that they are judgments formed by taking a perceptual experience at face value. Say you look out your window and see a palm tree. You

have a visual experience as of a palm tree. Suppose you have no reason to doubt the veracity of your visual experience, so you simply acquiesce in its portrayal of your surroundings. That is, you take your visual experience at face value. In doing so you now not only have an experience as of it being the case, but also make a judgment, that there is a palm tree about. This judgment is a perceptual judgment.

The traditional view about intuitive judgments is that they are analogous to perceptual judgments. There are intuition experiences. They portray matters more abstract than those concerning your surroundings, such as those concerning mathematics, metaphysics, and morality. And intuitive judgments are those judgments that you form when you take such intuition experiences at face value. Here is a characteristic expression of this traditional view:

You will surely admit that you are less certain of the presence of the objects you can see than of the truth of the proposition 'I am thinking, therefore I exist.' Now this knowledge is not the work of your reasoning or information passed on to you by teachers; it is something that your mind sees, feels and handles; and although your imagination insistently mixes itself up with your thoughts and lessens the clarity of this knowledge by trying to clothe it with shapes, it is nevertheless a proof of the capacity of our soul for receiving intuitive knowledge from God. (Descartes 1991, pg 331)

Descartes expresses the idea that bits of intuitive knowledge (i.e. intuitive judgments that amount to knowledge) are based on experiences analogous to perceptual experiences (e.g. experiences of seeing, feeling, and handling), but which provide us with a kind of access to reality that is different from the kind we get through reasoning, testimony, or sensation.

Few current defenders of the standard picture of philosophical methodology outlined in the introduction would follow Descartes very far in how he thinks about intuitive judgments and intuition experiences. Most would go as far as claim (A), however. This is the claim that intuitive judgments form an epistemically distinctive kind. Just *what makes* intuitive judgments epistemically distinctive is a contested issue. It seems to be fairly common ground, however, that Descartes was correct in thinking that, no matter what accounts for this fact, it is indeed a fact that intuitive judgments are not based on sensory experience. They are epistemically distinctive in that they are, in some reasonable sense, a priori.

Williamson has long opposed various more or less specific ways of demarcating a special class of intuitive judgments that are supposed to play an epistemically privileged role in

philosophical methodology (Williamson 2004, 2008). Here I will focus on his most recent onslaught, (Williamson 2013), which cuts to the core by purporting to show that a priority itself is not an epistemically significant feature of judgments.

Williamson invites us to consider the following two truths, the first a priori and the second a posteriori:

- (1) All crimson things are red.
- (2) All recent volumes of *Who's Who* are red.

He describes the details of how a person, Norman, might come to know each. Roughly: Norman imagines crimson things and recognizes them to be red; Norman imagines recent volumes of *Who's Who* and recognizes them to be red. The psychological processes are very similar. And this is what suggests to Williamson that the a priori/a posteriori distinction is “epistemically shallow”:

The problem is obvious. As characterized earlier, the cognitive processes underlying Norman's clearly a priori knowledge of (1) and his clearly a posteriori knowledge of (2) are almost exactly similar. If so, how can there be a deep epistemological difference between them? But if there is none, then the a priori-a posteriori distinction is epistemologically shallow.

It would be mistaken to reason solely from the premise that two processes are psychologically similar at some level of description to the conclusion that they are epistemically similar (cf. Malmgren 2011). But Williamson supplements the above line of argument with supporting epistemological considerations.

Reflection on the roles of Norman's previous sensory experiences of crimson things and recent volumes of *Who's Who* suggests to Williamson that they are both “more than purely enabling but less than strictly evidential” in grounding his knowledge of (1) and (2). They are supposed to be more than purely enabling because they impact the reliability of the psychological processes resulting in Norman's judgments. They are supposed to be less than strictly evidential because they need not be preserved, by memory say, in a form that enables Norman to cite them as considerations in favor of (1) and (2), but might instead retain their



significance precisely because of how they shaped the psychological processes resulting in those judgments.

The fact that something impacts the reliability of the psychological processes resulting in a judgment, however, does not show that it does more than merely enable that judgment. The quantity of oxygen in the room in which you are contemplating a question impacts the reliability of the psychological processes resulting in your judgment about that question. But the quantity of oxygen in the room does no more than merely enable you to make that judgment. One might complain that the quantity of oxygen in the room is not of the right category for us to even ask whether it is more than merely enabling a judgment. I agree. But there remains the question of why not, if having an impact on the reliability of psychological processes resulting in judgments is our test.

Better tests for whether something does more than merely enable a judgment should focus on properly epistemic dependencies, such as those revealed by epistemic defeat. Suppose, for example, Norman learns that all his previous sensory experiences as of crimson things were hallucinations. He never genuinely saw anything crimson. Does that undercut the justification he has for believing (1) and therefore make it so that he does not know (1)? No. It does not matter whether his previous sensory experiences as of crimson things were hallucinations. Suppose Norman learns that all his previous sensory experiences as of recent volumes of *Who's Who* were hallucinations. He never genuinely saw any recent volumes of *Who's Who*. Does that undercut the justification he has for believing (2) and therefore make it so that he does not know (2). Yes. It does matter whether his previous sensory experiences as of recent volumes of *Who's Who* were hallucinations.

These considerations do not just show that Norman's justification for believing (2), but not his justification for believing (1), is open to empirical defeat. Plausibly both are open to empirical defeat of some sort or another (cf. Casullo 2003). My observation concerns a specific form of defeat, namely undercutting rather than overriding defeat. The information Norman acquires does not just outweigh the justification he has for believing (2) but fail to outweigh the justification he has for believing (1). Rather, the information Norman acquires makes it so that he no longer has any justification for believing (2) but fails to make it so that he no longer has any justification for believing (1). Contrast cases in which Norman learns that experts say that not all crimson things are red or that not all recent volumes of *Who's Who* are red.

There is a variant on the above case that is worth noting. Suppose in fact Norman's previous sensory experiences as of crimson things and as of recent volumes of *Who's Who*

were hallucinations--but he does not learn this. Plausibly the mere fact neither undercuts the justification he has for believing (1) nor undercuts the justification he has for believing (2). Still, the mere fact does make a difference with respect to what he knows. Even if it is a fact that Norman's previous sensory experiences as of crimson things were hallucinations, still Norman knows (1). One might lend support to this judgment by noting that hallucinations suffice to enable one to ascertain various color relations--such as similarity and relative brightness (cf. Johnston 2004). But if it is a fact that Norman's previous sensory experiences as of recent volumes of *Who's Who* were hallucinations, then Norman does not know (2). Here we find the presence of a another epistemic dependence on previous experience that is absent in Norman's judgment of (1).

The foregoing gives us reason to reject Williamson's claim that Norman's previous sensory experiences are playing a "more than purely enabling but less than strictly evidential" role in grounding his knowledge of both (1) and (2). With respect to (1) Norman's previous sensory experiences are no more than purely enabling as is shown by the irrelevance of whether they are hallucinations and the irrelevance of whether Norman knows that they are hallucinations. The epistemic qualities of the previous experiences do not make a difference to the epistemic qualities of Norman's judgment of (1). Further, with respect to (2) one might argue that Norman's previous sensory experiences are *no less than strictly evidential*. This is suggested by the relevance of whether they are hallucinations and the relevance of whether Norman knows that they are hallucinations. The epistemic qualities of the previous experiences do make a difference to the epistemic qualities of Norman's judgment of (2). There remains the question of how the experiences can be no less than strictly evidential since they need not furnish Norman with considerations he can cite in favor of (2). But it might be that one possesses and relies on lots of evidence that one cannot cite in the form of considerations (cf. Chudnoff forthcoming).

The fact that Norman's judgment of (1) is a priori marks at least two epistemically deep features of it: it cannot be defeated by calling into question the veridicality of Norman's previous sensory experiences and the appropriate connection to the facts that its status as knowledge demands is independent of whether Norman's previous sensory experiences appropriately connected him to his surroundings.

What does this tell us about Gettier's judgment to the effect that Smith's justified true belief in (e), say, does not amount to knowledge? About *this* judgment not much. But I am inclined to think that this is not a good example of an intuitive judgment anyway. This can sound

perverse. But if we aim to learn something about Gettier by reflection on Norman, then we shouldn't do so by comparing Gettier's judgment about Smith with Norman's judgment of (1). Rather, we should introduce another of Gettier's judgments and another of Norman's judgments and consider a total of four judgments:

(G1) Gettier's judgment that Smith's belief in (e) does not amount to knowledge.

(G2) Gettier's judgment that justified true belief is not sufficient for knowledge.

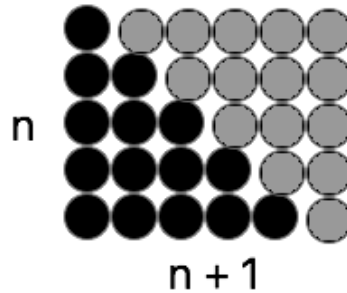
(N1) Norman's judgment that this imagined instance of crimson is red.

(N2) Norman's judgment of (1), that all crimson things are red.

(N1) is one of the judgments Norman makes during the imaginative endeavors that enable him to make judgment (N2). (N2) is Norman's a priori, and we might add intuitive, judgment. Analogously, (G1) is a judgment Gettier makes during the imaginative endeavors--the thought experiments--that enable him to make judgment (G2). Its etiology and epistemology are obscure. Perhaps much of what Williamson says about it--e.g. that it results from exercising capacities to apply epistemic concepts to real cases along with capacities to apply concepts we can apply to real cases to imagined cases--is correct. Either way, I think (G2) is clearly among Gettier's a priori, intuitive judgments. It is a priori and intuitive in just the way that one's judgment that true belief is not sufficient for knowledge is when one considers cases of lucky guesses, or that one's judgment that belief is not sufficient for knowledge is when one considers cases of false beliefs. These are the sorts of judgment Descartes is talking about in the passage quoted above.

I think it is a good idea to understand thought experiments such as Gettier's as analogous to imaginative endeavors such as Norman's. Both can be compared to the use of pictures in grasping mathematical truths. Here is an example:

Sum of the first n numbers  
 $1 + 2 + 3 + 4 + 5 + \dots + n = n(n+1)/2$



Seeing or imagining such a picture helps you grasp intuitively and know a priori the fact that the sum of the first  $n$  numbers is  $n(n + 1)/2$ . In the course of the endeavor you might make other judgments such as that the black array and the gray array contain the same number of dots. Similarly, imagining--or perceptually encountering, as Williamson has emphasized--Gettier cases helps you grasp intuitively and know a priori the fact that justified true belief is not sufficient for knowledge. In the course of the endeavor you might make other judgments such as that Smith's belief in (e) does not amount to knowledge.

Williamson might accept the analogy and argue that this just shows the shallowness of the a priori, and intuitiveness, of the mathematical judgments. But that is plausible only if what he says about Norman is plausible, and I've already given reasons for thinking it is not. The intent of my analogy is not to add anything to that discussion. Rather, it is to locate just which judgment of Gettier's we should regard as the paradigmatically epistemically distinctive one. In my view it is the judgment that justified true belief is not sufficient for knowledge.

### The Centrality of Intuitive Judgments

The title of this section is drawn from Cappelen's target in his book *Philosophy Without Intuitions*, namely:

Centrality (of Intuitions in Contemporary Philosophy): Contemporary analytic philosophers rely on intuitions as evidence (or as a source of evidence) for philosophical theories. (Cappelen 2013, pg. 3)

Developing ideas from an earlier paper (Deutsch 2010), Deutsch has also written a book-length criticism of a similar thesis:

(EC1) Many philosophical arguments treat the fact that certain contents are intuitive as evidence for those very contents. (Deutsch 2015, pg. 37)

My claim (B) says that intuitive judgments play an epistemically privileged role in philosophical methodology, and plausibly to “rely on intuitions as evidence” and to “treat the fact that certain contents are intuitive as evidence” are two ways of according intuitive judgments epistemic privilege. But I’ve intentionally left the notion of epistemic privilege vague. The core idea, which can be developed in different ways, is that intuitive judgments play a role in philosophical methodology that reflects their epistemically distinctive features, features of the sort discussed in the previous section. My own preference is to say: just as we make justified perceptual judgments on the basis of perceptual experiences, so we make justified intuitive judgments on the basis of intuition experiences. This is something that Cappelen and Deutsch deny.

Before getting to the main business of this section I should make two preliminary points. First, Cappelen and Deutsch devote a good deal of space to discussing what philosophers say or do not say using terms such as “intuition,” “intuitive,” “intuitively,” and the like. I’m not going to focus on this part of their challenge to (B). I’m going to focus on what they say about examples of philosophical practice, and in particular about our paradigm example of that practice--Gettier’s paper. Second, Cappelen and Deutsch take Gettier’s intuitive judgments to include the judgment that Smith’s belief in (e) does not amount to knowledge. As noted in the previous section I think this is not the best example. In my view one should focus on more general claims such as that justified true belief is not sufficient for knowledge. For the purposes of this section, however, I will set this point aside and follow Cappelen and Deutsch in focusing on Gettier’s judgments about Smith.

Above I quoted some of what Gettier says about Smith and (e) in his 10 coins case. The passage, however, extends beyond what I quoted. Here is a fuller excerpt, with the additional text in bold:

In our example, then, all of the following are true: (i) (e) is true, (ii) Smith believes that (e) is true, and (iii) Smith is justified in believing that (e) is true. But it is equally clear that Smith does not *know* that (e) is true; **for (e) is true in virtue of the number of coins in**

**Smith's pocket, while Smith does not know how many coins are in Smith's pocket, and bases his belief in (e) on a count of the coins in Jones's pocket, whom he falsely believe to be the man who will get the job.** (Gettier 1863)

Cappelen and Deutsch interpret the text in bold as an argument for Gettier's intuitive judgment that Smith's belief in (e) does not amount to knowledge. Deutsch writes:

The fact that this argument is present in Gettier's very short paper refuting the JTB theory, which is supposed to be one of the clearest examples we have of a piece of analytic philosophy that depends on taking intuitions as evidence--and, indeed, as the *only* evidence--for judgments about thought experiments, shows that the view of the nature of analytic philosophy that takes it to rely heavily on intuitions as evidence is almost certainly mistaken. If there are arguments for intuitive judgments about thought experiments in Gettier's paper, then they are bound to be found in many other papers in analytic philosophy besides. (Deutsch 2015, pg. 82)

Cappelen (2012, pg. 194) makes a similar point about Gettier's paper, after making the case that such arguments for intuitive judgments about thought experiments can indeed be found in many other papers, no less than ten classics of analytic philosophy in fact.

Here, then, are two theses:

Intuition: Gettier and his readers make a justified judgment that Smith's belief in (e) doesn't amount to knowledge on the basis of an intuition experience.

Inference: Gettier and his readers make a justified judgment that Smith's belief in (e) doesn't amount to knowledge on the basis of an inference from supporting considerations.

According to Cappelen and Deutsch Inference, but not Intuition, is true here and analogues of Inference, but not analogues of Intuition, are true elsewhere with respect to analogous moments in philosophy, and this fact gives us good reason to reject Centrality, (EC1), (B), and the like. As Cappelen (2014) and Deutsch (2016) have already acknowledged, however, the mere *presence* of supporting considerations does not by itself settle that Inference, but not Intuition, is true. The

supporting considerations might be present precisely to enable the intuition experience (cf. Bengson 2014, Koksvik 2013). How might we decide?

Contrast the following cases.

Considerations Enabling an Intuition	Considerations Constituting an Inference
<p>The sum of the first <math>n</math> numbers is <math>n(n + 1)/2</math>. Consider the sum of the first 5 numbers. You can write it going from 1 to 5 or from 5 to 1:</p> $1 + 2 + 3 + 4 + 5$ $5 + 4 + 3 + 2 + 1$ <p>Notice that if you add the the first representation of the sum to the second, then the result is <math>6 + 6 + 6 + 6 + 6</math>. That is, twice the sum of the first 5 numbers is <math>5 \times 6</math>, and so the sum of the first 5 numbers must be <math>(5 \times 6)/2</math>. Clearly we can do this for any number and in general the sum of the first <math>n</math> numbers is <math>n(n + 1)/2</math>.</p>	<p>The sum of the first <math>n</math> numbers is <math>n(n + 1)/2</math>. Take 0. The sum of the first 0 numbers is <math>n(n + 1)/2</math>, since <math>0(0 + 1)/2 = 0</math>. Now take some arbitrary number <math>n</math> and suppose the sum of the first <math>n</math> numbers is <math>n(n + 1)/2</math>. It follows that the sum of the first <math>n + 1</math> numbers is <math>[(n + 1)(n + 2)]/2</math>, for if the sum of the first <math>n</math> numbers is <math>n(n + 1)/2</math>, then by familiar algebraic manipulations: <math>n + (n + 1) = n(n + 1)/2 + (n + 1) = [n(n + 1) + 2(n + 1)]/2 = [(n + 1)(n + 2)]/2</math>. So the proposition is true for 0 and if the proposition is true for <math>n</math>, it is also true for <math>n + 1</math>. It follows by mathematical induction that in general the sum of the first <math>n</math> numbers is <math>n(n + 1)/2</math>.</p>

I've given two ways of talking someone through to the claim that the sum of the first  $n$  numbers is  $n(n + 1)/2$ . I claim that the first way illustrates considerations enabling an intuition and the second way illustrates considerations constituting an inference. Here is a key difference between them:

Different Constitution. If you infer  $c$  from  $p_1 \dots p_n$ , then your justification for believing  $c$  is constituted by your justification for believing  $p_1 \dots p_n$ . Say your justification for believing in the principle of mathematical induction is constituted by the testimony of a textbook. Then in the inference case your justification for believing the formula is partly constituted by testimony. If consideration of  $p_1 \dots p_n$  enables your intuition that  $c$ , then your

justification for believing  $c$  need not be constituted by your justification for believing  $p_1 \dots p_n$ . Rather, it is constituted by your intuition. Say your justification for believing that  $4 + 2$  is  $6$  is constituted by the testimony of a textbook. You learned this in school and just haven't thought about it since. Nonetheless, in the intuition case your justification for the formula need not be partly constituted by testimony.

A number of different hallmarks of inference are consequent on or closely related to this key distinguishing feature.

First, inferences do not have a very flexible construction. If you infer  $c$  from  $p_1 \dots p_n$ , then your justification for believing  $c$  is different from the justification you would have for believing  $c$  were you to take into account alternative considerations,  $p_1^* \dots p_n^*$ . So if the argument in the inference case invoked different algebraic manipulations or a variant on the principle of mathematical induction your justification for believing the formula would be different.

Second, the justification you have by inference is no stronger than the justification you have for the supporting considerations. If you infer  $c$  from  $p_1 \dots p_n$ , then your justification for believing  $c$  is no stronger than your justification for believing  $p_1 \dots p_n$ . So if you are shaky on mathematical induction, then your justification for believing the formula might be rather weak.

Third, the justification you have by inference inherits the defeasibility conditions of the justification you have for the supporting considerations. If you infer  $c$  from  $p_1 \dots p_n$ , then whatever defeats your justification for believing one of  $p_1 \dots p_n$  defeats your justification for believing  $c$ . If a recognized authority plays a trick on you and tells you that mathematical induction is illegitimate, then that will weaken your inferential justification for believing the formula.

Fourth, the constitution of your justification for a judgment is, at least in many cases, reflected in the phenomenology of your experience of making that judgment. In many cases what it feels like to infer  $c$  from  $p_1 \dots p_n$  reflects the fact that you take  $p_1 \dots p_n$  to support  $c$ . And in many cases what it feels like to intuit  $c$ , on the other hand, reflects the fact that you see, or at least seem to see, into the truth of  $c$  on its own merits.

Now consider Gettier's judgment that Smith doesn't know (e) and the consideration he points out to the effect that Smith's belief isn't based on an encounter with the fact in virtue of which it is true. Does the consideration fit into a structure of considerations with the hallmarks of inference? Arguably no. First, it could just as well have been replaced by an anti-luck consideration without making much of a difference to the nature of the justification Gettier's discussion gives us for thinking that Smith doesn't know (e). Second, the justification we have



for thinking Smith doesn't know (e) seems to be a lot stronger than the justification we have for thinking that, say, knowledge of a fact requires some kind of encounter with that fact. Indeed, and thirdly, whatever justification we might have had for believing in such an encounter condition on knowledge has been defeated by the subsequent Gettier literature, but nothing in that literature defeats the justification readers of Gettier's paper have for thinking Smith doesn't know (e). It is not as if every time a proposed condition on knowledge is refuted participants in the discussion lose their justification for thinking Smith doesn't know (e) until they regain it by consideration of another condition. Fourth, the phenomenology of judging that Smith doesn't know (e) just isn't much like the phenomenology of making an inference, even when we are extra attentive because we have been alerted to the possibility that we are making an inference. Rather, at least in my own experience though I suspect this is true of many others as well, the considerations Gettier cites in his discussion of the judgment simply help to make it vivid in itself that Smith doesn't know (e).

Earlier I suggested that reflection on Gettier's paper *prima facie* motivated the idea expressed in (B), that intuitive judgments play an epistemically privileged role in philosophical methodology. Cappelen and Deutsch can concede the *prima facie* motivation. But their view is that further reflection on Gettier's practice shows it does not really support (B), or related claims such as Centrality and (EC1). I believe the foregoing casts doubt on their view. The mere presence of supporting considerations in Gettier's paper does not establish that his discussion of his thought experiments rests on inference rather than intuition. And indeed that discussion is much more naturally assimilated to one that provides considerations aimed at enabling an intuition rather than one that provides considerations that constitute an inference. Whether the point generalizes to other instances of philosophical methodology is a nice question.

### The Place of Intuitive Judgments in Philosophical Methodology

In his "Emendation of the Intellect" Spinoza clarifies how he understands intuitive knowledge by contrasting different ways of figuring out what number  $x$  stands in the same ratio to  $c$  as  $b$  does to  $a$ . Here is what he writes:

Three numbers are given; a fourth is required, which is to the third as the second to the first. Here tradesmen generally tell us that they know what to do to find the fourth number, for they have not forgotten the procedure which they merely learned without

proof from their teachers. Others formulate a universal axiom from their experience with simple numbers when the fourth number is self-evident, as in the case of the numbers 2, 4, 3, 6...But mathematicians, because of the force of the demonstration of Proposition 19 of Book 7 of Euclid, know what numbers are propositional to one another from the nature and property of proportion, which tells us that the product of the first and fourth numbers is equal to the product of the second and third. However, they do not see the adequate proportionality of the given numbers, and if they do see it, they see it not by the force of that proposition but intuitively, without going through any procedure. (Spinoza 1992, pg. 238)

Spinoza's picture is similar to Descartes': when, for some  $a$ ,  $b$ , and  $c$ , you find  $x$  intuitively this is because you see into the truth of  $a/b = c/x$  on its own merits, without following rules passed on by testimony or derived by reasoning or suggested by previous experience. With respect to this kind of knowledge Spinoza also writes:

By the same kind of knowledge we know that two and three are five, and that if two lines are parallel to a third line, they are parallel to one another, and so on. But the things that I have hitherto been able to know by this kind of knowledge have been very few. (Spinoza 1992, pg. 238)

And:

Now that we know what kind of knowledge is necessary for us [i.e. intuitive knowledge], we must describe the way and method by which we may come to know by this kind of knowledge the things that are needful to be known. (Spinoza 1992, pg. 239)

The key point that I want to draw attention to here is that Spinoza thinks of intuitive knowledge as something we work toward not work from. Hitherto we haven't had much of it to work from. And what we need is a way and method by which we can work toward it. Philosophical inquiry does not start with intuitive knowledge and build theories on the basis of it. Rather, philosophical inquiry has intuitive knowledge as its goal.

I do not find Spinoza's view of the place of intuition in philosophical inquiry to be particularly idiosyncratic. It is not idiosyncratic in two ways. First, it is quite common in the

history of philosophy. But I will not try to make that case here. Second, even if the view itself is not one that is commonly endorsed by analytic philosophers--by practitioners of "philosophical methodology" in the sense stipulated in the introduction--still it is a view of the place of intuition in philosophical inquiry that, I believe, holds true of what those practitioners actually do, at least to a significant extent. If that is correct, then the piece of the standard view of philosophical methodology that has to go is (C), the claim that if intuitive judgments play an epistemically privileged role in philosophical methodology, then their role is to be taken as given inputs into generally accepted forms of reasoning.

I am not able to make a full case against (C) here. My aims in the balance of this section are threefold. First, I will clarify why (B) in the standard picture of philosophical methodology does not on its own force us to accept (C). Second, I will explain how endorsing (B) while rejecting (C) provides a satisfying framework within which to read Gettier's paper. Third I will briefly explore the bearing that this framework has on the negative experimental challenge to (D), the claim expressing the reasonableness of philosophical methodology.

The standard picture of philosophical methodology combines two ideas: (B) that intuitive judgments play an epistemically privileged role in philosophical methodology and (C) if intuitive judgments play an epistemically privileged role in philosophical methodology, then their role is to be taken as given inputs into generally accepted forms of reasoning. It is tempting to think that (C) just spells out what the sort of epistemic privilege (B) ascribes amounts to. The temptation, I believe, derives from the--in my view largely correct--idea that the supposed epistemic privilege at least partly consists in being immediately, or--if, as also seems correct to me, the two can come apart--at least non-inferentially, justified. Philosophers reason in favor of philosophical theories and their reasoning bottoms out in intuitive judgments which have to be taken as given. But this is a confusion.

Epistemic immediacy is different from methodological immediacy. Suppose intuitive judgments are justified--and, for simplicity, *immediately* justified--by intuition experiences and that this is their epistemic privilege. So (B) is true. It doesn't follow that intuitive judgments are judgments that we have to start with. It doesn't follow because it could be that various intuition experiences are ones that are available to us only *after* philosophical reflection and reasoning. This idea is commonplace in discussions mathematical intuition. Responding to Hans Hahn's (1980) popularization of challenges to the reliance on intuition in mathematics deriving from supposedly counterintuitive results of late 19th and early 20th century analysis, Mandelbrot (1983, pg. 150) writes: "This Essay demonstrates that Hahn is dead wrong. To tame his own

examples, I find it necessary to train our present intuition to perform new tasks, but it does not suffer any discontinuous change of character. Hahn draws a mistaken diagnosis, and suggests a lethal treatment.” The training Mandelbrot has in mind involves substantive mathematical reflection and reasoning, such as drawing mathematical distinctions, considering mathematical examples, clarifying the meanings of mathematical terms, isolating guiding mathematical principles, exploring helpful mathematical metaphors, working through mathematical arguments, building up mathematical theory, etc. There is no reason to think intuition is any different in philosophy. In philosophy, however, the relevant intuition experiences largely depend on philosophical reflection and reasoning, such as drawing philosophical distinctions, considering philosophical examples (or thought experiments), clarifying philosophical meanings (maybe via conceptual analysis), isolating guiding philosophical principles, exploring helpful philosophical metaphors, working through philosophical arguments, building up philosophical theory, etc. The starting points in all this need not be justified judgments, and even less intuitively justified judgments. Suppose they are hunches instead. If the result is a new body of intuitively justified judgments then our overall body of judgments can come to be justified via eventual connections to them.

We can see this in Gettier. The fact that justified true belief does not suffice for knowledge had already been recognized here and there in guiding thoughts to the effect that knowledge requires a connection to reality that reasonableness and fortune cannot guarantee--thoughts, perhaps, that motivated various theological and idealist intrusions into epistemology. Gettier’s achievement was to make the fact intuitively clear. He did this in two ways. First, he clarified the relevant notion of reasonableness--or “being justified,” “having adequate evidence” having “the right to be sure.” This part of his paper hasn’t figured much in recent discussions of philosophical methodology, but to my mind it is crucial. This is the part in which Gettier says that there can be justified false beliefs and that justification can be transmitted by deduction. Second, Gettier presented his famous examples which, once one is clear about the nature of justification, make it intuitively clear there can be justified true beliefs that do not amount to knowledge. It is worth briefly mentioning another paradigmatic instance of philosophical methodology for comparison, Kripke’s *Naming and Necessity*. Kripke’s presentation and subsequent discussion of his own famous thought experiments about reference have come under much recent scrutiny. What I want to point out is the glaring, indisputable fact that the thought experiments themselves only enter the picture in the second lecture after a whole first lecture in which Kripke engages in precisely those practices that tutor

our intuition: he draws distinctions, gives examples, clarifies meanings, enunciates some guiding principles, discusses good and bad metaphors, assesses arguments, and, though he demurs from essaying a theory himself, he makes important critical contributions to the project of theory building. After working through that lecture it is very difficult not to share Kripke's intuitions about his example cases. Gettier's preliminary discussion is clearly less involved than Kripke's. But both seem to me to serve the same end, namely to enable us to have the right intuition experiences.

And this brings us to the negative experimental challenge. Let's assume for the sake of argument that the first and second phases are sound. So philosophers' intuitions about thought experiments are influenced by factors that do not track the truth about their subject matter. The third phase, recall, goes like this:

- (6) If philosophers' intuitions about thought experiments are influenced by factors that do not track the truth about their subject matter, then it is unreasonable to accord intuitive judgments expressing them an epistemically privileged role in philosophical methodology.
- (7) Philosophers' intuitive judgments about thought experiments are accorded an epistemically privileged role in philosophical methodology.
- (8) So philosophical methodology is unreasonable

Cappelen, Deutsch, and Williamson criticize (7) on the basis of radical departures from the standard picture of philosophical methodology. Perhaps the departure I am recommending also counts as radical, though I'd rather think of it as taking us back to the longer tradition of theorizing about philosophical methodology, one that includes Spinoza. Either way it provides a basis for keeping (7) but rejecting (6) and so blocking the inference to (8).

Being a philosopher might not make your intuitions immune to influences that do not track the truth about their subject matter. But it does subject your intuitions to influences that, we have reason to think, do track the truth about their subject matter. These are the influences contained in the large body of philosophical literature in which relevant distinctions are drawn, examples presented, clarifications made, principles enunciated, metaphors explored, arguments assessed, and theories constructed. We have reason to think that these influences track the truth about their subject matter because these are just the sorts of activities that good thinking consists in across disciplines.

Here is a worry. Influences on intuition incorporated into philosophical practice might guide us toward better intuitions, but...they might not: they might guide us toward worse intuitions. This is always a possibility. But it is no more grounds for skepticism about philosophical practice than is the fact that it is always a possibility that empirically based methods in other disciplines might very well be leading us to adopt false views about the world. A variant on the worry is that it is not just that the influences on intuition incorporated into philosophical practice *might* guide us toward worse intuitions, but that we have no way of telling whether they are or not. Perhaps this is part of what Weinberg (2007) has in mind when he calls philosophical practice hopeless. I do not agree, however, that we have no way of telling. It is true that there is no simple test that applies across the board. Sometimes there are relatively simple tests that apply to limited domains. For those areas of philosophy that are closely connected to other areas of inquiry tests for coherence with the well-supported results of those areas are examples of such tests. By and large, however, checks on the course of philosophical inquiry are more holistic. You try to put the pieces together--the pieces from different areas of philosophy, the pieces from other disciplines--and see whether the result is coherent and intellectually satisfying. This does not look much like the kinds of tests we have for filtering out bad observational data. But the thrust of my argument here has been that even if intuitions are epistemically akin to observations their methodological position in inquiry is quite different.

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