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The Role of Intuition

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Since its inception, experimental philosophy has been bound up with methodological questions regarding the status of intuition. Several of the most well-known early experimental studies attracted attention due to their criticisms of "traditional" intuition-based argumentation, in which a philosopher takes intuitive reactions to an imagined case to serve as evidence for or against philosophical claims. When, for example, Weinberg et al. (2001) and Machery et al. (2004) found cross-cultural variation in responses to thought experiments, they took this to provide a serious challenge to the default assumption of a "shared" set of intuitions on which they claimed traditional methodology rests.

Such "negative" projects, of course, reflect only a part of the picture. Over its brief history, experimental philosophy has developed into a cross-disciplinary subfield whose practitioners pursue diverse aims. Some experimental philosophers conceive of their project as involving systematic empirical study of intuitions *qua* intuitions, of the psychological processes that produce them, and of the conceptual frameworks that they reflect. Some view themselves as pursuing a new, more empirical approach to resolving standard philosophical questions. However, even these nonnegative projects raise serious methodological questions. Their empirical methodology is itself a challenge to the image of the philosopher's task as a fundamentally armchair-bound exercise; they suggest that intuitive judgments have a different role to play than perhaps previously thought.

Experimental philosophy in all its forms, then, invites us to reflect on the role of intuition in philosophical methodology. Do the intuitive judgments of nonphilosophers provide just as much evidence as those of philosophers?

Do they perhaps provide better evidence? Does intuition provide any evidence whatsoever, or does the empirical work emerging from experimental philosophy simply show intuitions to be hopelessly biased and inconstant? If intuition does have some evidential worth, how much? How is this evidence to be properly elicited and employed?

Ultimately, our understanding of the implications of experimental philosophy depends heavily on our understanding of the role of intuition in philosophy, and vice versa. It's unsurprising, then, that the rise of experimental philosophy has been paralleled by the emergence of an extensive literature on the evidential value of intuition. These debates are deeply relevant to an assessment of the scope and impact of experimental philosophy—indeed, many of the debates explicitly target experimental findings, or even the very cogency of using experimental methods to approach philosophical problems.

With that in mind, the aim of this paper is to introduce and taxonomize several recent arguments regarding the evidential status of intuitions in philosophy.[1] Since the particular focus of this volume is experimental philosophy of mind, an important goal will be to show how such arguments might specifically apply to intuitions as used in the philosophy of mind, as well as how experimental philosophy in the area of mind might engage with the discussed arguments.

Philosophy of mind deals especially heavily in intuition—thought experiments regarding zombies, Chinese rooms, and color-deprived neuroscientists are the coin of the realm.[2] There is, therefore, deep potential for experimental philosophy to have dramatic effects on our conception of this subfield. In the next section, we'll look at an example from philosophy of mind in order to introduce what I call the "traditional" use of intuitions in philosophy. We'll also look at how experimental philosophy has uncovered data which may make us rethink this traditional use. This will serve as an opportunity to get clearer on the notion of intuition, and on the potential questions regarding its evidential status. After this introductory case study, we'll begin an investigation of some of the major forms of argument found in the intuition literature.

1 Intuitions in philosophy of mind: A case study

In his 1978 paper "Troubles with Functionalism," Ned Block proposed a compelling thought experiment. Imagine that we were to convince each citizen

of China to implement the functional properties of a single neuron, using two-way radios for communication. Suppose we were to use this system to produce, for a single hour, a functional duplicate of your brain. Would such a system be a mind? A functionalist theory of mind would entail that it is. Block claimed that cases of this variety "embarrass all versions of functionalism in that they indicate functionalism is guilty of liberalism—classifying systems that lack mentality as having mentality" (Block 1978, p. 277). The China brain case is, at least *prima facie*, a counterexample to functionalism—for, "there is *prima facie* doubt whether it has any mental states at all—especially whether it has what philosophers have variously called 'qualitative states,' 'raw feels,' or 'immediate phenomenological qualities'" (Block 1978, p. 281).

This "prima facie doubt" involves an intuition, as Block later clarifies. Upon considering the imagined case, we seem drawn to the claim that the China brain would not be a mind—we simply feel that it must be so, though we may not immediately be capable of explaining why. The details of this phenomenon are highly debatable. Intuition has been variously conceived as a type of judgment, a type of belief, an inclination to believe, a *sui generis* propositional attitude, and so on. However, we can point to at least two features to which all sides seem to agree. First, intuitions are marked by an absence of conscious reasoning. Second, they involve a distinctive phenomenological component; this is often described in terms of "seeming." Leaving aside the deeper questions of their nature, at least for the time being, we can give a "first pass" characterization of intuitions as follows: they are states in which a certain proposition seems to be true in the absence of awareness of reasoning.

Intuitions are standardly given at least some degree of evidential weight in philosophical argumentation. That is to say, the propositions which intuition endorses are generally taken to be supported by the existence of said intuitions. The degree of support thus provided is not always clear. In some contexts, certain propositions are treated as nearly sacrosanct solely due to their intuitive appeal—the Gettier case comes to mind.[3] In other cases, it's recognized that intuition may err, and that intuitive premises ought ideally to be supported by further argumentation. Block's case falls into the latter category, at least in its original statement—after introducing the case, Block says that he aims to show that the intuition in fact rests on a rational basis.

Nonetheless, in Block's case (as in others), it still seems as though intuition plays a crucial role. Block's subsequent argumentation for a "rational basis"

appeals, for instance, to the fact that we cannot conceive of how psychology in its current form could possibly explain qualia. This is as much an intuition-based argument as is the China brain thought experiment itself. Block concedes that the arguments here are not decisive, but he does take them to shift the argumentative weight against functionalism. On the "traditional view," then, intuition provides at least some degree of support for the claim that the China brain is not a mind; it thereby provides at least some reason to suppose that case to be a counterexample to functionalism.

Let's now turn to some recent work in experimental philosophy which has bearing on the status of our China brain intuition. Knobe and Prinz (2008) found that subjects are often quite comfortable ascribing beliefs and desires to "group agents"; however, they tend to be hesitant to ascribe phenomenal consciousness to such entities. Microsoft can desire a merger—but it cannot feel depressed. Knobe and Prinz hypothesize that the physical constitution of the subject is a major determinant of our willingness to ascribe phenomenal consciousness, but that it has less effect on our assessment of nonphenomenal mental states; in particular, we seem to resist ascribing phenomenal consciousness to subjects which lack a unified physical body. If this hypothesis is right, it may explain our hesitation to grant the China brain a mind.

Now, Knobe and Prinz themselves had no iconoclastic aims when performing their studies. But at least one similar study has shown that this preference for unified physical bodies may be deeply contingent. Huebner et al. (2010) found evidence that the resistance to ascribing consciousness to group agents may be culturally local—subjects in Hong Kong showed much less reluctance to so ascribe. If these studies are taken at face value, they at least raise the possibility that our reluctance to countenance group agents is nothing more than a quirk of our own psychology—and potentially a culturally mediated quirk, at that.

The empirical work here reflects two potential routes through which experimental philosophy can give us new perspectives on classic puzzles in the philosophy of mind. First, they can propose psychological explanations for intuitions that may otherwise have seemed fairly "brute"—for instance, by proposing that we have a cognitive tendency to invoke physical criteria in our assessment of whether something is a potential experiencer. Second, they can challenge the evidential status of those intuitions, through pointing to factors

such as cultural background which may affect intuition in inappropriate ways. This latter leads us to the first major argument type found in the intuition debates—what I will call the "variation argument."

2 The variation argument

'Variation arguments' are those which appeal to the phenomenon of variation in intuition, either within or across subjects, to cast doubt on the evidential status of intuition. Arguments based on variation share the following very simple argumentative structure. First, it is claimed that if intuitions about some philosophical notion N vary as a function of a certain feature F, then the project of using such intuitions to characterize the nature of N is misguided. Second, empirical evidence is offered in support of the claim that intuitions do in fact vary as a function of feature F. It is then concluded that the project of using intuitions to characterize the nature of N is misguided. This style of argument is, of course, one of the most well-known manifestations of "negative" experimental philosophy.

Perhaps the most common feature F is cultural background of the subject. In a paradigmatic study of this kind, Weinberg et al. (2001) presented subjects of either Western or East Asian background with vignettes describing a Gettier scenario. Though the Western subjects mirrored Western philosophers in judging that Gettier cases were not cases of knowledge, East Asian subjects disagreed. Similar results were found with "truetemp" cases—Western subjects' intuitions mirrored the intuitions of Western philosophers, but East Asian subjects' intuitions did not. The claim is that, unless we are willing to embrace epistemic relativism, we must reject one group's intuitions as false; however, in the absence of some sort of error theory, it would appear to be nothing but naïve ethnocentrism to doggedly hold that the Western responses are the correct ones. Weinberg et al. conclude that intuition should not be the basis for normative epistemological claims.

Cultural variation arguments are only one species of the variation argument type; variation arguments can also be constructed by substituting other features for F in the argument schema described above. In order for the first premise of the argument to be plausible, of course, the feature F which produces variation

must be irrelevant, in the sense that its variation in the cases under evaluation does not plausibly imply variation in the truth value of the hypothesis at hand. Imagine that a study shows that intuitions about whether a case counts as knowledge vary as a function of whether the person in the described case is in possession of a reliable belief-forming mechanism. No variation argument looms here, for the feature F causing the variation in intuition—possession of a reliable belief-forming mechanism—is relevant. It is plausible that the presence of this feature could affect the truth value of an ascription of knowledge.

On the other hand, imagine a study shows that intuitions about whether a case counts as knowledge vary as a function of the order in which cases are presented. A variation argument is now on the horizon, for case order is arguably irrelevant.[4] If nothing but the case order is changed, and yet our intuitions vary, then we have prima facie evidence that at least some of those intuitions are tracking something other than the truth. Swain et al. (2008) have, in fact, run just such a study; they found that subjects were much less willing to ascribe knowledge to the subject in a Truetemp case when they were first presented with a clear case of knowledge. Conversely, subjects were more likely to ascribe knowledge when they were first presented with a clear case of nonknowledge.

There is, of course, disagreement over the significance of this sort of data. Sosa (2009), for instance, has argued that the variation in Gettier intuitions observed in Weinberg et al. (2001) might be explained by a tendency for the two cultural groups to interpret the vignettes in different ways.

> It is not clear exactly what question the subjects disagree about. In each case, the question would be of the form: 'Would anyone who satisfied condition C with regard to proposition <p> know that p or only believe it?' It is hearing or reading a description of the example that enables the subjects to fill in the relevant C and <p>. But can we be sure that they end up with exactly the same C and <p>? (Sosa 2009, p. 107)

It is possible that the cultural differences between the subjects lead them to fill in details not explicitly specified in the vignettes in different ways—perhaps the two groups vary in some crucial background beliefs regarding fake barns, Ford cars, and the like.

This suggestion is of course an empirical hypothesis, but it is not without plausibility. In the context of philosophy of mind we can easily imagine, for

example, intuitions on Mary's room (Jackson 1982) differing as a result of certain background beliefs about the contents and scope of neuroscience. The cultural variation studies performed to date have not typically attempted to test for the presence of such differing background assumptions; this is a genuine weakness in the variation argument. It is, however, a defect that might be remedied by careful empirical work in the future—and this is therefore one area where experimental philosophers can continue to contribute to the intuition debate. In the meantime, the amassed variation studies should still cause the traditionalist a fair bit of concern.[5]

Sosa provides a second, similar concern for the Weinberg et al. findings—one that reflects a very common immediate reaction to the data. It is possible that the Western and East Asian groups have a purely verbal disagreement; "knowledge" might express different concepts for the two groups. There is no genuine disagreement, after all, if Westerners ascribe knowledge$_1$ to a subject in a Gettier case while East Asians withhold an attribution of knowledge$_2$.

One trouble with this suggestion, however, is that it leaves us with a serious normative question—which of the two sorts of epistemic states *ought* we to pursue? Many epistemologists take knowledge to be the primary goal of epistemic activity. However, if the above "divergent concept" case obtains, we're left with a puzzle—is knowledge$_1$ or knowledge$_2$ the primary goal of epistemic activity? There's a clear possibility that the Western tendency to value knowledge$_1$ over the East Asian knowledge$_2$ might amount to nothing more than cultural preference.[6] Of course, there are other responses one might give here. One possibility is to embrace some form of epistemic relativism—though this has not been a popular strategy. Sosa's response, by contrast, is pluralist; he argues that both concepts might express valuable epistemic goals, and that our preference for the one should not preclude our valuing the other.

Stich (2009) has rightly noted that Sosa's response becomes much less plausible when one considers extreme cases of moral disagreement. I would add that Sosa's response is also problematic for nonnormative, philosophically relevant phenomena—like those which form the subject matter of philosophy of mind. If "consciousness" picks out consciousness$_1$ for Westerners and consciousness$_2$ for East Asians, it is not at all obvious that our response should be to simply embrace both concepts as equally legitimate and valuable. In the face of divergent concepts, we must determine which notion deserves a place

in a satisfactory theory of the mind. The answer, of course, *might* be both—say, if the notions play different explanatory roles, and each of those roles is found to have theoretical import. But the point is that a theoretical question remains, even after we've successfully determined which states count as conscious$_1$ and which as conscious$_2$.

3 The calibration argument

A second form of broadly anti-intuition argument appeals to the fact that intuition appears to be resistant to calibration. The original form of this argument, found in Cummins (1998), takes as a starting point the common suggestion that the role intuition plays in philosophical inquiry is analogous to the role that observation plays in the sciences. In the sciences, of course, great care is taken to ensure that the observational procedures employed are accurate. And, Cummins claims, the typical way to do this is through calibration. Before we deem a scientific procedure—say, the use of a new telescope—to be an acceptable source of evidence, we apply that procedure to something whose properties are already known. If the output of the new procedure matches our independent knowledge, this bodes well for the procedure's accuracy; calibration, then, increases our confidence in a procedure's reliability.

Unfortunately, according to Cummins, the analogy between intuition and observation breaks down at this point, since philosophers do not attempt to calibrate intuition. This is no fault of the philosophers; intuition is, in many cases, impossible to calibrate. We simply do not have *independent* access to the sorts of facts that intuition purportedly reveals—how, other than via intuition, can we determine for example whether a certain act is morally good? One tempting response is that we infer truth from widespread agreement; the cases we calibrate our intuition on are the uncontroversial cases. This, however, would be like trying to calibrate a telescope by comparing the results it gave to those given by other telescopes of the same make. Though flaws in that particular telescope might be thus detectable, a design flaw common to the group would not.

Cummins does suggest that there are *some* cases in which intuition can be calibrated; we can, for instance, ask what notion of time our best physical

theory demands and then check intuition's deliverances against this notion. Thus, we can calibrate intuition by theory. The catch-22 for the traditionalist, according to Cummins, is that if we were in possession of a well-developed theory which afforded us independent access to the targets of intuition, we would no longer have need for intuition. "Philosophical theory in such good shape is ready to bid the Socratic midwife farewell and strike out on its own in some other department" (Cummins 1998, p. 118).

Even leaving this problem aside, however, the ability to calibrate intuition by theory will be cold comfort unless theory and intuition are found to coincide. In those cases where we have been able to check our more theoretical intuitions against our best theories, intuition does exhibit some degree of error; stock examples include the naïve comprehension principle in set theory and Kant's claim that space is necessarily Euclidian. The degree to which these errors cast doubt on intuition-based methodology is not wholly clear. They do, however, at least raise the possibility that intuition is a rather flawed instrument.

Cummins's ultimate conclusion is that "philosophical intuition is epistemologically useless, since it can be calibrated only when it is not needed" (Cummins 1998, p. 125). Within the context of philosophy of mind, one is reminded here of arguments made by the Churchlands advocating replacement of folk psychology with neuroscience (see Churchland 1981). With the development of modern sciences of mind, one might worry that intuitions simply no longer have anything to contribute; or, at least, that unanswered questions should be approached from within psychology and neuroscience rather than from within philosophy.

However, there are some clear responses that might be given to Cummins's argument as originally formulated. There's room to question the claim that calibration by theory negates the usefulness of intuition. First, Cummins neglects the possibility that theory could provide a check on some subset of intuitions regarding consciousness (for example) while nonetheless remaining silent on other cases where intuition might provide data. That is to say, intuition's applicability might extend further than the theory being used to calibrate it. Second, Cummins suggests that calibration only occurs when two sources' deliverances regarding some proposition P are compared; however, we might easily imagine other forms of calibration. There may be cases where theory only puts certain constraints on accurate intuition—as an example, we

might suppose that intuitions on the nature of mental states must be consistent with the phenomenon of neural plasticity. If they are found to be so consistent, this provides partial support for the reliability of intuition.[7]

Another response, offered by Goldman (2007), claims that calibration against independently validated procedures is simply too strict a requirement on sources of evidence. Intuition is not standardly calibrated; but neither is observation. Calibration is used on telescopes, but not obviously on vision itself. Goldman claims that basic evidential sources like perception, memory, and introspection are in general resistant to calibration. Just as in the case of intuition, we do not have procedures for accessing the relevant facts that do not ultimately rely on the faculties being tested. Yet, we do not reject perception or memory as sources of evidence.

It's plausible that we are justified in employing a basic source of evidence even if we have not performed a thorough assessment of its reliability. This is not, however, to say that such sources are immune to criticism. Goldman maintains that a weaker condition holds—we must not be justified in believing that the evidential source in question is *un*reliable. As mentioned above, there are a number of cases in which intuition has proven to be in error. But of course, we know that perception is fallible as well, and perception's fallibility does not impugn it as an evidential source. What's needed for a successful calibration argument against intuition is some more robust sense in which intuition resists calibration.

Weinberg (2007) and Weinberg et al. (2012) provide a version of the calibration argument which responds to such worries. On this modified calibration argument, the notion of calibration is expanded to involve what Weinberg et al. call "extrapolative" calibration. During the process of extrapolative calibration, we employ theoretical information about the procedure or instrument in question, in addition to external checks against an independent source. This can grant us confidence that the procedure will be reliable even in cases where independent access is not available.

In order to successfully infer from cases where we are able to perform independent checks to cases where we are not, we must have some idea of how the procedure or instrument operates. By examining the output of the procedure both over time and in varied situations, we may be able to detect unexpected and potentially problematic functioning. One test is that of consistency; if a

microscope pointed at a given object produces inconsistent readings at different times, we then have reason to doubt its accuracy. Another way to test for error is to look for features in the environment which might be illegitimately affecting the device.

If we do identify some problematic functioning via some such method, the device may be "rehabilitated"—for instance, it might be outfitted with some means of resisting the interfering factor(s). If rehabilitation is impossible, the device may instead be "restricted"—that is, we may decide to avoid using the instrument under the problematic conditions. If we are not able to successfully calibrate and subsequently rehabilitate or restrict, an epistemic source whose reliability is in doubt will be unable to regain its credibility.

Perception has been calibrated on this extended notion. Perception is indeed fallible, but through examination of its workings, we have come to know quite a bit about the circumstances under which it fails. Further, we are quite good at restricting our use appropriately—we do not, for instance, put much stock in visual perceptions in dark rooms. But it is not nearly as clear that intuition passes this test.

Weinberg (2007) notes that the real trouble for epistemic sources is not *mere* fallibility. Trouble arises only when an epistemic source suffers from unmitigated fallibility, or "hopelessness." There are at least four basic sources of epistemic "hope," the possession of which mitigates fallibility. The first of these is external corroboration, as in Cummins. A second is internal coherence—in the case of intuitions, coherence both within and across subjects. The third is detectability of margins; that is, we must have some means of identifying the conditions under which the instrument or procedure is likely to err. The final source of epistemic hope is theoretical illumination, in the form of a good theory of the workings of the instrument or procedure, explaining why it works and what has gone wrong when it doesn't.

Weinberg argues that intuition appears to lack much by way of epistemic hope. External corroboration is not forthcoming in domains like ethics; in other domains where we have been able to check intuition against theory, intuition often fares poorly. As for internal coherence, the variation studies discussed in the previous section provide substantial cause for doubt in many cases, and for an even greater number of cases we simply have insufficient data.[8] With regard to the third source of hope, intuition *may* occasionally provide the means for

detection of its own margins—intuitions can be felt more or less strongly, for instance. However, according to Weinberg (2007, p. 335), "this gradation is largely unexplored—and unexploited—by current philosophical practice"; further, strongly intuitive assertions like that of the naïve comprehension principle can turn out to be mistaken. Finally, our degree of theoretical illumination with regard to intuition is minimal; we simply have very little understanding of the causal routes through which intuition operates. To use Weinberg's terminology, intuitions are "introspectively opaque"—their most central feature, as we've seen, is that we have no access to the cognitive processes which produce them. On all these dimensions, Weinberg argues, our current ability to calibrate and rehabilitate/restrict our intuitions appears to be quite low.

Of course, some of these epistemic failings may be remediable; in particular, we may hope to eventually formulate a theory of intuition which is as rich and explanatory as is our current understanding of the workings of vision. Indeed, this is an area where experimental philosophy has much potential to contribute to the debate—after all, many experimental philosophers take the characterization of the psychological mechanisms underlying intuition to be their primary goal. In the area of philosophy of mind, we have a reasonably substantial start on characterizing such mechanisms, both from recent experimental philosophy as well as from the more established psychological literature relating to, for example, folk psychology. Of course, even if experimental philosophy does eventually provide, or help to provide, an adequate theory of intuition, it is still at this point an open question whether such a theory would support or undermine our confidence in our intuitions. We cannot yet successfully calibrate intuition; once we can, we may discover that intuition's flaws are so thorough that a program of rehabilitation/restriction would not be worthwhile.

4 The restriction argument

It is possible to hold that intuition is indispensable to philosophical inquiry while simultaneously arguing that its current usage is overly promiscuous. Michael Devitt, Hilary Kornblith, and Brian Weatherson have each suggested

that our use of intuition should be restricted rather than eliminated. This is not to imply that the anti-intuitionists discussed in the previous sections necessarily aim to reject intuition across the board, though in some cases they have made claims that suggest such a view. Restrictionists differ from the philosophers already discussed in that they in fact offer *positive* accounts of the value of intuition. The restrictions they suggest emerge as direct consequences of those positive views.

For Michael Devitt, the restrictionist position is prompted by his view that intuitions are simply a species of theory-laden, empirical judgments—as opposed to a special sort of a priori insight. Intuitions, according to Devitt (2006), differ from other empirical judgments only in that they are made in the absence of conscious reasoning. We can identify two types of intuitions which play a role in inquiry. The first are the sorts of intuitions by which we identify members of a given kind under investigation; our intuitions that this is an F but this is not. Call this "basic" intuition. The second sort of intuition, which we might call "rich" intuition, provides more general judgments about the Fs identified by the basic intuitions; a typical rich intuition would be something like "belief plays a central role in producing action."

There are two stages to an investigation into the nature of a given kind, whether that investigation is philosophical or scientific. During the first stage, we must identify uncontroversial cases of the kind to be investigated. Often this is done in the absence of any theory of the kind we are interested in; in such a case, basic intuitions are crucial. The best sources of appropriate basic intuitions are those persons who have the most empirical expertise with the kind at hand. In some cases—Devitt uses pains as an example—this may be "the folk." In cases where some scientific theory is available, however, intuitions of the relevant scientists are preferable. This is in sharp contrast to the standard philosophical view, upon which we must take pains to avoid intuitions that have been "contaminated" by theory. Theory-contamination, in Devitt's view, is a virtue rather than a vice.

The second stage of investigation, once we have identified samples of the kind in question, is to examine those samples and determine what is "common and peculiar" to them. Rich intuitions may, at this stage, be a source of hypotheses; but they are in no way necessary. Further, as with basic intuitions, rich intuitions should be trusted only insofar as they reflect strong empirical

expertise with the kind at hand. The best method of investigation is direct, scientific investigation of the kind; and where intuition and experimentation conflict, it is intuition which should be rejected.

Hilary Kornblith's (1998, 2002) account of the proper use of intuition in philosophy is quite similar to Devitt's. Kornblith, like Devitt, rejects the a priori view of intuition and takes the activity of philosophy to be analogous to the investigation of natural kinds in the sciences. The purpose of appealing to intuition in philosophy is to "make salient certain instances of the phenomenon that need to be accounted for . . . much like the rock collector who gathers samples of some interesting kind of stone for the purpose of figuring out what it is that the samples have in common" (Kornblith 1998, p. 134). Kornblith also agrees with Devitt that these identification intuitions are theory-laden, and that the influence of background theory (when that theory is accurate) improves rather than degrades the trustworthiness of intuition. Finally, Kornblith and Devitt both agree that this initial process of identification produces only a rough estimate of the boundaries of a class, and that further theory will in many cases show that some of the initial judgments were mistaken.

Brian Weatherson (2003) formulates his proposal for the role of intuition in the context of a defense of the justified true belief (JTB) model of knowledge. The JTB theory is widely considered to be inadequate due to the intuitiveness of Gettier counterexamples. But why should intuition trump theory in such a case? Weatherson claims that the model according to which we aim for a brute "best fit" with intuition is too crude. Instead, there are at least four separate criteria upon which to judge the success of a philosophical theory, not all of which invoke intuition.

First, it is true that a good philosophical theory should not have too many counterexamples. "While a theory can be reformist, it cannot be revolutionary" (Weatherson 2003, p. 6). Second, the theory cannot have too many undesirable theoretical consequences. To take Weatherson's example, a successful ethical theory should not imply that conspicuousness of suffering is a morally relevant feature. Third, the analysis proposed by the theory ought to be one upon which the concept analyzed turns out to be theoretically significant; *ad hoc* analyses are not successful. Finally, the analysis should be simple. Given that a theory might do better than its rivals on two or three of these measures while doing worse with regard to counterexamples, it seems that there should be at least

some cases where theory trumps intuition. Indeed, on these criteria it seems plausible that "knowledge" might mean justified true belief. Though this analysis falsifies a few of our pre-theoretical beliefs, it does well on the other three criteria, and is notably simpler than post-Gettier alternatives.

What are the consequences for experimental philosophy on the restrictionist views just mentioned? Arguably, they leave a significant role for experimental methods. If intuition holds evidential weight in some cases, but not others, then there is a clear need to distinguish the usable intuitions from those that must be abandoned. In some cases, this task may be approached via, for example, appeal to the theoretical criteria outlined by Weatherson. But this does not rule out the possibility that experimental investigation of the psychological mechanisms underlying intuition could significantly contribute to the project, as well. For instance, experimental work might reveal, as discussed in the introduction, that intuitions regarding consciousness in group agents are heavily dependent on a somewhat idiosyncratic and potentially inappropriate bias against agents without a unified physical body. This might provide reason to doubt those particular intuitions, without consequence for, for example, the more basic intuition that an average, non-brain-damaged, adult human would count as conscious.

5 The indispensability argument

We move now from arguments broadly critical of intuition, to arguments broadly in defense of intuition. Perhaps the most prima facie compelling argument supporting intuition is that it is just not possible to do without it. In one form, the argument is that intuition is simply so fundamental to reasoning that to reject all uses of intuition would result in a position of complete skepticism. This argument has been made, for instance, by Bonjour (1998) in his defense of "rational insight." Bonjour claims that in the absence of direct, immediate insight or intuition, no reasoning would be possible. Even performing a simple *modus ponens* inference requires, for example, the ability to directly see that one's premises and conclusion form an instance of the relevant argument form, as well as that the inferential pattern itself is valid. At least some very basic forms of intuition, then, must be counted as epistemically respectable.

A more narrowly focused form of the indispensability argument involves the claim that any radical anti-intuitionist thesis—that is, any thesis that claims that intuitions have no evidential weight—undermines itself. Anti-intuitionists argue that intuition should be removed from our evidential resources; but, it's argued, the premises of the anti-intuitionist's arguments can only be defended by appeal to intuition. We might call this the "self-defeat" variant of the indispensability argument.

One recent well-known instantiation of this argument type can be found in Pust (2000, 2001). Pust's target is the "explanationist" objection to the evidential status of intuition, one statement of which can be found in Harman (1977).[9] Harman claims that the best causal explanation for our having the moral intuitions we do does not advert to the truth of the intuited moral propositions, but instead merely to contingent psychological facts about moral reasoning. Because of this, we are not justified in using moral intuitions as evidence for the truth of moral facts. This argument, Pust claims, rests on an unarticulated premise involving a general "explanationist" criterion of justification, which runs as follows: one is justified in believing only those propositions which either (a) report the occurrence of judgments or observations, or (b) figure in the best explanation of the occurrence of those judgments or observations.

However, Pust claims that this explanationist criterion of justification is ultimately self-undermining, as can be seen by use of an analog of Harman's argument. The explanationist criterion suggests that we should only believe *epistemological* propositions when they either report, or figure into the best explanation of, judgments or observations. But if the best explanation for our moral intuitions does not advert to the truth of the corresponding propositions, then it is likely that the best explanation of our epistemological intuitions does not advert to the truth of the corresponding propositions. So we are not justified in using epistemological intuitions as evidence for the truth of epistemological facts. Insofar as the explanationist criterion of justification itself seems to rest on an epistemological intuition, the argument shows that we are not justified in believing in the truth of the explanationist criterion. Since that criterion was a premise in the argument itself, the argument is self-undermining.

There are two obvious places to question this argument. First, we might question the assumption that the epistemological version of the argument is as compelling as the moral version. There is surely no inconsistency in holding

that moral facts do not factor into the explanation of moral intuitings, but that epistemological facts *do* factor into the explanation of epistemological intuitings. If one could motivate the idea that moral reasoning is, for example, more subject to contingent features of our own psychology than is epistemological reasoning, then Pust's argument falls through. Such an argument might invoke the apparently greater influence of emotion on moral intuition, for instance.

Second, we might question the assumption that the explanationist criterion can only be defended via intuition. There are arguably all sorts of ways in which one could be justified in believing the explanationist criterion; notably, one could be justified in believing it because it follows from one's best epistemological theory. And belief in one's best epistemological theory could be justified because it explains all sorts of things, be they intuitions or otherwise.[10]

Another version of the self-defeat argument can be found in Bealer (1992). Bealer's argument aims at the radical empiricist who holds that one's evidence consists only of one's observations or experiences; to use Bealer's terminology, the radical empiricist wishes to formulate an intuition-free alternative to our "standard justificatory procedure." Bealer objects that the empiricist, in formulating this alternative procedure, violates its ban on intuition-based inquiry. The empiricist must surely make use of basic epistemic terms like "observation," "theory," and "explanation" in formulating her new procedure. But how does the empiricist determine what counts as an observation, as a theory, as explanation, or as justification? These basic epistemic classifications—which Bealer calls "starting points"—are arrived at via intuition, even for the empiricist. The empiricist's alternative procedure, then, inevitably undermines itself.

As before, the empiricist/anti-intuitionist might claim that she has nonintuitive justification for making the epistemic classifications that she does; more plausibly, Bealer suggests that she might claim that although she initially formulated her starting points by use of intuition, she no longer relies on intuition for her current justification. Bealer claims that this leads to a fatal dilemma. Intuitions about starting points are either reliable, or they are not; if they are reliable, then they are eligible to serve as evidence and the empiricist's rejection of them is unwarranted. If they are not reliable, then the starting point judgments that the empiricist initially formulated on the basis

of intuition are prone to error. This error, Bealer claims, will be reflected in the theories that result from those starting points—theories which include the empiricist's epistemological principles.

It's unclear why Bealer thinks that the anti-intuitionist can't claim that we employ our other cognitive resources in order to identify and expunge errors generated by our initial intuitions. There is a massive body of propositions which we are justified in believing; it's plausible that this body is sufficient for the construction of theoretical principles which could lead us to correct errors in our more unreliable classification intuitions. However, even leaving this aside, there is a more fundamental reply that one can make to this sort of self-defeat argument, and indeed to indispensability arguments in general.

The reply focuses on the apparent assumption by advocates of the indispensability argument that intuition is *monolithic*. That is, there appears to be an assumption that intuition forms some sort of unified faculty, such that granting evidential status to any intuition would thereby grant that status to them all. But it's not at all clear that intuition is so unified. The psychological mechanisms that produce, for example, epistemological intuitions are quite plausibly separate from the mechanisms underlying, for example, our use of fundamental logical rules, or our intuitions about mental states. One piece of psychological evidence in favor of such a claim is the apparent dissociability of the cognitive skills related to different types of intuition. Psychopathy provides a *prima facie* instance of selective impairment in moral reasoning, without corresponding impairment in other "intuitive" domains; autism provides the same for reasoning about mental states. Certain patterns of damage to the brain can even cause specific impairment in logical reasoning (Reverberi et al. 2009). Such phenomena are not decisive, of course, but they are suggestive of some degree of psychological heterogeneity in intuition.[11]

If we can in fact make principled, psychologically motivated distinctions between different types of intuitive judgment, then it remains an open question whether the reliability or epistemic respectability of one class of intuitions would have any bearing on the reliability of others. Thus, indispensability arguments lose much of their bite: even if a certain subset of intuitions is shown to be required, either to avoid skepticism or to prevent argumentative self-defeat, this by no means serves as sufficient reason to think that traditional methodology is wholly, or even substantially, in the clear.

Here, again, is a place where experimental philosophy has obvious potential to contribute to the ongoing debates. Insofar as experimental philosophy can help us gain insight into the actual psychological mechanisms underlying intuition, it can help us to determine whether the capacity for intuitive judgment is in fact unified, or whether it is more usefully subdivided into several fairly heterogeneous cognitive mechanisms or processes. This can in turn lead to a more nuanced understanding of the epistemological status of different varieties of intuition.

6 The parity argument

As noted in the discussion of calibration, the idea that the role of intuitions in philosophy parallels the role of perception in the sciences is prima facie attractive. Many philosophers take perception to be an uncontroversially justified, "basic" source of evidence. Could intuition be similarly basic? If it could be shown that intuition's epistemological properties are similar to perception's in some relevant ways, one might be able to thereby defend the use of intuition. Perception's evidential status is often taken to be nonnegotiable; one might be able to argue by parity that we ought to extend the same status to intuition.

A highly relevant epistemological similarity between perception and intuition is the following: both are fallible. Further, both exhibit failures which are not merely occasional or random—in many cases, the failures are systematic. This has not prompted us to abandon perception as an evidential source; Sosa (1998, 2007) argues that it should not present a reason to abandon intuition. Studies in experimental philosophy have shown that our intuitions vary when case order is reversed, or when descriptions are reframed; but, Sosa claims, this is simply analogous to perception's susceptibility to various errors in unfavorable conditions.

> Surely the effects of priming, framing, and other such contextual factors will affect the epistemic status of intuition in general, only in the sort of way that they affect the epistemic status of perceptual observation in general . . . the upshot is that we have to be careful in how we use intuition, not that intuition is useless. (Sosa 2007, p. 9)

As we saw earlier, proponents of the variation and calibration arguments have sometimes suggested that their arguments demonstrate that intuition should be wholly rejected as an evidential source; according to Sosa, however, no such conclusion is warranted. In fact, his statement implies that not even a moderate pessimism is appropriate; after all, perception is a fully respectable evidential source despite its flaws.

Weinberg's discussion of hopelessness, discussed earlier, suggests some ways in which intuition might plausibly differ from perception with regard to the epistemological impact of these sorts of errors. Sosa's suggestion that we simply employ caution only helps if we know what to be careful *for*; intuition's poor scores on Weinberg's four criteria of hopefulness imply that, at present, we are not capable of restricting intuition in appropriate ways. Our assessment of Sosa's argument depends on how deep the similarities between intuition and perception really are. Some progress on this question may be made from the armchair, but it seems clear that a deeper theoretical understanding of the cognitive mechanisms underlying intuitive judgment, such as might be provided by work in experimental philosophy, would be of central import.

We have thus far been pursuing an argument for parity between intuition and perception. There is a variant on this argument, proposed by Williamson (2004, 2007), which proceeds in a somewhat different vein. Williamson notes the indispensability and reliability of our counterfactual reasoning and our commonplace practices of applying concepts in everyday judgment. Williamson then argues that philosophical intuition, rather than being some *sui generis* mental activity, is simply an application of these sorts of basic cognitive capacities. The upshot of this is the same as for the argument for parity with perception—if you grant evidential status to the one, you had better grant evidential status to the other. Anti-intuitionist arguments, Williamson claims, apply equally well to any sort of concept application—we cannot consistently reject philosophical intuition without undermining the general practice of applying concepts. And if anti-intuitionists bite the bullet and reject concept application across the board, their position becomes one of extreme skepticism.

Note that Williamson's claim is more radical than Sosa's. It's not *just* that there is an epistemological parity between ordinary concept application and philosophical intuition, but further that there is *no* principled distinction to

be made between the two—either epistemologically or metaphysically. The traditional conception of intuition as a hyper-rational, unified, prototypically philosophical capacity turns out, upon further investigation, to be oversimplified. There's nothing epistemologically distinct about intuition.

Our assessment of this version of the parity argument will depend on whether a principled distinction can in fact be made between philosophical uses of intuition and similar, everyday forms of cognition. At least some effort has been made to so distinguish—see Weinberg (2007) for an attempt along these lines. But again, this is an area where the needed arguments will plausibly deeply involve empirical understanding of philosophical cognition. At the risk of resembling a broken record, experimental philosophers have the potential to take up the task.

7 The constitutivity argument

Constitutivity arguments are characterized by their claim that intuitions must necessarily reveal truths (at least, in suitably good cognitive conditions), due to the existence of some sort of constitutive tie between intuition and meanings or concepts. That intuition is generally reliable simply follows from the existence of this constitutive relation. This is not to suggest infallibility; it is agreed on all sides that we may still err, if we are inattentive or if we do not reflect appropriately. But these errors must lie at the level of performance, rather than the level of competence.

Bealer's version of this form of argument involves the assertion that intuition has a "strong modal tie" to the truth; and further, that the existence of this modal tie implies that philosophy is both autonomous from and authoritative over the sciences. The most compelling argument Bealer offers for the existence of a strong modal tie between rational intuition and the truth is his "multigon" example, which proceeds as follows. Suppose a woman introduces through use (as opposed to via stipulation) a new term, "multigon." She applies this term to pentagons, hexagons, and so forth, but she has not yet applied it to, nor withheld it from, triangles or rectangles. Suppose she now considers whether triangles and rectangles are in fact multigons. Supposing that she is suitably intelligent, attentive, and so forth, and that her term "multigon"

expresses a definite concept that she determinately possesses, Bealer claims that it's plausible that the woman will judge that triangles and rectangles are multigons if and only if the property of being a multigon is identical to the property of being a polygon, and she will judge that triangles and rectangles are not multigons if and only if the property of being a multigon is identical to the property of being a polygon with five or more sides. Thus, the woman's intuitions have a strong modal tie to the truth.

The argument crucially rests on the idea that the woman *determinately* possesses the concept expressed by "multigon." "Determinate" concept possession is a term introduced by Bealer, and is to be contrasted with "nominal" concept possession. We possess a concept nominally if we are able to have propositional attitudes toward propositions whose contents contain that concept. We possess a concept determinately if we possess it nominally, and in addition do not possess it "with misunderstanding or incomplete understanding" (Bealer 2000, p. 11).

At this point, however, the account becomes unsatisfying. By the definition of "determinate" concept possession given, the multigon example merely demonstrates that if we possess a concept without misunderstanding or incomplete understanding, our intuitions will necessarily be generally true. On what I take to be the standard interpretation of the word "misunderstanding," this seems to say that if our possession of a concept involves no falsehood, our intuitions about that concept will necessarily be generally true. But the critic of intuition is not going to lose much sleep over the fact that there is a strong modal tie between nonfalsity and truth.

For his account to have any bite, Bealer needs to show that we do possess philosophically relevant concepts determinately. A step toward such an argument is given by Bealer's claim that philosophical terms are "semantically stable"—that knowledge of their conditions of application does not require any contingent knowledge about the speaker's external environment (in contrast to terms like "water," whose meaning depends on the nature of the watery stuff in one's environment). Since no empirical knowledge is required in order to possess these concepts determinately, there is no barrier to determinate, a priori philosophical understanding—and, "intuitively, it is at least possible for most of the central concepts of the a priori disciplines to be possessed determinately by some cognitive agent or other" (Bealer 2000, p. 12).

The question of whether philosophical terms do in fact possess semantic stability is, to my mind, open to debate. But more importantly, there has still been no real positive explanation of the "strong modal tie." If Bealer is right, then we do not need knowledge of the contingent features of the external world in order to understand when something counts as, for example, a case of knowledge. But surely this is insufficient to guarantee the necessary reliability of our intuitions about knowledge. After all, presumably no knowledge of the contingent features of the external world is required in order to come to know the truths of mathematics; but this fact alone does not guarantee that we are reliable at mathematical reasoning. Nor does that fact explain whatever reliability our mathematical capacities may possess (indeed, our access to mathematical truths remains deeply puzzling).

Though Bealer's account, I would argue, fails to explain the proposed necessary reliability of intuition, such an explanation might be derived from an account of the nature of meaning. A meaning-based approach to the a priori accessibility of philosophical knowledge has, in fact, been offered by Frank Jackson in his book *From Metaphysics to Ethics*. Jackson argues that philosophy requires "serious metaphysics." Serious metaphysicians work with a limited ontology—for the physicalist, this ontology should more or less consist of the properties, objects, relations and so forth employed by completed physics. Most philosophically interesting terms will not explicitly occur in the language describing the fundamental ontology. However, the existence of "higher-level" entities may be entailed by the basic ontology, if the higher-level entities are supervenient on the lower-level entities. Being entailed in this way is both necessary and sufficient for an entity's inclusion in the serious metaphysician's implied ontology. Jackson calls this principle "entry by entailment."

For each entity described in a high-level vocabulary, the metaphysician must either "locate" that entity by showing how its existence is entailed by facts described in the physical vocabulary of her basic ontology, or she must eliminate the higher-level entity from her ontology entirely. Here is where conceptual analysis is required; for, according to Jackson, "conceptual analysis is the very business of addressing when and whether a story told in one vocabulary is made true by one told in some allegedly more fundamental vocabulary" (Jackson 1998, p. 28). Conceptual analysis, by examining folk

intuitions about the extensions of terms in possible scenarios, reveals the implicit understanding of the folk and uncovers the meanings of their terms, and thus the entities that will have a place in our implied ontology.

This is a genuinely explanatory constitutive approach; the fundamental idea is that the folk possess mental theories or descriptions which determine the meanings of their words. Given that one's intuitions reflect these theories, then, one's intuitions reflect facts about the meanings of one's terms.[12] Therefore, our intuitions about hypothetical cases will necessarily be by-and-large true. One potential trouble with this version of the constitutivity strategy, however, is that the divisions effected by folk theory may not be important divisions from the standpoint of scientific theory—depending on the theorist's goals, the "implied ontology" Jackson's method will generate may not be an explanatorily useful one. It is open to the anti-intuitionist to claim that philosophy should be concerned with phenomena that, for instance, aid in explanation and prediction or factor into laws; and further, that there is no reason to think that folk theory will necessarily reflect categorizations that play those theoretical roles.

Alvin Goldman's (2007) version of the constitutivity argument, by contrast, avoids this problem. His strategy is to claim that the truths revealed by intuition are simply truths about one's concepts, in the psychological sense of concept—and further, that a primary aim of philosophy is to uncover these psychological truths. On Goldman's account, possession of a concept is to be understood as possession of a psychological structure underlying one's use of a given natural-language term. Given this characterization of concepts, it seems to simply follow that possession of a concept which underlies a natural language term "F" will involve a disposition to judge "x is an F" when and only when x satisfies that concept. *What it is* to have a given concept is to have a psychological structure which disposes one to make categorizations in accordance with the content of that concept.

As with Jackson's account, this version of the constitutivity approach is genuinely explanatory; the necessary reliability of intuition is grounded in the very nature of concept possession. However, this story only really explains why, for example, *my* intuitions are reliable indicators of facts about *my* individual, psychological concepts. We may be able to move from facts about individual concepts to facts about shared concepts or word meanings, if the members of

our community have concepts which are substantially similar. Where there is substantial disagreement among members of the community, however, even this may not be possible.

Goldman acknowledges this limitation, and his account thus expresses a very modest assessment of the role of intuition. On the other hand, the account does imply that intuitions are genuinely evidential, in that they grant reliable access to truths about our personal psychological concepts; further, this evidential role is not undermined by phenomena like cultural variation. Finally, truths about personal psychological concepts are plausibly explanatorily important, particularly if one's project is avowedly psychological; Goldman will not, therefore, face the problem just raised for Jackson's implied ontology.

Goldman claims that viewing philosophical analysis as targeting psychological concepts provides justification for a good portion of our actual philosophical practices. For instance, it explains why philosophers place a high value on pre-theoretical intuition—if one's intuition is influenced by explicit theory, it will not reflect one's underlying concept. Goldman's viewpoint also squares quite well with views expressed by some of the advocates of the positive approach to experimental philosophy. For instance, Knobe and Nichols (2007) suggest that questions about the workings of the mind, including the conceptual structures underlying philosophical judgment, have been traditionally central to philosophy, and that experimental philosophy follows in that tradition by attempting to reveal interesting psychological facts about our intuitive cognition.

Of course, the psychologistic approach to philosophy does not make sense of certain other philosophical practices—for example, "biting the bullet" when one's theory produces counterintuitive results. Further, if our aim were purely psychological, undesirable theoretical features like inconsistency or ontological promiscuity would not provide a reason to reject an analysis—after all, we should not assume that our personal psychological concepts avoid contradiction or make appropriate use of Occam's razor.

One begins to suspect that current philosophical methodology often reflects a running together of both Goldman's aim of characterizing our concepts as well as a Devitt/Kornblith–type aim of delineating explanatorily useful kinds. In fact, it is entirely consistent to pursue both projects. As such, we should agree with Nichols and Knobe that there is nothing antiphilosophical about the

experimental philosopher's attempt to elucidate the psychology of intuition. In some cases, the two approaches may even complement one another; as Goldman notes in earlier writings on metaphysics, an understanding of psychology can indicate to us that some of our metaphysical distinctions are not objective, but merely reflect innate tendencies to, for example, group perceptual elements together in certain ways (Goldman 1987). Psychological investigation can provide the metaphysical prescriptivist with error theories.

8 Questioning the presuppositions

By way of conclusion, we must discuss one final, very recent argumentative category—one which involves the claim that it is a mistake to focus on intuition in the first place. This broad and diverse argument type, which we might call the *false presupposition* argument, urges that the entire dialectic of recent debates over philosophical methodology has been fundamentally misguided. Though the participants have been arguing over intuition's status as a source of evidence for philosophical theories, the truth of the matter is that philosophy doesn't rest on intuitions in the first place.

In fact, the Williamsonian parity argument briefly discussed earlier can be seen as falling into this category as well. Williamson claims that there is nothing epistemologically distinctive about intuition. He writes that "philosophers might be better off not using the word 'intuition' and its cognates. Their main current function is not to answer questions about the nature of the evidence on offer but to fudge them, by appearing to provide answers without really doing so" (Williamson 2007, p. 220). The very practice of construing philosophical arguments as relying on intuition only leads to an illegitimate "psychologizing" of the evidence—that is, to the false notion that our evidence in philosophy consists solely of psychological facts, rather than facts about, for example, knowledge or consciousness.

A similar argument against psychologization is given by Deutsch (2009). Deutsch claims that variation arguments against the use of intuition make the dubious assumption that philosophers are committed to using claims about intuition as premises in their philosophical arguments. But, Deutsch claims, philosophical arguments do not standardly rest on intuition. Machery et al.

(2004) write as though Kripke's arguments against descriptivism rest on an intuition that "Gödel" refers to Gödel. But this is false. Kripke's argument doesn't rest on the *psychological* fact that someone intuits something, it relies on the *semantic* fact that "Gödel" refers to Gödel. Deutsch's conclusion is that the prevalent misassumption that philosophy depends on intuition undermines much of current experimental philosophy.

Finally, Herman Cappelen (2012) has mounted a book-length argument against the idea that philosophy centrally relies on intuitions. Through examination of the actual text of well-known thought experiments, Cappelen argues that philosophers do not generally base their arguments on appeal to anything that might be construed as having the epistemological features assigned to intuition. When they do use terms like "intuition," philosophers typically only mean to indicate that something is pre-theoretically plausible, that it is "in the common ground" of the debate, or that they wish to hedge their claim rather than fully endorse it. Cappelen's final chapter pronounces that experimental philosophy has been "a big mistake." Experimental philosophers, both positive and negative, aim to study intuitions—but philosophers don't employ intuition in their theorizing. Thus, "the project of checking people's intuitions is philosophically pointless" (Cappelen 2012, p. 222). Experimental philosophy, Cappelen suggests, is a bankrupt enterprise.

On the contrary, it seems to me that the implications of such views for experimental philosophy are not quite so bleak. There are two separate threads running through the above arguments; the first involves the cogency of the claim that intuitions are evidence. The authors discussed above emphasize that our evidence does not consist of intuitions—our evidence consists of facts, such as the fact that the Gettier case is not a case of knowledge. Experimental philosophers have had a tendency to "psychologize" the evidence, to the detriment of their arguments. Yet, it's not at all clear why "de-psychologizing" the evidence should make investigations of intuition irrelevant to an assessment of our evidential resources. In the sciences, we might say that our evidence consists of facts rather than observations themselves; yet an assessment of the workings of our perceptual faculties is clearly relevant to an assessment of our evidential situation. Should we discover unexpected biases in vision, our assessment of which facts we can take to be evidence would surely be affected.

The other thread of argument reflects a kind of eliminativist take on intuition. That is, it's suggested that there simply isn't a natural category of mental state corresponding to the term "intuition" as ordinarily used by philosophers; hence, we cannot straightforwardly speak of philosophical judgments or arguments as being "based on intuition." There is something deeply plausible about this. Participants in experimental philosophy and in current debates over philosophical methodology have inherited a conception of the processes and methods underlying philosophical argumentation and judgment that is, to put it bluntly, old. It would be wholly unsurprising if this conception was in fact misleading in some seriously fundamental ways. Indeed, we've already discussed earlier in the paper how it's quite likely that there's no homogeneous "intuition faculty" underlying philosophical cognition. Perhaps our understanding of philosophical method is fundamentally flawed in yet deeper ways, as the authors above suggest. But the claim that any of this invalidates the very idea of experimental philosophy strikes me as wrong-headed.

Philosophers make judgments, and give arguments. Our current "theory" of such activities invokes a psychological category—intuition—that may well go the way of phlogiston or élan vital. But this in no way shows that there is no psychological story to be told about the reasoning processes that philosophers in fact employ, nor that that story (or more probably, *stories*) would be of no use to philosophy generally. It's possible that our current accounts are fairly far off the mark. There may even be fundamental methodological flaws in current experimental methods—for instance, the untutored judgments of nonphilosophers may turn out to shed no light whatsoever on the reasoning processes involved in professional philosophy (though I find this highly doubtful). Experimental philosophers may need to evolve their methods and their vocabulary, and may even need to rethink the conceptual framework upon which their investigations rest. But this is nothing more than the standard lot of the scientist—or, indeed, of any participant in any academic discipline whatsoever.

Perhaps experimental philosophy can be more usefully conceived of as the study of the psychological processes underlying reasoning about philosophical questions—whether or not that involves intuition. There's every reason to think that such study will continue to advance our understanding of philosophical method. Just as importantly, there's every reason to think

that such study increases our understanding of the mind itself. The links between experimental philosophy and psychology are close indeed, as can be seen by a quick glance through the contributions to this volume. Mental state attribution, moral judgment, agency, concept possession—all are topics investigated by psychologists as well as philosophers. No deep distinction seems likely to be forthcoming; nor would such a distinction obviously be desirable. Experimental philosophy is a young field, and numerous methodological and conceptual questions regarding its nature and its relation to traditional methodology remain to be explored. Answering these questions will be no easy task; but then, nothing in philosophy ever is.

Notes

1 The taxonomy I propose in this paper is far from exhaustive; I do, however, hope to have covered the most prominent views in the recent literature. There are a few important responses to specific anti-intuitionist arguments which do not fit into my proposed taxonomy. I have not, for example, proposed an argument type for Sosa's suggestion that the findings of Weinberg et al. (2001) can be explained by a difference in the propositions the subjects are entertaining rather than by disagreement over a particular proposition (see Sosa 2009). Specific responses of this sort will instead be discussed during exposition of the arguments they respond to, where appropriate.

2 These are all contemporary examples, but there are also earlier examples of mind-related thought experiments—for instance, Molyneux's problem (would a blind man, upon restoration of his sight, recognize shapes on this basis of previous tactile acquaintance?), Hume's claim that it is possible to have an idea of a "missing" shade of blue which one has never perceived, or Leibniz's use of a mill analogy to argue against the possibility of a mechanical explanation for perception.

3 Though, as will be discussed later, Weatherson (2003) provides a rare case where the Gettier intuition is questioned.

4 Though this claim might be contested by epistemic contextualists. See Swain et al. (2008) for discussion of this point.

5 It is worth mentioning that the "differing background beliefs" hypothesis is much less plausible for explaining away framing effect and order effect findings. Sosa in fact has a separate reply to the Swain et al. order effect findings. It is a

reply which draws an analogy between intuition and perception, and is a good example of what I call a "parity" argument. Parity arguments will be discussed in Section 2.2.

6 Of course, it may well be the case that knowledge$_1$ *is* a better epistemic goal than knowledge$_2$; the point is that this thesis cannot be defended solely via intuitions about what falls under the term "knowledge."

7 Thanks to Jonathan Livengood for bringing these points to my attention.

8 Of course, there is also substantial agreement, particularly on very basic cases such as "murder is wrong." However, it's plausible that the requirements on consistency here are rather high. Take as an example a certain make of thermometer which has been found to be quite consistent on temperatures between 10°C and 40°C, but which is fairly inconsistent in its readings when exposed to very high or low temperatures. Insofar as we need temperature readings at those ranges for whatever intellectual enterprise we are engaged in, use of that thermometer will be problematic. There's an analogy here with intuition; there may be widespread agreement on core cases, but it is often the "outlying," unusual cases that decide between philosophical theories. All plausible metaethical views entail that murder is wrong; however, they disagree on more subtle cases. Insofar as intuition is inconsistent in such cases, this is a challenge to intuition's "hopefulness."

9 I have not included "explanationist" arguments in my taxonomy of the primary arguments against intuition, simply because explanationist arguments have not been prevalent in the intuition literature over the last 15 or so years. However, Weinberg's "theoretical illumination" criterion for hopefulness perhaps reflects something of the spirit of the objection—the natural reading of his view is that philosophical use of intuition will be potentially validated if it turns out that there is a causal pathway between intuitions and the facts they purport to reveal, paralleling the case of vision, providing an explanation of why we have the intuitions that we do—and, further, if that explanation makes plausible the hypothesis that intuition generally reflects truths.

10 This strategy would use the explanationist criterion to defend the explanationist criterion. Thus, it may appear circular—but the circularity is not obviously vicious. Rather, it is a case of "rule-circularity"—a form of argument in which the conclusion makes a claim about an inferential rule employed in the argument. Rule-circular arguments, unlike ordinary circular arguments, are plausibly nonvicious (see e.g. Braithwaite 1953).

11 See Nado (forthcoming) for some further preliminary empirical arguments in support of the claim that intuition is heterogeneous.

12 Jackson's full account is considerably more complicated than this, due to his use of two-dimensional semantics. The details arising from the two-dimensional account, however, are not relevant for the purposes of this paper.

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