

The Proper Role of Intuitions in Epistemology

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Intuitions play an important role in contemporary philosophy. It is common for theories in epistemology, morality, semantics and metaphysics to be rejected because they are inconsistent with a widely and firmly held intuition. Our goal in this paper is to explore the role of epistemic intuitions in epistemology from a naturalistic perspective. Here is the question we take to be central:

(Q) Ought we to trust our epistemic intuitions as evidence in support of our epistemological theories?

We will understand this question as employing an epistemic ‘ought’ – insofar as we aim at developing a correct epistemological theory, ought we to trust our epistemic intuitions as evidence for or against our epistemological theories? As it stands, (Q) needs further clarification. *Whether something is trustworthy is relative to what (a) what it is and (b) what we’re asking it to do.* Sam might trust Marie but not George to care for his children, while he might trust both to care for his pet fish. So in order to address (Q), we first need to explore two questions: What are epistemic intuitions? And what sort of epistemological theories do we want? We will take up each of these questions in the following sections.

1. What are epistemic intuitions?

We can distinguish various views about the nature of intuitions by focusing on the following four questions.

Are intuitions beliefs / inclinations to believe? According to David Lewis, “‘intuitions’ are simply opinions” where “some are commonsensical, some are sophisticated; some are particular, some are general, some are firmly held, some less. But they are all opinions” (1983: x). An objection to this view holds that it is possible to have an intuition that *p* without believing that *p*. For example, one might have the intuition but not the belief that parallel lines never intersect. In reply, one might argue that intuitions can include a feeling or inclination to accept a belief. According to

Peter van Inwagen, for example, “‘intuitions’ are simply beliefs—or perhaps, in some cases, the tendencies that make certain beliefs attractive to us, that ‘move’ us in the direction of accepting certain propositions without taking us all the way to acceptance” (1997: 309). So one can have an intuition without a belief insofar as one can have an inclination to believe without a belief. A worry about this view is: Do are all our beliefs count as intuitions? It would be strange to say that S’s belief that (say) she is an employee of IBM is an intuition. If this is right, the belief view of intuitions is incomplete: What is it about some beliefs that makes them intuitions?

Many philosophers insist that intuitions and beliefs are distinct kinds of propositional attitude. According to Ernest Sosa, an intuition is “a representationally contentful conscious state that can serve as a justifying basis for belief while distinct from belief, not derived from certain sources, and possibly false” (2007: 57). George Bealer argues that intuitions are a “*sui generis*, irreducible, natural (i.e., non-Cambridge-like) propositional attitude that occurs episodically...” They are distinct from “physical intuitions, thought experiments, beliefs, guesses, hunches, judgments, common sense, and memory....not reducible to inclinations, raisings-to-consciousness of non-conscious background beliefs, linguistic mastery, reports of consistency; and so forth” (1998: 213).

Are intuitions non-inferential? Most philosophers who write about intuitions claim that they are non-inferential. For example, Lisa Osbeck claims that “the salient feature common to various accounts of intuition is its non-inferential status” (2001: 119). Alvin Goldman and Joel Pust “assume, at a minimum, that intuitions are some sort of spontaneous mental judgments. Each intuition, then, is a judgment ‘that p’, for some suitable class of propositions p” (1998: 179). But some naturalistically inclined philosophers take intuitions to be the result of some inferential process. Michael Devitt claims that “intuitive judgments 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” (2006: 491). Hilary Kornblith argues that intuitions “are corrigible and theory-mediated. The extent of agreement among subjects on intuitive judgments is to be explained by common knowledge, or at least common belief, and the ways in which such background belief will inevitably influence intuitive judgment, although unavailable to introspection, are none the less quite real” (2002: 13).

Are intuitions untutored judgments? Philosophers disagree about whether intuitions are commonsense, untutored judgments or whether they can arise (non-inferentially) after considerable learning and reflection. So L.J. Cohen contends that “an intuition that p is... just an immediate and untutored inclination, without evidence or inference, to judge that p” (1981: 318). On the other hand, Laurence Bonjour takes intuitions to be “judgments and convictions that, though considered and reflective, are not arrived at via an explicit discursive process” (1998: 102).

Do intuitions come with special seemings? Some philosophers believe that intuitions come with a characteristic feeling or conviction that what is intuited is true. Guy Claxton thinks that intuition “comes to mind with a certain aura (or even conviction) of ‘rightness’” (1998: 217). Stephen Hales thinks that “to have an intuition that A is for it to seem necessarily true that A” (2000: 137). But as we have already seen, those philosophers who take intuitions to be beliefs do not suppose that intuitions must come with these sorts of seemings, although they can include an inclination to accept a belief.

There is a cacophony of views about intuitions. When we ask whether our epistemic intuitions should count as evidence for or against our epistemological theories, there are a number of different sorts of things we might mean by this question, depending on what we mean by ‘intuitions’. We can capture some of the variation in views about intuitions in terms of the following menu:

Menu A: Choose one each from the As, the Bs and the Cs.

- A1. Epistemic intuitions are beliefs or inclinations to believe.
- A2. Epistemic intuitions are sui generis propositional attitudes.

- B1. Epistemic intuitions are inferential judgments.
- B2. Epistemic intuitions are non-inferential judgments.

- C1. Epistemic intuitions include only untutored judgments.
- C2. Epistemic intuitions include tutored and untutored judgments.

This menu defines eight different views about intuitions (in terms of the various possible combinations of As, Bs and Cs). So recall our central question:

(Q) Ought we to trust our epistemic intuitions as evidence in support of our epistemological theories?

We can distinguish eight different interpretations of (Q) depending on what we take intuitions to be. For the purposes of this paper, we are going to adopt a neutral characterization of intuitions: they are quickly formed epistemic judgments of the sort that have played vital roles in the development of epistemological theories over the past half-century or so. We take no stand on whether these judgments are beliefs, whether they are non-inferential or whether they can be the result of specialized training.

2. What sort of epistemological theory do we want?

Different philosophers have different conceptions of what an epistemological theory is supposed to deliver. Unlike disagreements about intuitions, however, we cannot make these disagreements disappear by adopting a neutral position. Let's restrict our focus to theories of epistemic knowledge. Following Stephen Stich (forthcoming), let's distinguish five possible projects we might embark upon in developing a theory of knowledge:

1. Intuition capturing: A theory of knowledge must entail our intuitions about epistemic knowledge (perhaps with some light revisions in the service of clarity of theoretical power).
2. Implicit theory: There is an implicit theory that underlies our abilities to produce epistemic intuitions. A theory of knowledge must give an account of that implicit theory.
3. Conceptual analysis: There is a concept that underlies our abilities to produce epistemic intuitions. A theory of knowledge must give an account of that concept. (Note: On some views of concepts, this project will be identical to the second project.)
4. True nature: A theory of knowledge aims to characterize the nature and conditions of knowledge. This assumes that knowledge is something that is distinct from our concept of knowledge or our implicit theories about knowledge, in the same sense that

characterizing the nature of water or whales is different from providing an account of our concept of water or whales.

5. Reason-guidance: A theory of knowledge (or justification) aims to tell us what we epistemically ought to believe, *ceteris paribus*. The *ceteris paribus* hedge is important: a reason-guiding epistemological theory gives advice that can be overridden by other, non-epistemic considerations. For example, a reason-guiding theory might tell us that we ought (epistemically) to believe *p*, even though there are competing moral or pragmatic considerations that, all things considered, advise against believing that *p*.

We don't mean to suggest that this list exhausts the projects epistemologists might be embarked upon in their theorizing about knowledge. But they are sufficiently different that the right answer to (Q) might depend on which project we have in mind. For example, one might reasonably argue that the appropriate role of epistemic intuitions in epistemological theorizing are quite different for project 1 (intuition capturing) and project 5 (reason-guidance). Now let's turn to the various possible answers we might give to some interpretation of (Q).

3. The optimism-pessimism divide

Our central question is (Q): Ought we to trust our epistemic intuitions as evidence in support of our epistemological theories? The following schema sets out 16 different ways we might answer this question.

Schema A: Choose one from A and one from B.

Our epistemic intuitions ought A to count as B substantive evidence for our epistemological theories.

A: always, usually, sometimes, seldom

B: the only, the primary, some, no

By substantive evidence, we mean evidence that does not simply involve theoretical considerations of power, simplicity, etc. We do not mean to suggest that the answers we might give to (Q) are restricted to these 16 possibilities and their various possible consistent conjunctions and disjunctions. Many plausible answers are ignored by the above schema; for example, a philosopher might argue that our intuitions are always "de-

fault reasonable” evidence for our epistemological theories. But it is a useful exercise to note that we can give at least 16 different answers to (Q) and we are assuming that there are five different interpretations of (Q) – one for each epistemological project.

Perhaps the most noteworthy feature of contemporary analytic epistemology is that regardless of what project is being pursued, analytic philosophers put a lot of evidential weight on epistemic intuitions. Our reading of the contemporary philosophical landscape leads us to hypothesize that the practice of most contemporary epistemologists embraces an answer to (Q) that is extremely optimistic:

(O) Our epistemic intuitions ought always to count as the only substantive evidence for our epistemological theories.

Are we guilty of foisting on the optimist an overly polarized view of intuitions? We don't think so. Optimists believe that epistemic intuitions ought to play roughly the role they're actually playing in (non-skeptical) epistemological theorizing; pessimists believe that epistemic intuitions ought to count for less than they do in contemporary epistemology. For those who think we have made life too tough for optimists by setting the standard so high, we challenge them to find examples of theories of knowledge that have been defended by appealing to substantive, non-intuitional evidence after their counterintuitive results have been recognized. Except for the occasional skeptic, such examples are exceptionally hard to find. Despite having canvassed a dozen or so experienced epistemologists, we have been hard pressed to come up with any examples in which a philosopher defends an epistemological theory that he or she recognizes is counterintuitive. In fact, the only exception we have found is Weatherson (2003). But Weatherson argues that theoretical considerations of power and simplicity can outweigh a theory having some counterintuitive consequences. So even Weatherson seems to be an optimist insofar as he seems unwilling to appeal to substantive non-intuitional evidence in support of a theory of knowledge.

For some epistemological projects, optimism is perfectly warranted. Epistemic intuitions are clearly extremely important evidence for project 1, intuition capturing. Epistemic intuitions are also very important evidence for projects 2 and 3 (implicit theory and conceptual analysis). But other substantive evidence, particularly psychological evidence about what underlies our abilities to produce epistemic intuitions, is likely to be

important to projects 2 and 3 as well. So it is a mistake for the naturalist, or for anyone, to embrace a general pessimism about the proper role of epistemic intuitions in epistemology. There are plenty of legitimate philosophical projects, projects that distinguished philosophers have pursued, where pessimism would be absurd. On our view, however, a moderate pessimism about projects 4 and 5 is warranted. That's because these theories explicitly aim to tell us about something beyond our intuitions – either about the nature of knowledge (project 4) or about what we epistemically ought to believe (project 5).

4. The coherence of a moderate pessimism about epistemic intuitions

A moderate pessimism about epistemic intuitions consists of an optimistic component and a pessimistic component. The optimistic component holds that epistemic intuitions are practically indispensable. A person totally bereft of these sorts of intuitions would make Hamlet seem reckless. Indeed, given the many beliefs we must come to in order to navigate our environment, we would not long survive without quickly formed judgments about what we epistemically ought to believe in particular evidential situations. Not only have epistemic intuitions played an essential role in our everyday cognitive accomplishments, they have played a vital role in the quite impressive intellectual achievements of our species. The pessimistic component of a moderate pessimism about epistemic intuitions holds that despite their considerable practical utility, contemporary philosophical practice gives way too much credence to epistemic intuitions as evidence for or against epistemological theories that aim to tell us something about matters that go beyond our intuitions (e.g., theories that aim to characterize the nature and conditions of knowledge [project 4] or that aim at a reason-guiding theory of knowledge [project 5].)

Moderate pessimism, with its optimism about the practical utility of our intuitions and its pessimism about the evidential potential of intuitions on epistemological projects 4 and 5, is perfectly consistent. An analogy might be useful. Different people have different physical intuitions. Most people (including some who have learned Newtonian physics) have largely Aristotelian physical intuitions; while some people tutored in Newton's theory have Newtonian physical intuitions. From a practical perspective, having either type of physical intuition helps one

get along effectively in the world. In the normal course of events, there is enough overlap in the Aristotelian and Newtonian intuitions that in everyday matters, the theoretical differences are invisible. Those with Newtonian intuitions and those with Aristotelian intuitions come to spontaneous physical judgments that allow them to catch fly balls and navigate traffic. But from a theoretical perspective, these differences are deep and important. The Newtonian intuitions give a much more accurate representation of the physical world. The moderate pessimist about intuitions wants to make a perfectly parallel point: Everyone's epistemic intuitions are practically very useful, even if there is diversity in people's epistemic intuitions; but it doesn't follow that our intuitions accurately represent the nature and conditions of knowledge (project 4) or that they issue effective reasoning guidance (project 5).

Let's consider two related arguments optimists have proposed for thinking that pessimism about epistemic intuitions is a non-starter. On our view, both arguments attack a straw man. The first argument is that intuitions are so vital to our intellectual lives that we cannot give them up without engendering intellectual catastrophe. For example, against "those who reject philosophical intuitions as useless", Ernest Sosa thinks that we merely need to reflect on how widespread and accurate appeal to intuition actually is (forthcoming).

[W]e surely do and must allow a role for intuition in simple arithmetic and geometry, but not only there. Indeed, I ask you to consider how extensively we rely on intuition. I myself believe that intuition is ubiquitous across the vast body of anyone's knowledge (forthcoming).

We rely on intuition in a wide variety of areas; "by parity of reasoning, therefore, it would be an overreaction to dismiss intuition just because it misleads us systematically in certain known circumstances" (1998, p. 265). As BonJour pointedly argues, to offer a blanket condemnation of our intuitions is to commit "intellectual suicide" (BonJour 1998: 5). (See also Bealer 1992, 1996, 1998.)

Another version of this basic argument contends that pessimists about our intuitions must use their intuitions in coming to their epistemological views; and as a result, pessimism about our intuitions is ultimately self-defeating. For example, Harvey Siegel argues that "in one respect the naturalized epistemologist's position is self-defeating. For it seeks to justify naturalized epistemology in precisely the way in which, according to it,

justification cannot be had” (1984: 675). And Mark Kaplan thinks that “the naturalist’s attempt to show the errors of aprioristic methodology depends for its success on consulting, and finding naturalist arguments in accord with, the very sorts of armchair intuitions whose advice the naturalists would have us ignore” (1994: 360). (See also DePaul 1998.)

From our perspective, these arguments attack straw men because they commit the naturalist to an implausibly extreme pessimism. As we have argued, a reasonable pessimism can hold both of the following theses:

1. Restricted optimism: Our epistemic intuitions are reasonably reliable at identifying beliefs that have the property of being knowledge (project 4) or identifying what subjects epistemically ought to believe (project 5).
2. Restricted pessimism: Our epistemic intuitions are not reliable enough to serve as the only (or even the primary) substantive evidence for our theories that aim to characterize the nature and conditions of knowledge (project 4) or that aim at a reason-guiding theory of knowledge or justification (project 5).

The moderate pessimist is not arguing that we should abandon all our epistemic intuitions about everything (which would lead to “intellectual suicide”). Nor is she arguing that we can construct an epistemological theory without ever relying on any epistemic intuitions. Instead, the moderate pessimist merely holds that certain sorts of epistemological theories (e.g., those aimed at projects 4 and 5) cannot be supported entirely (or perhaps even primarily) by epistemic intuitions. These arguments against a moderate pessimism don’t work.

5. The vicissitudes of epistemic intuitions

Why might anyone be pessimistic about whether our epistemic intuitions ought to be trusted as the primary (or only substantive) evidence for a theory of knowledge that aims to characterize the nature and conditions of knowledge (project 4) or guide reasoning (project 5)? From our perspective, a fundamental reason for pessimism is driven by evidence for what we will call the epistemic diversity thesis. This thesis holds that different people have different, incompatible epistemic intuitions. This diversity, we will argue, calls into question whether our epistemic intuitions serve by themselves as the only substantive evidence for an epistemologi-

cal theory that aims to tell us about something other than our epistemic concepts and intuitions.

5.1. Epistemic intuitions are culturally variable

Johnathan Weinberg, Shaun Nichols, and Stephen Stich (henceforth, WNS) present a series of empirical studies that suggest that there are systematic cultural and socio-economic differences in people's epistemic intuitions (2001). Consider that for over 40 years, philosophers have agreed unanimously that subjects in Gettier conditions do not have knowledge. Here is a typical Gettier case.

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?

REALLY KNOWS ONLY BELIEVES

The majority of Westerners (75%) agree with philosophers that Bob only believes that Jill drives an American car and does not really know it. But a majority of subjects from East Asia and India disagreed with philosophers (and most Western subjects). 55% of East Asians and about 60% of Indians judged that Bob has knowledge (WNS 2001: 443-4). WNS also found cases in which there were significant differences between the epistemic judgments of people of high socioeconomic status (SES) and of low SES (2001: 447-448).

The cross-cultural diversity in epistemic intuitions is important but it is not the whole story. WNS emphasize that they did not merely find random variation in people's epistemic judgments across cultures. Instead, these differences reflected deeper cross-cultural differences in how people reason. The psychologist Richard Nisbett and his colleagues have identified some significant differences in the thought patterns of East Asians (Chinese, Japanese and Koreans) and non-Asian Westerners (from the U.S. and Europe) (Nisbett, Peng, Choi and Norenzayan 2001; Nisbett 2003). The reasoning of Westerners tends to be more analytic, "involving detachment of the object from its context, a tendency to focus on attributes of the object to assign it to categories, and a preference for using

rules about the categories to explain and predict the object's behavior. Inferences rest in part on the practice of decontextualizing structure from content, the use of formal logic, and avoidance of contradiction." The reasoning of East Asians tends to be more holistic, "involving an orientation to the context or field as a whole, including attention to relationships between a focal object and the field, and a preference for explaining and predicting events on the basis of such relationships. Holistic approaches rely on experience-based knowledge rather than on abstract logic and are dialectical, meaning that there is an emphasis on change, a recognition of contradiction and of the need for multiple perspectives, and a search for the 'Middle Way' between opposing propositions" (Nisbett, et al. 2001: 293). An example will help make this distinction concrete.

In the "Michigan Fish" study, Japanese and American subjects viewed animated underwater scenes and then reported what they had seen (Masuda & Nisbett 2001). The first statement by Americans usually referred to the fish, while the first statement by Japanese usually referred to background elements, e.g., "There was a lake or a pond." The Japanese made about 70 percent more statements than Americans about background aspects of the environment, and 100 percent more statements about relationships with inanimate aspects of the environment, e.g., "A big fish swam past some gray seaweed" (Nisbett, et al. 2001: 297). In this study, the Westerners subjects focused on objects detached from their background, while the Japanese subjects focused on the context and the relationships between objects in the field. Referring to this study, Nisbett has joked that for Westerners, if it doesn't move, it doesn't exist.

The cognitive differences that Nisbett and his colleagues found between East Asians and Westerners are reflected in WNS's epistemic diversity findings. For example, WNS gave participants three variations of a Truetemp case (in which a person unwittingly is able to reliably form beliefs about the ambient temperature). In the individualistic version, Charles alone gets the Truetemp ability as a result of getting hit in the head by a rock. In the elders version, John alone gets the Truetemp ability as a result of the elders in his community deciding to have John's brain rewired for this ability. And in the community version, radiation causes the rewiring of the entire community of people of which Kai is a member. In all three versions, Westerners' intuitions about stayed about the same (32%, 35%, and 20% respectively thought the person knows). But East Asians' tend to ascribe knowledge more often as more of the community was involved (12%, 25%, and 32% respectively thought the person knows). So in the individualistic version, more Westerners ascribed

knowledge; in the elders version, there was no significant difference; and in the community version, more East Asians ascribed knowledge (WNS 2001: 439-441). These results are consistent with the findings of Nisbett and his colleagues. Because Westerners focused on the properties of the individual and those properties remained the same in the Truetemp cases, their intuitions remained basically stable. However, because East Asians focused on relational properties that changed in 1-3, their intuitions about the cases changed accordingly. WNS argue that

[t]he differences between Ws [Westerners] and EAs [East Asians] look to be both systematic and explainable. EAs and Ws appear to be sensitive to different features of the situation, different epistemic vectors, as we call them. EAs are much more sensitive to communitarian factors, while Ws respond to more individualistic ones. Moreover, Nisbett and his colleagues have given us good reason to think that these kinds of differences can be traced to deep and important differences in EA and W cognition... What our studies point to, then, is more than just divergent epistemic intuitions across groups; the studies point to divergent epistemic concerns – concerns which appear to differ along a variety of dimensions (2001: 451).

This consilience suggests some pretty deep differences in how people in different cultures evaluate reasoning.

5.2. Epistemic intuitions are influenced by irrelevant considerations

Stacy Swain, Joshua Alexander, and Johnathan Weinberg (henceforth SAW, in press) have found that people's intuitions are influenced by the order in which examples are presented. SAW presented participants with a Truetemp case: Charlie is hit in the head which causes his brain to be rewired so that he can accurately judge the ambient temperature. The Truetemp case is presented either before or after one of the following two cases.

Non-Knowledge: Dave sometimes gets a special feeling about which side of a coin is going to come up. When he feels which side will come up, he forms a belief to that effect.

Knowledge: Karen is a chemist who has recently read that mixing two chemicals together will create a toxic gas, and she forms the belief that mixing those two chemicals will create a toxic gas.

Two experimental results are particularly interesting. In the first, experimental subjects are presented with Non-Knowledge first, then Truetemp; the control subjects are presented with Truetemp first, then Non-Knowledge. Those who get Non-Knowledge first are more likely to judge that Charlie knew the ambient temperature. In the second experiment, experimental subjects are presented with Knowledge first, then Truetemp; the control subjects are presented with Truetemp first, then Knowledge. Those who got Knowledge first are less likely to judge that Charlie knew the ambient temperature. SAW conclude that these “results build on an existing body of empirical research demonstrating that intuitions vary according to factors irrelevant to the issues thought-experiments are designed to address” which indicates that epistemic intuitions “may in fact be built on an unacceptably shifting foundation” (in press).

5.3. Philosophers are mistaken about “our” epistemic intuitions

Philosophers who build theories on the basis of epistemic intuitions rely on their own intuitions. Why do they believe that their intuitions are shared by most people? Frank Jackson claims that “we [philosophers] know that our own case is typical and so can generalize from it to others” (1998: 37). But sometimes this is not true. For example, in Knowledge and Practical Interests, Jason Stanley argues that the practical facts of a situation play a role in ordinary knowledge ascriptions. In particular, keeping a person’s evidence fixed, when the costs of having a false belief are high, people are less likely to ascribe knowledge to a person, and when the costs of having a false belief are low, people are more likely to ascribe knowledge to a person. “Ordinary assertions of knowledge are made on such a basis that we can envisage someone [who possesses knowledge] in a higher-stakes situation (often a much higher-stakes situa-

tion), whom we would not think of as possessing that knowledge, given similar evidence” (2005: 8).

Adam Feltz and Chris Zarpentine (manuscript) have tested Stanley’s claim. They began with the examples Stanley takes to show that practical facts influence ordinary knowledge ascriptions (although the examples are slightly modified so as to eliminate potential confounding factors¹).

Low Stakes: Hannah and her wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. It is not important that they do so, as they have no impending bills. But as they drive past the bank, they notice that the lines inside are very long, as they often are on Friday afternoons. Realizing that it isn’t very important that their paychecks are deposited right away, Hannah says, ‘I know the bank will be open tomorrow, since I was there just two weeks ago on Saturday morning. So we can deposit our paychecks tomorrow morning.’

High Stakes: Hannah and her wife Sarah are driving home on a Friday afternoon. They plan to stop at the bank on the way home to deposit their paychecks. Since they have an impending bill coming due, and very little in their account, it is very important that they deposit their paychecks by Saturday. Hannah notes that she was at the bank two weeks before on a Saturday morning, and it was open. But, as Sarah points out, banks do change their hours. Hannah says, ‘I guess you’re right. I don’t know that the bank will be open tomorrow.’ (Stanley 2005: 5)

When Feltz and Zarpentine gave these examples to subjects, their pattern of responses did not conform to Stanley’s predictions. 41% disagreed that Hannah knows in Low Stakes whereas 43.5% disagreed that Hannah knows in High Stakes. The costs of being wrong or right did not significantly influence people’s knowledge ascriptions. Feltz and Zarpentine tested Stanley’s hypothesis against several different scenarios, and none of the results conformed to Stanley’s predictions. It would appear that most people do not share Stanley’s intuitions about knowledge.

6. From epistemic diversity to moderate pessimism

¹ The sentence, “But, as Sara points out, banks do change their hours,” is present in High Stakes but not in Low Stakes. This was removed because it made a possible justification defeater salient that may have confounded the results.

The case for a moderate pessimism begins with three assumptions. First, a theory of knowledge aims to give us an account of a target beyond our concepts and intuitions. Perhaps the aim is to give us an account of the nature and conditions of knowledge (project 4) or an account of what we ought epistemically to believe (project 5). (It will be useful to focus on just one of these projects in our discussion below, so we'll focus on project 4. The following arguments apply *mutatis mutandis* to project 5.) The second assumption is that crude relativism about these projects is false. So the nature and conditions of knowledge are not determined by the content of our concept of knowledge or by our knowledge intuitions. And the third assumption is that the diversity thesis is correct: different people have different knowledge intuitions. Given these three assumptions, we are faced with what we might call the adjudication problem: We need a principled way to adjudicate between competing inconsistent knowledge intuitions – to decide which knowledge intuition is correct and which is incorrect. Since the target of our inquiry is not our knowledge intuitions, a solution to the adjudication problem must appeal to evidence beyond the knowledge intuitions at issue. But there's the rub: Optimists don't think they need to appeal to substantive evidence beyond our knowledge intuitions in constructing a theory of knowledge. So they can't solve the adjudication problem.

Some optimists try to avoid the adjudication problem by denying the existence of genuine diversity in people's epistemic intuitions. Let's start with two related avoidance strategies.

A. Thin slicing knowledge: Diversity does not imply any disagreement about what beliefs count as knowledge because those who apparently disagree are really talking past one another. The diversity findings show only that 'knowledge' has different meanings in different people's idiolects. So there can be no large-scale, systematic disagreements about knowledge. And so there is no need to adjudicate any disagreements.

B. Thin slicing epistemology: The diversity findings show that some people don't have epistemic concepts at all. So, for example, WNS have not shown that East Asians have different epistemic intuitions concerning Gettier cases. Rather, WNS have shown that East Asians have non-epistemic intuitions concerning

Gettier cases. And the diversity findings show no large-scale, systematic disagreements about epistemological matters.

The main worry about the thin slicing strategies is that it is not clear that a plausible semantic theory can support them. After all, while WNS found systematic diversity in people's epistemic intuitions, they also found plenty of widespread cross-cultural agreement. For example, the vast majority of all cultural groups agreed that beliefs based on "special feelings" were not knowledge (WNS 2001: 430). More importantly, the epistemological project we're considering does not concern itself with our concept of knowledge or what we mean by 'knowledge'. It concerns itself with the nature and conditions of knowledge – with the referent of 'knowledge'. It is overwhelmingly plausible that individuals can have quite different opinions about something while still referring to it (Kripke 1972, Putnam 1975). If people with very different ideas about what atoms are can all refer to atoms, then it seems plausible to suppose that people with somewhat different ideas about the nature and conditions of knowledge can all refer to knowledge. There's much more to say about this, of course, but it is plausible to conclude that as an attempt to explain why epistemology never tackles the adjudication problem and relies entirely on philosophers's agreed upon intuitions, the thin slicing strategies are fraught with difficulties.

A third avoidance strategy is convergence. The basic idea is that all epistemic diversity is merely apparent diversity; it always arises because someone is making some kind of mistake. Once the errors are eliminated, the diversity in people's epistemic intuitions will disappear. It is important to distinguish two sorts of convergence strategies. The first holds that diversity will disappear (or at least ought to disappear) when people are introduced to evidence about knowledge (not about our concept of knowledge or our knowledge intuitions). But this is not an avoidance strategy. It adjudicates between different, competing intuitions by introducing non-intuitional evidence. Here is a convergence strategy that does involve denying the existence of real epistemic diversity:

C. Convergence: All diversity about intuitions concerning epistemic knowledge is merely apparent diversity. It will always disappear after people engage in a process of reflection solely on their epistemic knowledge intuitions.

The problem with the convergence strategy is that it must avoid stacking the deck in favor of some particular set of epistemic intuitions. We suspect that at least some philosophers who favor the convergence strategy do so because they are confident that they can convince people who have (from their perspective) “mistaken” intuitions to change their minds and adopt “correct” intuitions. But that way of eliminating diversity does not show that the original diversity was merely apparent. Even if those with T1 intuitions can implement some argumentative or pedagogical regime and convince those with T2 intuitions to adopt T1 intuitions, it doesn’t follow that their original intuitions were the result of some kind of mistake. After all, those with T2 intuitions might be able to implement a different argumentative or pedagogical regime and convince those with T1 intuitions to adopt T2 intuitions. The convergence strategy must show that an unbiased process of reflection solely on knowledge intuitions will lead people to a single set of knowledge intuitions. This is a brute empirical claim. We do not know how to test it. But we see no reason to take convergence seriously in absence of at least some evidence that it is true.

The final avoidance strategy we will consider simply involves the claim that certain people are experts in matters epistemological and their intuitions are correct – or at least more likely to be correct than other people’s intuitions.

D. Claiming expertise: Some privileged class of people, perhaps those with a certain sort of expertise, have the correct intuitions – or at least they have the intuitions we ought to accept.

We have no objections to well-founded claims of expertise and the practice of deferring to experts. But if two people have different intuitions about nature and conditions of knowledge, what makes one of them an expert? It can’t just be that she has these intuitions rather than those. It must be that her intuitions are correct – or at least that we have good evidence for thinking that her intuitions more accurately reflect the nature and conditions of knowledge. If this is right, then this isn’t really an avoidance strategy, since it must provide evidence beyond the knowledge intuitions under consideration for why some of these intuitions are correct and others are not.

So given epistemic diversity, why do contemporary analytic epistemologists construct theories of knowledge relying solely on their agreed upon knowledge-intuitions? Perhaps there is an explanation we have

missed, or perhaps one of the avoidance strategies we've considered can overcome its prima facie difficulties. But we have an alternative hypothesis which we will frame in terms of the following argument:

1. Analytic epistemology is committed to relying solely upon the agreed upon knowledge-intuitions of philosophers as the substantive evidence for theories of knowledge.
2. A well-supported theory of knowledge that aims at projects 4 or 5 (characterizing the nature and conditions of knowledge or developing a reason-guiding account of knowledge) must appeal to more substantive evidence than simply the agreed upon knowledge-intuitions of philosophers.
3. Therefore, analytic epistemology cannot deliver a well-supported theory of knowledge that aims at projects 4 or 5.

7. Naturalized epistemology: Intuitions and beyond

If we want a theory to tell us about the nature and conditions of knowledge (project 4), our knowledge-intuitions are likely to be reasonable guides. If we want a theory that delivers a reason-guiding conception of knowledge (project 5), our knowledge-intuitions (or our justification-intuitions) are likely to be reasonable guides. But there is some plausible evidence that people's epistemic intuitions about knowledge vary in systematic ways. Not all these various, inconsistent intuitions can be accurate representations of the true nature and conditions of knowledge (project 4). And it is unlikely these inconsistent intuitions will always provide high quality guidance about what we epistemically ought to believe (project 5). How might we determine whose knowledge intuitions are right? We submit that philosophy must face the adjudication problem squarely: We must find some evidence that would show us that these intuitions are correct while those intuitions are not. One might reasonably wonder what such evidence might be. This is one of the challenges facing naturalized epistemology: What, besides our epistemic intuitions, might reasonably count as substantive evidence for or against our epistemological theories? We want to briefly sketch an answer to this question.

A naturalistic approach to philosophy will begin by considering humans in our natural settings. We find ourselves interacting with various parts of the natural and social world, and we try to navigate and arrange our natural and social environments in ways that (if all is going well) make our lives go better. Normative concepts and practices – moral, epis-

temic, pragmatic – play important roles in guiding certain aspects of our thought and behavior in ways that are (if all is going well) generally effective at helping us to navigate and arrange our environments in ways that make our lives – and the lives of others – go better. Where do our epistemological theories fit into this picture? To some degree, this is an empirical question and subject to various lines of evidence. Our epistemic intuitions are certainly an important line of evidence – from them we can perhaps learn about the role of our epistemic concepts, norms and practices in guiding our reasoning and our beliefs (Ahlstrom 2008). What’s more, sociological and anthropological evidence are relevant to limning the (perhaps variable) role of epistemic norms and practices in the lives of people in different cultures.

On the view we are pressing, the contents of our epistemic concepts are not handed down from above as Iron Laws of Reason. Rather, they are cultural artifacts that betray how reasoning and belief are guided in an environment that is to some degree successful in promoting people’s well-being. And this brings out another line of evidence we take to be relevant to epistemological theorizing: evidence concerning human well-being. On our view, epistemological excellence in reasoning and belief tends to promote human well-being. It does not necessarily, or even always, do this. (Pragmatists might insist that epistemic excellence always promotes well-being. But we think it is a mistake to suppose that all epistemic considerations are grounded directly in considerations of well-being [Bishop, forthcoming].) If we suppose there is some sort of loose connection between epistemic excellence and well-being, this provides another line of evidence to consider in adjudicating between competing intuitions. Other things being equal, epistemic intuitions are more likely to reflect genuine epistemic factors insofar as they recommend ways of reasoning or believing that consistently foster greater well-being.

So what role do epistemological considerations play in our cognitive lives? Here is a plausible speculation, based on the philosophical study of our epistemic concepts and on evidence (some of it anecdotal) concerning the role of epistemic practices in various cultural settings (including science, the law, medicine, etc.): Our epistemological concepts and practices are largely aimed at directing us to reason reliably about significant matters and believe significant truths. We hope this speculation seems obvious and trivial. That’s because accepting it opens up many new lines of evidence that are relevant to epistemological theorizing. In particular, our epistemological theories must answer to psychological evidence concerning how people can become better, more reliable reasoners (e.g., Bishop

& Trout 2005). Indeed, given the aim of epistemological concepts, norms and practices, we might find lots of ways to revise and improve our concepts, norms and practices so that they more effectively fulfill their appropriate roles.

Given the naturalistic perspective we're pressing, theories of epistemology must fit coherently with a wide range of interesting theories and evidence about how we get along in the world and how we might get along better in the world. These theories and evidence come from psychology, sociology, anthropology as well as philosophy. Many of these theories are in their infancy. Viewed in this light, the philosophical debate over the role of intuitions in supporting epistemological theories appears stilted and cramped. The real issue is not whether to trust our epistemic intuitions in building our epistemological theories. Of course we should. The real issue is: In building our epistemological theories, why stop with our intuitions?

References

- Ahlstrom, K. (2008). *Constructive Analysis: A Study in Epistemological Methodology*. Acta Universitatis Gothoburgensis: Goteborg, Sweden.
- Bealer, G. (1992). The incoherence of empiricism. *The Aristotelian Society Supplementary Volume*, 66, 99-138.
- Bealer, G. (1996). A priori knowledge and the scope of philosophy. *Philosophical Studies*, 81, 121-142.
- Bealer, G. (1998). Intuition and the autonomy of philosophy. In M. D. a. W. Ramsey (Ed.), *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry* (pp. 201-239). Lanham: Rowman and Littlefield.
- Bishop, M., & Trout, J. D. (2005). *Epistemology and the Scope of Philosophy*. New York: Oxford University Press.
- Bishop, M. (Forthcoming). Reflections on Cognitive and Epistemic Diversity: Does a Stich in Time Save Quine? In D. Murphy and M. Bishop (Eds.), *Stephen Stich and His Critics*. Blackwell Press.
- Bonjour, L. (1998). In *Defense of Pure Reason: A Rationalist Account of A Priori Justification*. Cambridge: Cambridge University Press.
- Claxton, G. (1998). Investigating human intuition: Knowing without knowing why. *The Psychologist*, 11, 217-220.
- Cohen, L.J. (1981). Can human irrationality be experimentally demonstrated. *The Behavioral and Brain Sciences*, 4, 317-331.
- DePaul, M. (1998). Why bother with reflective equilibrium. In W. R. M. DePaul (Ed.), *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry* (pp. 293-309). Lanham: Rowman and Littlefield.

- Devitt, M. (2006). Intuitions in linguistics. *British Journal for the Philosophy of Science*, 57, 481-513.
- Feltz, A. & Zarpentine, C. (manuscript). Do you know more when it matters less?
- Goldman, A., & Pust, J. (1998). Philosophical theory and intuitional Evidence. In W. R. M. DePaul (Ed.), *Rethinking Intuition: The Psychology of Intuition and Its Role in Philosophical Inquiry* (pp. 179-197). Lanham: Rowman and Littlefield.
- Hales, S. (2000). The problem of intuition. *American Philosophical Quarterly*, 37, 125-147.
- Jackson, F. (1998). *From Metaphysics to Ethics: A Defense of Conceptual Analysis*. New York: Oxford University Press.
- Kaplan, M. (1994). Epistemology denatured. *Midwest Studies in Philosophy*, 19, 350-365.
- Kornblith, H. (2002). *Knowledge and Its Place in Nature*. Oxford: Oxford University Press.
- Kripke, S. (1972). *Naming and Necessity*. Cambridge: Harvard University Press.
- Masuda, T., & Nisbett, R. E. (2001). Attending holistically versus analytically: Comparing the context sensitivity of Japanese and Americans. *Journal of Personality and Social Psychology* 81, 992-934.
- Nisbett, R.E. (2003). *The Geography of Thought*. New York: Free Press.
- Nisbett, R. E., Peng, K., Choi, I., & Norenzayan, A. (2001). Culture and systems of thought: Holistic vs. analytic cognition. *Psychological Review*, 108, 291-310.
- Osbeck, L. (2001). Direct apprehension and social construction: Revisiting the concept of intuition. *Journal of Theoretical and Philosophical Psychology*, 21, 118-131.
- Putnam, H. (1975). The meaning of 'meaning'. In H. Putnam (Ed.), *Mind, Language, and Reality: Philosophical Papers* (pp. 215-271). Cambridge: Cambridge University Press.
- Lewis, D. (1983). *Philosophical Papers*. In. Oxford: Oxford University Press.
- Sosa, E. (2007). Intuitions: Their nature and epistemic efficacy. *Grazer Philosophische Studien*, 74, 51-67.
- Siegel, H. (1984). Empirical psychology, naturalized epistemology, and first philosophy. *Philosophy of Science*, 51, 667-676.
- Sosa, E. (Forthcoming). A defense of the use of intuition in philosophy. In M. Bishop & D. Murphy (Eds.), *Stich and His Critics*.
- Stanley, J. (2005). *Knowledge and Practical Interests*. New York: Oxford University Press.
- Stich, S. (Forthcoming). Reply to Bishop. In D. Murphy and M. Bishop (Eds.), *Stephen Stich and His Critics*. Blackwell Press.

- Swain, S., Alexander, J., & Weinberg, J. (in press). The instability of philosophical intuitions: Running hot and cold on Truetemp. *Philosophy and Phenomenological Research*.
- van Inwagen, P. (1997). Materialism and the psychological continuity account of personal identity. *Nous*, 31, 305-319.
- Weatherson, B. (2003). What are good counterexamples? *Philosophical Studies*, 115, 1-31.
- Weinberg, J., Nichols, S., & Stich, S. (2001). Normativity and epistemic intuitions. *Philosophical Topics*, 29(1&2), 429-460.