

The Relevance of Experimental Epistemology to Traditional Epistemology

James R. Beebe

University at Buffalo, Buffalo, NY, USA

Experimental epistemology is the use of the experimental methods of the cognitive sciences to shed light on debates within epistemology, the philosophical study of knowledge and rationally justified belief. A variety of misconceptions about this experimental approach conspire to make it far more controversial than it should be. For example, no experimental philosopher has ever claimed that experimentation should completely replace philosophical theorizing. Yet experimental philosophers are continually faced with the following challenge by their would-be critics: “If we surveyed everyone and discovered that they believe that skepticism is false (or that it’s rational to believe in God, that we have free will, etc.), how is this fact supposed to put an end to the centuries-old philosophical debate?” The simple answer is “It is not.” The empirical data gathered by experimental philosophers is supposed to inform rather than replace philosophical debate. Experimental philosophers also do not claim that their methods and results will necessarily be relevant to every area of philosophy. Yet it is common for critics to try to think of areas of philosophical debate where experimentation would not seem to be relevant and present them as evidence for the lack of worth of experimental philosophy. However, consider the fact that no philosopher would dream of offering the following argument: “Insights from modal logic are not relevant to every area of philosophy; therefore, modal logic has no value and should not be practiced.” It turns out that the experiments being performed by experimental philosophers can shed light on surprisingly wide swaths of philosophical debate, but there is no claim that they must somehow be relevant to every dispute. What follows is an overview of the main areas of epistemological debate to which experimental philosophers have been contributing and the larger, philosophical challenges these contributions have raised.

I. Gettier and Truetemp

Most of the major movements and innovations of the last forty years or so of contemporary epistemological debate have relied heavily upon intuitions elicited by key thought experiments. Edmund Gettier (1963), for example, appeared to successfully undermine the analysis of knowledge as justified true belief with two thought experiments in which the protagonists seemed to have justified true beliefs without knowledge. The externalist theories of epistemic justification that appeared in the 1970s and 1980s were attacked primarily on the grounds that they seemed to conflict with widely shared intuitions about cases such as Norman the clairvoyant (BonJour 1980), Truetemp the temperature perceiver (Lehrer 1990), and victims of evil demon deception (Cohen 1984). More recently, epistemic contextualism has been both defended and attacked on the grounds that it comports well or poorly with common intuitions about key cases (DeRose 1992; 1995; 2005; Hawthorne 2004; Stanley 2005).

All of these uses (and more) of philosophical thought experiments are based on the assumption that the intuitions they elicit will be widely shared—indeed, that they *ought* to be shared by anyone who possesses the concepts of knowledge and justified belief and who has at

least minimal capacities for reflection upon the correct application of those concepts. Recently, some important work in experimental epistemology has put this simple assumption to the test. More precisely, experimental epistemologists have gathered data about people's intuitive responses to these thought experiments in a more rigorous and controlled fashion, and the results have been surprising.

Gettier Cases

Having a justified true belief usually means having knowledge. However, Gettier (1963) famously introduced a class of cases in which cognitive agents have justified true beliefs that do not appear to count as knowledge. In what is usually considered to be the founding document of experimental epistemology, Jonathan Weinberg, Shaun Nichols and Stephen Stich (2001) discovered that, while most American college students of European ancestry (i.e., 'Westerners') gave the "correct" or typical response to Gettier cases, many American college students of East Asian (i.e., Koreans, Japanese and Chinese) and South Asian descent (i.e., Indian, Pakistani, Bangladeshi) did not. Weinberg, Nichols and Stich presented participants with the following version of one of Gettier's original cases:

Bob has a friend, Jill, who has driven a Buick for many years. Bob therefore thinks that Jill drives an American car. He is not aware, however, that her Buick has recently been stolen, and he is also not aware that Jill has replaced it with a Pontiac, which is a different kind of American car. Does Bob really know that Jill drives an American car, or does he only believe it?

Bob's belief is justified because of his knowledge of Jill's past driving habits, and his belief is true because Jill really does drive an American car. However, the fact that makes Bob's belief justified and the fact that makes it true are not related in the proper fashion. In this case 74% of Western participants indicated that they thought Bob only believes but does not really know that Jill drives an American car, while 53% of East Asians and 61% of South Asians indicated that Bob really knows this fact (cf. Figure 1).

Gettier Case	Really Knows	Only Believes
Westerners	26%	74%
East Asians	53%	47%
South Asians	61%	39%

Figure 1

Christina Starman and Ori Friedman (2009) presented their subjects with similar Gettier cases and found a significant gender difference among the responses. They found that males are more likely than females to deny that the protagonists in Gettier cases possess knowledge and that this difference did not result because men are generally reluctant to attribute knowledge or because women are generally inclined to attribute it. Starman and Friedman hypothesize that this sex difference arises because women put more emphasis on the protagonist's belief, whereas men put more emphasis on the specific relation between the belief and reality. They suggest that this difference of emphasis might be due to the fact that women are generally more empathetic

and more prone to adopt others' perspectives than men and that women "might simply be less inclined than men to consider the causal relation between belief and fact when reasoning about knowledge."

When intuitions are found to diverge in cases where it had been assumed they would be unanimous, a significant challenge is posed to the evidential and argumentative force of these cases. If everyone who possessed the concept of knowledge agreed that protagonists in Gettier cases lacked knowledge, the cases could be persuasively used to impugn the 'justified true belief' account of knowledge. But if there is significant disagreement, matters become more complicated. It could be that some respondents are simply confused or made some kind of performance error that prevents their responses from adequately reflecting their conceptual competence. Or it might be that some participants (e.g., from one culture) are operating with one concept of knowledge, whereas other participants (e.g., from another culture) are operating with a different one. Further testing might be able to bring this fact to light. Some have suggested that in cases of disagreement greater weight should be given to the intuitions of experts than to those of the philosophically untrained. However, this response is unhelpful in cases where the experts disagree. Some experimental epistemologists have suggested that the diversity and instability of epistemic intuitions point to a more radical conclusion, viz., that intuitions should not be used as evidence in philosophical theorizing at all. These issues will be discussed in more detail below, but first we need to examine more of the recent empirical findings of experimental epistemologists.

Truetemp Cases

One of more prominent areas of debate within contemporary epistemology has been the dispute between epistemic internalism and externalism. Describing the distinction between internalism and externalism about epistemic justification, Laurence Bonjour (1992, p. 132) writes:

The most generally accepted account of this distinction is that a theory of justification is *internalist* if and only if it requires that all of the factors needed for a belief to be epistemically justified for a given person be *cognitively accessible* to that person, internal to his cognitive perspective; and *externalist*, if it allows that at least some of the justifying factors need not be thus accessible, so that they can be *external* to the believer's cognitive perspective, beyond his ken.

The most common form of epistemic externalism is reliabilism, which claims that beliefs are justified just when they are produced by cognitive processes that are highly reliable or truth-conducive (cf. Goldman 1986). Reliabilism does not require that subjects know or be able to recognize that their cognitive processes are reliable. The fact that they must simply be reliable is what makes reliabilism a form of epistemic externalism, and it has been the target of most of the objections lodged against the theory.

Critics of reliabilism (and externalism more generally) have used thought experiments in which a hypothetical cognitive agent satisfies the reliabilist (or otherwise externalist) conditions for knowledge or justified belief, yet intuitively seems to lack knowledge or justification. One of

the most widely discussed such thought experiments is Keith Lehrer's (1990) story of Mr. Truetemp. Weinberg, Nichols and Stich (2001) employed the following version of the story in one of their experiments:

One day Charles is suddenly knocked out by a falling rock, and his brain becomes re-wired so that he is always absolutely right whenever he estimates the temperature where he is. Charles is completely unaware that his brain has been altered in this way. A few weeks later, this brain re-wiring leads him to believe that it is 71 degrees in his room. Apart from his estimation, he has no other reasons to think that it is 71 degrees. In fact, it is at that time 71 degrees in his room. Does Charles really know that it was 71 degrees in the room, or does he only believe it?

Lehrer and the authors of other similar counterexamples (e.g., BonJour 1980) maintain that it is obviously the case that Charles lacks justification for his belief and, since justification is necessary for knowledge, that he lacks knowledge as well. Among Western participants surveyed by Weinberg, Nichols and Stich, 68% of them agree. An even greater proportion of East Asians agree (cf. Figure 2). The difference between Eastern and Western responses is statistically significant.

Individualistic Truetemp Case	Really Knows	Only Believes
Westerners	32%	68%
East Asians	12%	88%

Figure 2

A key feature of Charles' epistemic situation—and the original Truetemp story it was patterned after—is that Charles has a belief-forming process that is not shared by anyone else in his community. Knowing that people from East Asian cultures tend to be more holistic or collectivist in their thinking and less inclined toward understand objects and individuals in detachment from their contexts (as Westerners often do), Weinberg, Nichols and Stich constructed some other Truetemp-style cases that were less individualistic. In one version, the rock that gave Charles his new perceptual ability is replaced by a team of well-meaning scientists that are sent by the elders in his community. In another version, the entire community shares the new perceptual process in question.

In both cases where some kind of community-based sanction is introduced, the statistically significant difference between Westerners and East Asians disappears. 75% of East Asians responded that the protagonist whose brain has been rewired with elder approval only believed the proposition in question, and 68% of East Asians said that the protagonist who shared his new perceptual process with others in his community only believed and did not really know. While more Westerners than East Asians maintained in the first two cases that he did not really know, this pattern reversed in the third, even though the difference in the groups' responses in that case was not significant (cf. Figures 3 and 4).

Elders Truetemp Case	Really Knows	Only Believes
Westerners	35%	65%
East Asians	25%	75%

Figure 3

Community Wide Truetemp Case	Really Knows	Only Believes
Westerners	20%	80%
East Asians	32%	68%

Figure 4

Swain, Alexander and Weinberg (2008) also found that intuitions given in response to the basic Truetemp case are subject to an ordering effect. If participants are first presented with a clear case of knowledge before considering the Truetemp case, they are less willing to attribute knowledge in the Truetemp case. But if they are first presented with a clear case of non-knowledge, they are more willing to attribute knowledge in the Truetemp Case. Because Truetemp intuitions are thus unstable, Swain, Alexander and Weinberg suggest that they are unsuitable for use in philosophical argumentation.

An often unremarked feature of the empirical findings on Truetemp cases is that before experimental epistemology came on the scene, epistemologists seemed to unanimously agree that the intuition that Truetemp does not know is obviously correct and is one that would be universally shared. Even Alvin Goldman (1994) and William Alston (1989)—two of the foremost defenders of reliabilism—shared this opinion and agreed that because of this the Truetemp case presented a deep and significant challenge to their theory. Thus, one of the basic functions that experimental epistemology has performed is that of testing a variety of empirical assumptions made by contemporary epistemologists and showing how the empirical data can often surprise us.

II. Skepticism, Error Possibilities and Stakes

Skepticism

The philosophical debate about skepticism (the view that we have no knowledge or justified belief) has been an ever-present feature of epistemology throughout its history. Recently, experimental epistemologists have found important differences in how participants respond to prototypical skeptical scenarios. Weinberg, Nichols and Stich (2001), for example, found significant differences between how Westerners and South Asians respond to the following two cases in which the possibility that a belief might be in error has been raised:

It's clear that smoking cigarettes increases the likelihood of getting cancer. However, there is now a great deal of evidence that just using nicotine by itself without smoking (for instance, by taking a nicotine pill) does not increase the likelihood of getting cancer. Jim knows about this evidence and as a result, he believes that using nicotine does not

increase the likelihood of getting cancer. It is possible that the tobacco companies dishonestly made up and publicized this evidence that using nicotine does not increase the likelihood of cancer, and that the evidence is really false and misleading. Now, the tobacco companies did not actually make up this evidence, but Jim is not aware of this fact. Does Jim really know that using nicotine doesn't increase the likelihood of getting cancer, or does he only believe it?

Mike is a young man visiting the zoo with his son, and when they come to the zebra cage, Mike points to the animal and says, "that's a zebra." Mike is right—it is a zebra. However, as the older people in his community know, there are lots of ways that people can be tricked into believing things that aren't true. Indeed, the older people in the community know that it's possible that zoo authorities could cleverly disguise mules to look just like zebras, and people viewing the animals would not be able to tell the difference. If the animal that Mike called a zebra had really been such a cleverly painted mule, Mike still would have thought that it was a zebra. Does Mike really know that the animal is a zebra, or does he only believe that it is?

In both cases, a purely hypothetical scenario involving deception is brought up but is not actual. Many epistemological theories predict that getting subjects to think about possibilities in which their beliefs are in error should make them less willing to attribute knowledge to themselves and others. However, South Asians appear to be much less likely than their Western counterparts to deny that the protagonists in these cases have knowledge (cf. Figures 5 and 6).

Cancer Conspiracy Case	Really Knows	Only Believes
Westerners	11%	89%
South Asians	30%	70%

Figure 5

Zebra-in-Zoo Case I	Really Knows	Only Believes
Westerners	31%	69%
South Asians	50%	50%

Figure 6

Weinberg, Nichols and Stich also found differences between the responses of high and low socioeconomic status participants concerning the Cancer Conspiracy Case above and a variation of the zebra-in-the-zoo case. High socioeconomic status participants were significantly more likely than low socioeconomic status participants to deny that the cognitive agents in these cases really know the propositions in question (cf. Figures 7 and 8).

Cancer Conspiracy Case	Really Knows	Only Believes
High SES	17%	83%
Low SES	50%	50%

Figure 7

Zebra-in-Zoo Case II	Really Knows	Only Believes
High SES	12%	88%
Low SES	33%	67%

Figure 8

It seems that high socioeconomic status participants may have lower standards that possibilities of error must satisfy in order to defeat knowledge. However, an alternative explanation suggested by the fact that the responses of low socioeconomic status participants are not significantly different from chance in the Cancer Conspiracy Case is simply that they did not understand the task sufficiently well. Nichols, Stich & Weinberg (2003) also found that a significant majority of American college students who had taken three or more philosophy courses thought that the protagonist in a typical brain-in-a-vat case only believed and did not know that he was not a virtual-reality brain, but a narrow majority of students who had taken two or less thought that he really knew this fact.

After reviewing these findings concerning the variability of epistemic intuitions about skeptical scenarios, Nichols, Stich and Weinberg (2003, p.243) conclude:

Our predicament is in some ways analogous to the predicament of a person who is raised in a homogeneous and deeply religious culture and finds the truth of certain religious claims to be obvious or compelling. When such a person discovers that other people do not share his intuitions, he may well come to wonder why his intuitions are any more likely to be true than theirs.

In addition to casting doubt upon the reliability of our intuitions, Nichols, Stich and Weinberg (2003, p. 246) also think that the foregoing data should make us question the central place that debates about skepticism have occupied in western philosophy:

For if people in different cultural and SES groups and people who have had little or no philosophical training do not share ‘*our*’ intuitions (that is, the intuitions of the typical analytic philosopher who is white, western, high SES and has had *lots* of philosophical training) then they are unlikely to be as convinced or distressed as ‘*we*’ are by arguments [in support of skepticism] whose premises seem plausible only if one has the intuitions common in our very small cultural and intellectual tribe. *Pace* McGinn’s ‘anthropological conjecture,’ skepticism is neither primitive nor inevitable. And *pace* Stroud there is no reason to think that skepticism “appeals to something deep in our nature.” Rather, it seems, its appeal is very much a product of our culture, our social status and our education!

Error Possibilities and Stakes

The epistemic contextualism developed by Keith DeRose (1992, 1995, 2005), Stewart Cohen (1988, 1999) and David Lewis (1996) has been at the forefront of epistemological debate for the last two decades. Contextualists maintain that it can be true to assert ‘Bob knows that Jill drives an American car’ or ‘Mike knows that the animal is a zebra’ in some conversational contexts but

false to assert either of these in other conversational contexts. Contextualists contend that when error possibilities are made salient in a conversational context (as in the Cancer Conspiracy and Zebra cases above), it will no longer be true to say that someone knows, even if before those possibilities were made salient, it would have been true. Contextualists also claim that when the stakes are raised—i.e., when the cost of someone’s belief being wrong is high—it will be false to say that one knows certain propositions, even though it will be true to say that one knows those propositions in contexts where the stakes are low.

Perhaps more than any other recent position in epistemology, contextualism has made clear its basis in the epistemic intuitions of the average person. DeRose (2005, p. 172), for example, claims:

The best grounds for accepting contextualism concerning knowledge attributions come from how knowledge-attributing (and knowledge-denying) sentences are used in ordinary, non-philosophical talk: what ordinary speakers will count as ‘knowledge’ in some non-philosophical contexts they will deny is such in others.

Buckwalter (2010) tested these claims by presenting three versions of DeRose’s “bank” cases to American college students, one of which is the following:

Bank. Sylvie and Bruno are driving home from work on a Friday afternoon. They plan to stop at the bank to deposit their paychecks, but as they drive past the bank they notice that the lines inside are very long. Although they generally like to deposit their paychecks as soon as possible, it is not especially important in this case that they be deposited right away. Bruno tells Sylvie, “I was just here last week and I know that the bank will be open on Saturday.” Instead, Bruno suggests that they drive straight home and return to deposit their paychecks on Saturday. When they return to the bank on Saturday, it is open for business.

In the ‘High Stakes’ variant of this case, instead of being told that “it is not especially important in this case that [their paychecks] be deposited right away,” participants are told “Bruno has written a very large check, and if the money from his pay is not deposited by Monday, it will bounce, leaving Bruno in a very bad situation with his creditors.” In the ‘High Standards’ variant, participants are given the following, additional piece of information: “Sylvie says, ‘Banks are typically closed on Saturday. Maybe this bank won’t be open tomorrow either. Banks can always change their hours, I remember that this bank used to have different hours.’” Thus, the costs of being wrong are high for Bruno only in High Stakes, and an error possibility is raised only in High Standards.

DeRose (1992, p. 170) claims that “almost any speaker in my situation would claim to know the bank is open on Saturdays” in the low stakes bank case and that “Almost everyone will accept [“I don’t know”] as a reasonable admission [in High Stakes], and it will seem true to almost everyone.” However, Buckwalter found that while 74% of participants agreed that Bruno’s assertion “I know that the bank will be open on Saturday” was true in Bank, 69% of participants in High Stakes and 66% in High Standards also thought that Bruno’s assertion was true. Statistical analysis reveals that the mean responses in each case are significantly above the

midpoint—in other words, that most people agree that Bruno’s knowledge attribution is true in all three cases—but there is no significant difference between the means of the three sets of responses. This means that what contextualists and even many of their critics (e.g., Hawthorne 2004; Stanley 2005) have predicted about the responses of ordinary participants was not found.

Josh May et al. (2010) ran a similar experiment, which included an additional case that combined both error possibilities and stakes, and came up with similar results. May et al. found that “neither raising the possibility of error nor raising stakes moves most people from attributing knowledge to denying it.” However, even though participants generally attributed knowledge in both high and low stakes cases, they were more strongly inclined to attribute knowledge in low stakes cases. May et al. found no such effect for error possibilities.

Adam Feltz and Chris Zarpentine (forthcoming) also ran a related set of experiments that tested the widespread assumption among epistemologists that higher stakes means less knowledge. They did not find that stakes had any effect on knowledge attributions. Neta and Phelan (forthcoming) ran an analogous set of experiments that looked at how strong participants thought the evidence of protagonists was and again found that raising stakes did not affect folk attributions, as long as the cases were presented individually. However, they did find an effect when high and low stakes cases were presented in a juxtaposed fashion. Neta and Phelan take the fact that no effect was found in individual cases to indicate that stakes do not in general factor into people’s assessments of strength of evidence.

In contrast to the foregoing studies that failed to find that making error possibilities salient had any effect on knowledge attributions, Schaffer and Knobe (forthcoming) did find such an effect by presenting the possibility of error “in a concrete and vivid fashion.” Instead of having one character in a Bank case simply mention the abstract possibility that banks might change their hours and thus be closed on one Saturday after having been open on another, Schaffer and Knobe had one of the characters in their vignettes say,

Well, banks do change their hours sometimes. My brother Leon once got into trouble when the bank changed hours on him and closed on Saturday. How frustrating! Just imagine driving here tomorrow and finding the door locked.

Even though all participants were told that the cognitive agent whose belief was in question stayed “just as confident” as he or she was that the bank will be open on Saturday, participants were less inclined to think that the character knew the bank would be open when the possibility of error was presented in this concrete fashion (mean rating: 3.05 out of 7) than when the possibility of error was presented more abstractly (mean rating: 5.54 out of 7). I strongly suspect that the same thing will be shown to be true for the effects of raising stakes.

Knowledge and Action

If stakes were to affect attributions of knowledge, it would indicate one kind of connection between knowledge and action. The practical costs of failing to know are costs associated with the actions one is undertaking in one’s life. Although the experiments described above did not

find such a connection, a different sort of connection between knowledge and action was found by Beebe and Buckwalter (forthcoming) and Beebe and Jensen (forthcoming). Beebe and Buckwalter initially presented participants with either the help or the harm versions of the following vignette (based upon Knobe 2003's original study):

The vice-president of a company went to the chairman of the board and said, 'We are thinking of starting a new program. We are sure that it will help us increase profits, and it will also *help/harm* the environment.' The chairman of the board answered, 'I don't care at all about *helping/harming* the environment. I just want to make as much profit as I can. Let's start the new program.' They started the new program. Sure enough, the environment was *helped/harmed*. Did the chairman know that the new program would *help/harm* the environment?

Participants were significantly more likely to attribute knowledge to the chairman in the harm case than in the help case. Beebe and Jensen found that subjects also responded in this same asymmetrical fashion when the side-effect involved aesthetic or prudential (as opposed to moral) harm. Buckwalter (forthcoming) found that there was a significant gender difference in how participants responded to the chairman case. Women were significantly less likely than men to attribute knowledge to the chairman in the help condition, which means that the difference between helping and harming had more of an overall effect on how women responded than men.

III. Larger Methodological Issues

Although the findings of experimental epistemologists obviously raise challenges to the use of this or that thought experiment for this or that particular purpose in philosophy, experimental philosophy is most often associated with more global methodological challenges. The surprising patterns of responses found by experimental epistemologists raise some important questions about the way contemporary epistemology is ordinarily practiced. Consider the following, widely endorsed theses:

- (i) Whether a true belief counts as knowledge depends only upon epistemic factors such as evidence or reliability.
- (ii) Because the target of philosophical analyses of knowledge is the ordinary person's concept of knowledge, such analyses should be answerable to data about 'what the ordinary person would say' in response to various epistemological thought experiments.

The work of experimental epistemologists has made the conjunction of (i) and (ii) increasingly difficult to maintain. While it may be possible to dismiss a small class of the patterns of the surprising variation as due to performance errors or noise, as more and more experimental data is gathered that shows that ordinary peoples' knowledge attributions are influenced by a variety of non-epistemic factors (e.g., culture, education, socioeconomic status, moral properties of actions, etc.), this line becomes ever more difficult to maintain.

The strongest form of the ‘experimentalist’s challenge’ to standard philosophical practice has been dubbed the ‘restrictionist view,’ according to which “the results of experimental philosophy should figure into a radical restriction of the deployment of intuitions as evidence” (Alexander & Weinberg 2007, p. 61). Restrictionists maintain that “the problem with standard philosophical practice is that experimental evidence seems to point to the unsuitability of intuitions to serve as evidence at all” (Alexander & Weinberg 2007, p. 63). Weinberg, Nichols and Stich (2001) claim, “a sizeable group of epistemological projects—a group which includes much of what has been done in epistemology in the analytic tradition—would be seriously undermined if one or more of a cluster of empirical hypotheses about epistemic intuitions turns out to be true.”

The Different Concepts Response

Critics of experimental philosophy have responded in a variety of ways to the experimentalist’s challenge. Ernest Sosa (2007, pp. 102-103), for example, writes:

The bearing of these surveys on traditional philosophical issues is questionable, however, because the experimental results really concern in the first instance only people’s responses to certain words. But verbal disagreement *need* not reveal any substantive, real disagreement, if ambiguity and context might account for the verbal divergence.... The experimentalists have not yet done enough to show that they have crossed the gaps created by such potential differences in meaning and context, so as to show that supposedly commonsense intuitive belief is really not as widely shared as philosophers have assumed it to be.

Sosa is certainly correct that too often experimental philosophers have tried to support far-reaching conclusions on the basis of very few studies and should do more to rule out alternative, less radical explanations of their experimental data. However, it is also important to note that pointing to the bare possibility that participants who offer differing responses to survey questions may be parties to a merely verbal dispute does nothing to show that this is indeed the correct explanation of any of the surprising pattern of responses experimentalists uncovered.

Sosa (2005) also raises the following, related objection:

When we read fiction we import a great deal that is not explicit in the text. We import a lot that is normally presupposed about the physical and social structure of the situation as we follow the author’s lead in our own imaginative construction.... Given that these subjects are sufficiently different culturally and socio-economically, they may because of this import different assumptions as they follow in their own imaginative construction the lead of the author of the examples, and this may result in their filling the crucial [description of a protagonist’s epistemic condition] differently. But if [this description] varies across the divide, then the subjects may not after all disagree about the very same content.

However, as Alexander and Weinberg (2007, p. 67) point out, “this line of objection... is no less threatening to standard philosophical practice.” They continue:

On this line, no two people can ever be sure, when talking about some imagined case that they are actually talking about the same thing.... For if we cannot know that two experimental subjects are really disagreeing when they have putatively divergent intuitions, it would follow that we cannot know that two philosophers are really *agreeing* when they have putatively convergent intuitions. A skepticism about intuitions would be the result.

Sosa’s objections here are (or at least are related to) versions of the ‘different concepts’ response to the experimentalist’s challenge. According to this response, if it can be shown that people from different demographic groups (e.g., East Asians vs. Westerners or high vs. low socioeconomic status participants) repeatedly respond to philosophical thought experiments in systematically different ways, then the two groups may be deploying nonequivalent concepts. Although this response often discussed as a hypothetical possibility, it has very few real defenders because most epistemologists take the target of their investigations to be the ordinary concept of knowledge—not a technical concept possessed only by professional epistemologists and not one that is only of local, cultural interest. It is also difficult to defend the idea that anyone who disagrees with white, male, high socioeconomic status analytic philosophers and whose disagreement does not stem from any conceptual confusion must be operating with a different concept because the intuitions of white, male, high socioeconomic status analytic philosophers cannot be wrong.

The Expert Response

A more common response to the experimentalist’s challenge is to try to find some reason to privilege the intuitions of those who are experts concerning the application of the concepts in the relevant domain. Alexander and Weinberg (2007, p. 59) write, “One might argue, for example, that philosophers spend more time thinking about the relevant concepts than do non-philosophers and their expertise at producing correct intuitive judgments is a product of this sustained reflection.” Michael Devitt (2006, p. 103) takes up this response and argues that intuitions are “are empirical theory-laden central-processor responses to phenomena, differing from many other such responses only in being fairly immediate and unreflective, based on little if any conscious reasoning.” He argues that we should trust a person’s intuitions to the degree that we should trust the theory and experience underwriting those intuitions:

Sometimes the folk may be as expert as anyone: intuitions laden with “folk theory” are the best we have to go on. Perhaps this is the case for a range of psychological kinds. For most kinds, it clearly is not: we should trust intuitions laden with established scientific theories. Consider, for example, a paleontologist in the field searching for fossils. She sees a bit of white stone sticking through grey rock, and thinks “a pig’s jawbone.” This intuitive judgment is quick and unreflective. She may be quite sure but unable to explain just how she knows. We trust her judgment in a way that we would not trust folk judgments because we know that it is the result of years of study and experience of old

bones; she has become a reliable indicator of the properties of fossils. Similarly we trust the intuitions of the physicist over those of the folk about many aspects of the physical world where the folk have proved notoriously unreliable. (Devitt 2006, pp. 104-105)

One can grant that Devitt's proposal sounds plausible for disciplines like paleontology and physics and yet wonder whether there is anyone who has comparable expertise in matters philosophical. The mere fact that philosophers spend more time thinking about philosophical concepts does not guarantee that time spent translates into expertise concerning them. Alexander and Weinberg (2007) note that extended reflection might simply reinforce intuitive judgments philosophers already made before engaging in reflection—philosophical reflection might not be what produces the intuitions of philosophers at all.

Another possibility is that that long hours of participating in philosophical debate has an effect more akin to enculturation or socialization than enlightenment. Extended practice in philosophy may simply enable one to successively navigate one's way through the culture of philosophy, wherein giving certain kinds of recognized responses to philosophical thought experiments is part of what is involved in being a genuine member of that culture. Experimental philosophers are not committed to the view that this is all there is to being a professional philosopher, but the experimentalist's challenge calls upon proponents of the expert response to provide non-question-begging reasons or evidence in support of the claimed expertise. *Pace* the occasional and impassioned statement of philosophical elitism, it is widely agreed that evidence of this sort has not been forthcoming.

Leaving Folk Intuitions Behind [incomplete]

A more promising strategy may be to reject the idea that an account of how we should think about knowledge must answer to the epistemic intuitions of ordinary people.

References

- Alston, W. P.: 1989, 'An Internalist Externalism', in *Epistemic Justification: Essays in the Theory of Knowledge*, Cornell University Press, Ithaca, NY, pp. 227–245.
- Alexander, Joshua & Jonathan M. Weinberg, "Analytic Epistemology and Experimental Philosophy" *Philosophy Compass*, 2(2007): 56-
- Beebe, James & Buckwalter, Wesley. forthcoming. The epistemic side-effect effect," *Mind & Language*.
- Beebe, James., Jensen, Mark., manuscript. Surprising connections between knowledge and intentional action: The robustness of the epistemic side-effect effect."
- Bishop, M.A., and Trout, J.D. (2005) *Epistemology and the Psychology of Human Judgment* (Oxford and New York: Oxford University Press)
- BonJour, Laurence. 1980. "Externalist Theories of Empirical Knowledge." In P. French, T. Uehling & H. Wettstein (eds.), *Midwest Studies in Philosophy*, Vol. 5: Epistemology, University of Minnesota Press, Minneapolis, pp. 53-73.
- BonJour, Laurence. 1992. "Externalism/Internalism." In Jonathan Dancy & Ernest Sosa (eds.), *A Companion to Epistemology*, Blackwell, Oxford, pp. 132-136.

- Buckwalter, Wesley. Knowledge Isn't Closed on Saturday: A Study in Ordinary Language. In Edouard Machery, Tania Lombrozo, & Joshua Knobe (eds.) *Review of Philosophy and Psychology*.
- Buckwalter. forthcoming. Gender and epistemic intuition.
- Cohen, S. 1984. Justification and Truth. *Philosophical Studies* 46: 279-96.
- Cohen, Stewart 1988. "How to be a Fallibilist," *Philosophical Perspectives* 2: 91-123.
- Cohen, Stewart 1999. "Contextualism, Skepticism, and the Structure of Reasons," *Philosophical Perspectives* 13: 57-89.
- DeRose, Keith. 1992. Contextualism and knowledge attributions. *Philosophy and Phenomenological Research*, 52, 4 pp. 913-929.
- DeRose, Keith. 1995 "Solving the Skeptical Problem." *Philosophical Review*, pp. 1-52
- DeRose 2005. The ordinary language basis for contextualism and the new invariantism. *The Philosophical Quarterly*, 55: 172-198.
- Devitt, Michael. (2006). *Ignorance of Language*. Oxford: Clarendon Press.
- Feltz, Adam & Chris Zarpentine. forthcoming. "Do You Know More When It Matters Less?" *Philosophical Psychology*.
- Gettier, E. L. 1963. Is justified true belief knowledge? *Analysis*, 23, 121-123.
- Goldman, Alvin. 1986, *Epistemology and Cognition*, Harvard University Press, Cambridge, MA.
- Goldman, A. I.: 1994, 'Naturalistic Epistemology and Reliabilism', in P. French, T. Uehling, and H. Wettstein (eds.), *Midwest Studies in Philosophy*, Vol. 19. University of Minnesota Press, Minneapolis, pp. 301-320.
- Hawthorne, John. 2004. *Knowledge and Lotteries*. Oxford: Oxford University Press.
- Knobe, J. 2003: Intentional action and side effects in ordinary language. *Analysis*, 63, 190-193.
- Lehrer, K. (1990). *Theory of Knowledge*. Boulder and London: Westview Press
- Liao, Matthew. 2008. "A Defense of Intuitions," *Philosophical Studies* 140:247-262.
- May, Joshua, Sinnott-Armstrong, Walter, Hull, Jay G., and Zimmerman, Aaron. Forthcoming. Practical interests, relevant alternatives, and knowledge attributions: An empirical study. Machery, Edouard., Knobe, Joshua., and Lombrozo, Tania. (eds.), *Review of Philosophy and Psychology*.
- Neta, Ram and Mark Phelan manuscript. "Evidence that Stakes Don't Matter for Evidence."
- Nichols, Shaun, Stephen Stich & Jonathan M. Weinberg. 2003. "Metaskepticism: Meditations in Ethno-Epistemology." In Stephen Luper (ed.), *The Sceptics*. Ashgate Press, pp. 227-247.
- Shaffer, Jonathan., and Knobe, Joshua., manuscript. Contrastive Knowledge Surveyed. *Nous*
- Sosa, E. (2005). A defense of the use of intuitions in philosophy, in D. Murphy and M. Bishop (eds), *Stich and his critics*, Blackwell, Oxford, pp. 101-112.
- Sosa, Ernest "Experimental Philosophy and Philosophical Intuition" *Philosophical Studies* 132 (2007): 99-107.
- Stanley, Jason. 2005. *Knowledge and Practical Interests*. Oxford: Oxford University Press.
- Starmans, Christina & Ori Friedman. A Sex Difference in Adults' Attributions of Knowledge.
- Swain, Stacey, Joshua Alexander & Jonathan M. Weinberg. 2008. "The Instability of Philosophical Intuitions: Running Hot and Cold on Truetemp." *Philosophy and Phenomenological Research* 76:138-155.
- Weinberg, Jonathan M., Shaun Nichols & Stephen Stich. 2001. "Normativity and Epistemic Intuitions." *Philosophical Topics* 29: 429-460.
- Wright, Jennifer Cole. forthcoming. On intuitional stability: The clear, the strong, and the paradigmatic. *Cognition*.