

## “Virtue, Intuition, and Philosophical Methodology”

Jonathan Jenkins Ichikawa  
ichikawa@gmail.com  
Arché Philosophical Research Centre

Draft Manuscript 29 August, 2011

To Appear in *Virtuous Thoughts: Essays on the Philosophy of Ernest Sosa*, ed. John Turri, Springer Publishing

**Abstract.** This chapter considers Ernest Sosa’s contributions to philosophical methodology. In Section 1, Sosa’s approach to the role of intuitions in the epistemology of philosophy is considered and related to his broader virtue-theoretic epistemological framework. Of particular focus is the question whether false or unjustified intuitions may justify. Section 2 considers Sosa’s response to sceptical challenges about intuitions, especially those deriving from experimental philosophy. I argue that Sosa’s attempt to attribute apparent disagreement in survey data to difference in meaning fails, but that some of his other, more general, responses to experimentalist sceptics succeed.

Historically, one of the central motivating questions in the epistemology of philosophy concerns the role of intuitions. It is said that philosophers often make use of intuitions, and theorists consider what it is about intuitions that could justify such a practice, or whether it is a mistake for philosophers to continue to use intuitions in the way that they do. These questions define a significant subfield in metaphilosophy.

Ernest Sosa’s is among the most influential work in this tradition; he accepts the premise of the dialectic, that intuitions do play an important role in philosophy as practiced, and argues in favour of such practice, by offering a theory of the epistemic role of intuitions, and by defending the practice of appeal to intuition from critics. These two elements of Sosa’s work—the positive story about intuitions, and the defensive responses to critiques of intuitions—are the focus of the present contribution. We consider each in turn.

### 1. The role of intuitions in the epistemology of philosophy

If, as is generally assumed, intuitions play some role in justifying certain beliefs, it is correct for us theorists to inquire into how and why this is so.

#### 1.1. What are intuitions?

Invocation of ‘intuition’ in philosophical discussion generally can be rather diverse. Some theorists intend the word to apply to beliefs—perhaps of a certain kind, or perhaps even unrestrictedly. Kirk Ludwig considers a factive sense of ‘intuition’ amounting to judgments with a particular rational etiology<sup>1</sup>; George Bealer considers intuition to comprise a *sui generis* propositional attitude with a

---

<sup>1</sup> Ludwig (2007).

distinctive phenomenology.<sup>2</sup> Sosa's own approach to intuitions falls somewhere between these latter approaches. Like Bealer, Sosa considers intuitions to be a certain kind of felt attraction toward judgment; unlike Bealer, he relents from strong claims about a distinctive phenomenology, or intuition's *sui generis* status. Like Ludwig, Sosa considers the etiology of a particular mental state to be central in establishing it as an intuition—Sosa's 'intuitions' are attractions that derive only from the entertaining of their particular contents. But where Ludwig requires that intuitions derive from conceptual competence, Sosa allows for intuitions that reflect rational errors or biases, so long as they stem from the entertaining of the intuited content.

I take it that questions such as these admit of a significant degree of stipulation. I see little point in appealing to pretheoretic intuitions about 'intuition' to settle the question of how we ought to use the term, and I suspect that Sosa will share my attitude here. Let us therefore accept Sosa's terminology, and allow that intuitions are certain kinds of attractions to judge, where

[w]hat is distinctive of intuitive justification is ... *its being the entertaining itself of that specific content that exerts the attraction*. So, intuitions are attractions of a certain sort, with no rational basis beyond the conscious grasp of its specific propositional content.<sup>3</sup>

(We may pause to note that Sosa's use of 'intuition' has not always fit this account; Sosa (1998), for instance, articulates a notion of intuition that relates it closely to counterfactual belief. However, his recent work does seem to have converged on the approach described above, and so it will be our focus in what follows.)

So we now have a (stipulative) account of what intuitions are. What epistemological role can they play?

## 1.2. Perceptual models

Here is one natural idea: intuitions should be understood by analogy to perceptual experiences. Just as my sensory experiences play a role in determining what contents I am justified in coming perceptually to believe, so do my intuitive experiences play a role in determining what contents I am justified intellectually to believe. As Sosa characterizes this approach, intuitive seemings play a mediating role between beliefs in *a priori* propositions, and those contents themselves.<sup>4</sup>

Sosa offers three arguments against the perceptual model of intuition.

First, intuitions, unlike perceptual experiences, are *epistemically evaluable*. Sosa points out that "[a] reason can be assigned the wrong weight, as it attracts one's assent too much, or too little."<sup>5</sup> Sosa discusses cases of pernicious bias and

---

<sup>2</sup> Bealer (1992), (1998).

<sup>3</sup> Sosa (2007a) p. 54, emphasis in original.

<sup>4</sup> *Ibid.* p. 47.

<sup>5</sup> *Ibid.* p. 49.

enculturation, whereby the consideration of a certain propositional content attracts one's assent to an inappropriate degree; from wherever it may derive—cultural bias or elsewhere—I think the phenomenon is familiar enough; a standard form of philosophical debate disputes the proper weighting of various particular intuitions.

The second reason Sosa suggests that intuitions are not able to stand as analogues of perceptual experience is that visual experiences play a role in perceptual justification that enjoys no correlate in the case of intuitive judgment. Sosa writes:

What *intuitive* justification lacks is any correlate of the visual sensory experience beyond one's conscious entertaining of the propositional content, something that distinctively exerts a thereby justified attraction to assent. No such state of awareness, beyond the conscious entertaining itself, can be found in *intuitive* attraction.<sup>6</sup>

Intuitive belief, Sosa says, like introspective belief, but unlike perceptual belief, involves no such intermediate stage.

The third reason Sosa cites to distinguish the role of perceptual experience from that of intuition is that the former is, in typical cases, causally and counterfactually connected to both the resultant belief and its content itself. The sun causes in me the visual experience as if it is sunny; this in turn causes my belief to the same effect. By contrast, "many truths known intuitively lie outside the causal order, unable to cause experience-like intuitions, even if there were such intuitions. Nor can such truths be tracked, not if tracking requires sensitivity. What are we to make of the claim that if it were not so that  $1+1=2$ , one would not believe it to be so? Hard to say, but that is what tracking it with "sensitivity" would require."<sup>7</sup>

Let us consider these apparent differences.

Sosa makes much of the fact that intuitions are epistemically evaluable. There are good and bad dispositions to assent. Some intuitions, for example, derive from unreliable sources, like wishful thinking or unreliable enculturation; such are negatively rationally evaluable, and any belief based on such an intuition is thereby deficient. On this point, there can be little doubt that Sosa is correct.

Plausibly, there is yet another way in which intuitions are rationally evaluable, beyond the question of how much the intuition that  $p$  ought to attract assent that  $p$ . Perhaps there is also room to evaluate the intuition itself. We will see below that Sosa is committed to such evaluability. Well-functioning, virtuous epistemic agents are attracted to a certain class of truths; such attractions are a credit to

---

<sup>6</sup> *Ibid.* p. 55.

<sup>7</sup> Sosa (2007b), p. 51. For subjects to 'track' a proposition in the relevant sense is approximately for their beliefs to be counterfactually sensitive to the truth of that proposition; if a subject's belief tracks the fact that  $p$ , then, were  $p$  not the case, the subject would not believe that  $p$ . See e.g. Nozick (1981), p. 185.

their subjects. Almost everyone finds it intuitive that  $4 > 3$ ; if someone had an intuitive repulsion from this truth, instead of the usual attraction, this would reflect badly on him as an epistemic agent, at least with respect to arithmetic.

The point is not limited to such simple contents; if someone has studied logic and finds DeMorgan's Laws intuitive, then she is, epistemically speaking, with respect to logic, better off than her peers who have no particular attraction to assent, and better off still than those who find the equivalence counterintuitive.

The phenomenon in question is a general one, extending well beyond philosophical questions. Expert poker players make much more reliable intuitive poker judgments than do novices; this even though, in some cases, they are unable, without confabulation, to articulate the considerations that led them to their judgments. Professional outfielders make excellent immediate judgments as to which direction to run in order to catch the ball, but few could tell you how they know. (McBeath *et al* (1995) argues that the best available data indicates that fielders, while running, seek to maintain a linear optical trajectory with monotonic increases in optical ball height.) We are all, in our small ways, Ramanujans.

But does this represent a disanalogy with perceptual experience? One might think that, just as there is room to evaluate the degree to which one is attracted by intuition to assent to a given proposition, so is there room to evaluate the degree to which one is attracted by perceptual experience to a given proposition. Indeed, on one natural reading, the central epistemic tradition of engagement with skepticism is a dialectic with regards to this question: to what degree ought my perceptual experience attract me to assent to the proposition that I have hands?

However, this line of thought neglects Sosa's particular ontological approach to intuitions. Intuitions, for Sosa, are not experiences that lead us to develop attractions to assent; they are the attractions themselves. Experiences, by contrast, are, in Sosa's framework, passive and non-rational. (Sosa here commits to a certain approach to nonconceptual content: they are non-rational precisely because they do not involve concept application.) This is why Sosa argues that experience is not rationally evaluable in the way that intuition is.

Since the argument here relies on his particular identification of intuitions with attractions to assent, it is worth noting that it leaves open the question of whether there is such a thing as 'intuitive experience' that plays a role parallel to perceptual experience in the epistemology of the *a priori*. Sosa clearly thinks there is no such experience—and perhaps he is right to think not—but the argument here only establishes that intuitions, as he understands them, are not such experiences.

This last point relates rather directly to Sosa's second disanalogy between intuition and perceptual experience, the apparent lack of an intermediate state standing between fact and judgment. It is not clear to me how to go about evaluating whether it is correct. Sosa thinks that in the case of perception we do have an intermediating state playing such a role, but that in the cases of

introspection and intuition, we do not. In the introspective case, Sosa suggests that it is the introspected fact itself that directly justifies the introspective judgment. We will see below that he prefers a different story about intuition, but he agrees that it is no intermediate mental experience between fact and belief. I do not see in Sosa any straightforward argument to this effect; it is just a claim made at various points as if he considers it obvious. But introspective access to claims such as these is a tricky business. It is worth noting, for instance, that some philosophers have denied that the state of sensory experience plays such a mediating role in the case of perception; I don't know how to tell, short of constructing and selecting between the relevant theories, whether this is so. Likewise, I see no obvious reason to reject the suggestion that introspective judgments, as of headaches, proceed on the basis of an intermediary experience, one giving rise to the seeming as if there is a headache. So as far as this point goes, I don't see that Sosa has established, so much as claimed, that intuition is unlike perception with respect to the role of an intermediary state.

Sosa's third argument, though, does seem to have more traction against the perceptual model of intuition: the causal connection between fact and perceptual experience is obviously not applicable in the case of intuition. This does seem a plausible candidate for an essential feature of a perceptual model.

We may add one more reason not to prefer a perceptual model of intuition: it fails to respect the sense in which the constraints of rationality are objective. According to the perceptual model of intuition, intuitions play a justifying role analogous to that enjoyed by sensory experience. But there is an intuitive disanalogy concerning the rationality of intuitive and perceptual judgments: in the latter case, but not in the former, the rationality of the judgments in question seems contingent on having the particular experiences that allegedly underwrite it. I would suffer no rational pressure to form a perceptual belief, absent the sensory experience in question; someone who is blind, or in a totally dark room, faces no reason to believe that the walls are red. By contrast, someone who, upon considering the proposition that  $2 + 2 = 4$ , does not undergo any intuitive experience to the effect that it is true, thereby demonstrates a rational deficiency—a deviation from ideal rationality. She, unlike her blind counterpart, does suffer rational pressure to believe that content, even if her intuitions are not helping her to appreciate it.

### **1.3. Factive models**

As Sosa sees it, the failure of the perceptual model of intuition *prima facie* motivates a Cartesian, factive model of intuitions that emphasizes a similarity between intuition and introspection. Sosa writes:

In explaining what it is to perceive clearly and distinctly, Descartes does not turn simply to logic, or arithmetic, or geometry. In his most prominent explanation of the notion, he appeals rather to introspection. Even if our awareness that we suffer a pain has some clarity in it, we fall short of clear *and distinct* perception until we separate the hypothesis as to the origin of our feeling of pain from the perception that we have that feeling. It is the perception of the *feeling*, so detached, that attains both clarity and

distinctness. So, Descartes' model of a kind of intuitive justification and knowledge is introspection, not perception.

...

According to this model, a propositional content about a present state of consciousness can attract assent through its sheer truth (though presumably it needs to be simple enough as well). Analogously, what properly draws your assent to propositional contents about simple arithmetic, geometry, and logic, is again their truth. And the corresponding belief may then be said, by extension, to be intuitively and even foundationally justified. One is justified intuitively by grasping a fact directly.<sup>8</sup>

As indicated in the previous section, I do not consider it obvious that introspection works the way here supposed. Given the possibility of errors in introspective judgment, I see no obvious objection to the suggestion that introspection of a headache involves sensitivity to an intermediate quasi-perceptual state that is, in typical instances, caused by the headache itself. It is also not obvious to me that there *is* such an intermediate state, so I do not intend here exactly to be objecting to Sosa (or Descartes, according to Sosa's reading); I mean only to highlight the assumption as a substantive one, both to clarify the suggestion, and to point to an opportunity for a dissenter to object. For now, let us follow Sosa in supposing that introspection is direct; our introspective beliefs proceed by direct appreciation of internal facts. Can the same be said about intuition?

One immediate worry carries over rather directly from the worries for the perceptual model: since logical, arithmetical, and philosophical facts do not in general enter into causal relations with human beings, their truth cannot in any literal sense 'draw your assent,' since drawing is a causal notion. Perhaps the occurrent consideration of such truths draws assent, but this still seems a significant disanalogy with introspection, just as it is with perception. (In the latter cases, we don't think that *consideration* of introspected or perceived facts causes attraction to assent; we think the facts themselves do.)

Headaches *cause* judgments of headaches; modal facts don't cause anything. Sosa does not, so far as I can tell, consider this particular worry for the introspective model of intuition.<sup>9</sup> Dialectically, from his point of view, this omission is perhaps permissible, as he tends to develop a different objection to the introspective model—namely, that the truth of the intuited judgments cannot directly draw assent, because there are false intuitions that justify in just the same way as true ones do. Sosa's favorite examples here concern paradoxes: cases in which each of several propositions is intuitively justified, but where philosophical investigation demonstrates that they cannot possibly all be right. Consider for example, a formulation of a sorites paradox:

---

<sup>8</sup> Sosa (2007a) pp. 56-57.

<sup>9</sup> The central places in which Sosa considers views of this sort are his (2007a) pp. 56-60 and (2007b).

1. A man with no hairs on his head is bald.
2. For all  $n$ , if a man with exactly  $n$  hairs on his head is bald, then a man with exactly  $n+1$  hairs on his head is bald.
3. A man with *that* much hair on his head [here indicating Ernest Sosa] is not bald.<sup>10</sup>

According to the standard treatment of the paradox, each premise is intuitively plausible, but philosophical investigation—in this case, a bit of relatively trivial reasoning—reveals that at least one must be false. But prior to this investigation, the naïve theorist is, Sosa suggests, justified in each premise, and justified intuitively. Since we know that at least one premise is false, it cannot be that in general, the truth of an intuitive claim accounts for its justificatory status.

We will consider an objection to this line of reasoning in §1.5 below. For now, we turn to the positive view Sosa takes this failure to motivate.

#### 1.4. Competence models

Sosa's own favored view of the role of intuition in the epistemology of the *a priori* is a particular application of virtue epistemology. (It is not, as we shall see, the only way to apply virtue epistemology to the epistemology of the *a priori*.) In general, a virtue-theoretic approach to epistemology associates epistemic justification with virtuous epistemic performance. Agents may have better or worse epistemic dispositions. An epistemically good disposition is an epistemic virtue; an epistemically bad disposition is an epistemic vice. Sosa's brand of virtue epistemology ties virtue closely to reliability: an epistemic virtue (as he often puts it: a competence) is a disposition to form judgments in a way that reliably yields true belief and avoids false belief.

Dispositions do not always manifest; one can be generally disposed to judge well, and yet judge poorly in an instance—such would be a generally virtuous agent acting viciously in the moment. Of course, even the exercise of virtue does not guarantee truth; one may judge reliably and yet go wrong through no fault of one's own. Such is the plight of subjects with beliefs that are justified but false. One may even judge virtuously and come to believe a truth, where so correctly believing nevertheless fails to manifest virtue—the belief was only luckily true. Such, Sosa thinks, is the proper diagnosis of Gettier cases.

Sosa has often made use of an analogy to an archer;<sup>11</sup> we may find it useful as well. An archer may be more or less skilled—her skill may be understood as approximately a propensity to hit the target (and avoid missing it). Being a good archer in general is analogous to being epistemically virtuous in general. A good archer will tend to release adroit shots—these are shots that manifest the archer's skill; they are well-aimed, etc. An adroit shot corresponds to a justified

---

<sup>10</sup> We may interpret (3) as a *de re* judgment about the amount of hair that Ernest Sosa has; thus do we make plausible that the justification here is intuitive. The judgment that Ernest Sosa is not bald is plausibly a perceptual one.

<sup>11</sup> *E.g.* Sosa (2007a) pp. 22-23.

belief. A successful shot hits the target—as a successful belief ‘hits’ the truth. An adroit shot is more likely than a bad one to be successful, but sometimes adroit shots miss (as when a gust of wind intervenes) and sometimes bad shots hit (when they are lucky). Likewise, an adroit shot may succeed only luckily, as when a gust of wind sends it off course, and another lucky one directs it again to the target; such are the Gettier cases of marksmanship.

So stated, the generalized version of Sosa’s virtue epistemology relates justification and knowledge to judgment, and its connection to virtuous—*viz.*, reliable—dispositions to judge. How do intuitions fit into the picture? Sosa treats them very much like judgments: as justified or unjustified, depending on whether they are the result of an epistemic competence.

...[T]he intuitions immediately delivered by our rational competences are preponderantly true, even if occasionally false. This is why those rational mechanisms are intellectual *competences*, because they systematically lead us aright. All seemings delivered by such competences are thereby epistemically justified.<sup>12</sup>

So intuitions, like judgments generally, can be good or bad; like judgments generally, they are good when they are produced by competences—*i.e.*, when they are produced by reliable mechanisms—and bad otherwise. Thus, according to Sosa, can mistaken intuitions justify, as in the cases of paradoxes. Although they are false intuitions, having gone wrong in the cases in question, they are nevertheless produced by competences, which typically produce true intuitions.

Of course, as epistemologists, we are not only, or even primarily, interested in the circumstances under which intuitions are justified. Indeed, we rarely use the language of justification and unjustification for intuitions at all. Instead, or at least in addition, we want to know about the justification conditions for intuitive *belief*. What is the relationship between justified intuition and justified belief?

*Prima facie*, it is not obvious that there should be any straightforward relationship here. Intuitions are attractions to believe; it does not follow that intuitive beliefs are only virtuous when based on intuitions that are themselves virtuous. Compare the various attractions one might have to shoot arrows—thinking it’d be fun, having energy to spare, hoping for some game to eat, trying to impress a lover—none of these have any straightforward bearing on whether the resultant shot is an adroit one. One can shoot well, even having been attracted by a bad reason.

Sosa, however, sees a tighter connection here, writing, for instance, that if an intuition is epistemically faulty (*i.e.*, not produced by a competence—produced, perhaps, by vicious enculturation), then “it could hardly provide epistemic justification to any belief founded upon it. Only *competently* derived intuitive seemings could do so.”<sup>13</sup> What could justify such a stance? Sosa’s remark here would be vindicated if it turned out that only a belief founded upon a virtuous

---

<sup>12</sup> Sosa (2007a) p. 60.

<sup>13</sup> Sosa (2007a) p. 62.



intuition could itself be virtuous. Whether this is so turns upon questions about how to individuate belief-forming dispositions. The question is a version of the generality problem for process reliabilism.<sup>14</sup>

Suppose someone has the intuition that *p*, and on this basis, forms the belief that *p*. Is her resultant belief justified? In particular, we wonder whether the justification of her belief rests in important part on the justification of the relevant intuition. Suppose we considered her to be employing a disposition to believe everything she finds intuitive, and to suspend judgment on everything she finds neither intuitive, nor counterintuitive, if no other evidence presents itself. By stipulation, she believes without regard to the virtue of the intuition; nevertheless, plausibly, her preponderance of true intuitions to false ones will be high, and so her belief-forming dispositions will be at least reasonably virtuous. If this is how we think of her competence, then there is no requirement that intuitions be themselves well-founded in order to justify.

Of course, someone with the dispositions just described will be far from ideally virtuous; a more reliable tendency would involve the exercise of due diligence to ensure that beliefs be made on the basis of only those intuitions that are well-founded. While we should not expect people in general to be able to distinguish all of their good intuitions from all of their bad ones, it is very plausible that steps can be made to improve reliability here: we can trust our intuitions to a greater extent when in more favorable circumstances for thinking clearly, and we can be particularly cautious with the sorts of intuitions that could easily be the product of irresponsible bias. So perhaps Sosa's thought here is that to be reliable enough to constitute virtuous performance, subjects must exhibit sensitivity to the virtue of the intuitions in question.

This is plausible enough, but it still does not yield the strong connection between good intuition and good belief suggested. Perhaps good belief demands that one exhibit some selectivity about one's intuitions; this is not to say that the selection in question must be infallible. Suppose an intuition is unjustified—it is formed via an unreliable process, rather than by a competence—but in a way that defies detection as such by the usual sorts of introspective processes by which a subject recognizes many untrustworthy intuitions. In such a case, a subject might exhibit belief-forming competence by treating the intuition critically, then going on virtuously to base judgment on what is in fact an unvirtuous intuition. It is not clear what, on Sosa's view, could prevent a subject from coming to justified belief in this way.

So we see a tension between elements of Sosa's approach to intuitions. He wants, on the one hand, to render intuitions epistemically evaluable, in a way closely analogous to beliefs, and to judge them as justified or not via his virtue-theoretic framework; on the other hand, he is careful to emphasize that intuitions are not themselves judgments but merely attractions to judge. By thus separating intuition and judgment, it becomes possible, on the virtue framework, to evaluate them independently, even in the case when a judgment rests on an

---

<sup>14</sup> For an overview, see Conee & Feldman (1998).

intuition. As a result, there is no obvious way to derive another result Sosa claims: that intuitive belief is justified only if it is based on a justified intuition.

### 1.5. Mistaken intuitions justifying

Although Sosa wants to rule out the possibility of unjustified intuitions justifying belief, he does allow for *false* intuitions to justify belief. So he commits to the possibility of false justified intuitions—again, false premises in paradoxes provide the paradigms. As he observes, however, there could be reason to doubt that false intuitions could justify in this way. Here is a line of thought that Sosa attributes to Descartes:

Suppose that, apart from having drawn it as a deductive conclusion, someone has no reason whatsoever for believing a certain proposition, one that can be known not directly but only through reasoning. If the reasoning is grossly fallacious, it cannot really justify the subject in believing that conclusion. When we work our way back through the reasoning we eventually hit the fallacy; let it be an affirming of the consequent. At that point it must have seemed intuitive to the reasoner to think something of the following form: *that, necessarily, if  $q$ , and  $p \rightarrow q$ , then  $p$* . In making that immediate inference, the thinker makes manifest his intuitive attraction to its corresponding conditional. But he cannot really be justified in being thus attracted to that conditional, nor in any corresponding belief. Whatever sort of epistemic justification he lacks for assenting to the conclusion is one he must also lack for attraction and assent to that unfortunate conditional. This reveals an advantage of the Cartesian [factive] account of intuition: that it explains our verdict about the fallacious intuition. Descartes suggests that the intuition at work in the fallacy is *apparent* intuition (*merely* apparent intuition), whereas only real intuition justifies. For him, all real intuition must be true, so the corresponding conditional of affirming the consequent cannot really be intuited. What is not a fact, on his view, is just not there to be intuited.<sup>15</sup>

As we have seen, Sosa is committed to resisting this line of reasoning, since it is his view that at least sometimes, as in the case of paradoxes, subjects have justified intuitive beliefs that are false. And since Sosa says that only virtuous intuitions can justify, he thereby commits to false virtuous intuitions with these contents as well.

What, then, distinguishes justified false intuitions, as in the cases of paradoxes, from unjustified ones, as in the case of an intuition that would license affirming the consequent? It cannot be merely that the latter constitutes fallacious reasoning, for false premises in paradox would license fallacious reasoning just as much as the affirming-the-consequent intuition would. (For example, supposing the iterative principle to be the false premise in the sorites paradoxes, it seems to license fallacious reasoning from the baldness of Stephen Stich to the baldness of Ernest Sosa.)

---

<sup>15</sup> Sosa (2007a) p. 58. See Sosa (2007b) pp. 53-54, for effectively the same point, developed a bit more thoroughly.

Sosa's answer is that the key difference turns on whether the false intuition derives from "some avoidably defective way"; such errors constitute "faults, individual flaws, or defects."<sup>16</sup> Sosa thinks this is what is going on when somebody follows her strong inclination to affirm the consequent, inferring from  $q$  and (if  $p$ ,  $q$ ) to  $p$ . By contrast, "the false intuitions involved in deep paradoxes are not so clearly faults, individual flaws, or defects. For example, it may be that they derive from our basic make-up, shared among humans generally, a make-up that serves us well in an environment such as ours on the surface of our planet."

So Sosa's line is that false intuitions do not justify when they derive from faults, flaws, and defects, but do justify when they derive from our basic make-up and are generally shared among humans. But does the distinction hold up to scrutiny? In a sense, of course, one illustrates a flaw or defect by virtue of falling short of the highest ideals of rationality; this, of course, cannot be what Sosa here has in mind. Instead, he seems to be imagining flaws as deviations from some sort of imperfect but generally effective strategy for getting around in the world. This is, perhaps, the more ordinary sense of a defect. My computer, even when it is working properly, will occasionally crash; a tendency to crash constitutes a defect only when it is not working properly. And maybe there is a good reason why humans ought to have tendencies to accept, for instance, naive set theory, or threshold principles for vague predicates.

But does this distinguish paradoxical premises, which Sosa thinks will involve justified intuitions, from the kinds of fallacious moves he is concerned to rule out? The problem for this line is that there is also plausibly sound reason for humans to have tendencies to commit such errors as affirming the consequent. Given the environments we face, having a tendency to affirm the consequent will help us to recognize patterns and confirm hypotheses; inductive reasoning generally looks a bit like affirming the consequent.

This sort of pattern is less exception than rule. A great many well-documented human rational errors derive from the application of generally reliable heuristics; such heuristics are, in typical cases, deeply engrained in human psychology, and present in humans generally—even experts who ought obviously to know better.<sup>17</sup>

So we face a dilemma for upholding Sosa's distinction. Do we say that these errors—these false judgments arising from generally good heuristics—constitute defects or not? If not, then they are relevantly like Sosa thinks the intuitive premises involved in deep paradoxes are. If so, what makes them so, and why should they not apply also to the cases of the paradoxes?

The ordinary reasoner—your average philosopher, say—looks down on the fallacious reasoner Sosa describes, and identifies his intuition as the vicious result of carelessness. But imagine the perspective of an extraordinary

---

<sup>16</sup> Sosa (2007b), p. 54.

<sup>17</sup> For a useful overview, see Tversky & Kahneman (1974), especially pp. 1124 (for the connection to generally reliable heuristics) and 1130 (for the prevalence of these rational errors even among experts).

reasoner—an über-rational being who rates much higher on the scales of rationality. Her attitude toward the ordinary reasoner is much the same as his attitude toward the fallacious reasoner. She describes both as defective—as failing to live up to the standards of rationality. Although she can see that the ordinary reasoner is not tempted by one particular error—affirming the consequent—she points to another error that he regularly makes—some complicated fallacy that we ordinary reasoners do not recognize as such—and that he also has some attraction to more fallacies—the necessarily false premises of paradoxes.

From this perspective, it appears difficult to justify Sosa's attitude that the error of the ordinary reasoner is importantly different from that of the fallacious reasoner; the ordinary reasoner is fallacious himself in his own way. The fallacious reasoner demonstrates epistemic defects. This, even though there is typically a psychological story to be told about the genesis of the defective judgments in which they arise from generally reliable dispositions. According to Sosa, the ordinary errors—like accepting the premises of paradoxes—are fundamentally different. They do not reflect defects, but instead demonstrate mere tendencies to affirm falsehoods that derive from general human nature.

Our über-rational superior, however, thinks of the ordinary reasoner as defective in just the same way as the fallacious reasoner, but to a lesser degree. I do not see what resources Sosa has to reject her opinion on the matter.

### **1.6. Virtue without intuition?**

Let us take stock. Sosa has attempted to apply his attractive general virtue theoretic epistemology to the case of intuitive justification. But we have seen two respects into which Sosa's treatment of intuitions fits awkwardly into this general picture. First, although it is plausible enough to evaluate intuitions as justified or unjustified, by extension of the virtue-theoretic treatment of belief, it is not at all clear why it should turn out, as Sosa wants, that there is an intimate connection between justified intuition and justified belief. Second, considerations involving fallacious reasoning were taken *prima facie* to motivate a requirement that only true intuitions can justify; Sosa's attempt to diffuse this motivation was, I suggested, unconvincing. False rational intuitions always constitute a rational failure.

I rather suspect that the error here lies more with in treatment of intuitions than with the virtue epistemology. Here, briefly, is a competing approach to the epistemology of the *a priori*, motivated by a kindred general approach to epistemology, that may bring these features of Sosa's view into clearer relief. It is not, of course, anything like the only competing view available, but it is one that may provide an instructive foil.

If the problem is that intuitions fit oddly into the epistemology of intuitive judgment, we can consider telling a story of the latter that does not afford a central role to intuitions themselves. We may admit that there are such things as intuitions—attractions to assent of a certain sort—while denying that they play any fundamental role in *justifying* assent. Our story of justified assent can be the straightforward virtue-theoretic one: a judgment is justified just in case it is the

product of an epistemic competence—this, whether or not it is in any sense grounded in an intuition, or, if it is, whether or not that intuition itself is justified. The reason it's useful to have justified intuitions is that justified intuitions tend to attract assent in the direction of truth. What intuitions a subject has will causally affect her dispositions to judge. So they have a psychological role to play in the establishing of competence, and hence virtuous performance. But the epistemological action is at the level of competence generally; the role of intuitions is exhausted in helping to fix the competences.

On such an approach, we will not have any general constraint on what kinds of intuitions can enter into justified beliefs; a belief is justified if it is the product of a disposition that is a competence—whether or not an unjustified intuition played some role in influencing that disposition. And since on this approach intuitions do not themselves justify, but only play a causal role in establishing the dispositions that underwrite justification, we need not say as Sosa does that some false intuitions justify and are justified, while others do not; we say only that intuitions are part of the psychological story underwriting justification. And we can maintain the Cartesian idea that in the realm of the *a priori*, false intuitions are always in some sense defective: they always in some sense pull us away from the truth. But of course, we may and should overcome them and believe virtuously anyway.

It is even possible that a subject could judge virtuously in a way intimately and essentially involving a vicious intuition; suppose one is so calibrated as to reliably intuit *wrongly* in a certain kind of domain. One knows of oneself that he has a strong tendency to be pulled *away* from the truth with respect to a certain kind of question. Such a subject could in some circumstances judge that *p* *precisely because* of his intuition that not-*p*; the judgment might be virtuous, and the intuitive vicious. (This is, of course, a very unusual sort of case.)

I tentatively suggest, then, that the epistemic role of intuitions may be exaggerated. One can have a virtue-theoretic approach to the epistemology of intuitive judgment that is broadly in Sosa's spirit without affording a central role to intuitions themselves. I have suggested a few respects in which this may be preferable.

## 2. Challenges to intuition

We turn now from Sosa's positive articulation of the epistemic role that intuitions may play, to his defensive response to recent attacks on the use of intuition in philosophy. These attacks are, for the most part, somewhat general. That is to say, although Sosa's particular positive account of the role of intuitions in philosophy is among those potentially impugned by these critiques, they are not distinctive to it. Even philosophers who do not accept Sosa's approach to intuitions ought to reckon with at least some of these critiques. And Sosa's defenses of intuition do not, on the whole, depend substantially on the specifics of his own positive view. So the material of this section should be of interest to anyone interested in methodological questions about philosophy, whether or not she accepts Sosa's views articulated in the previous section.

## 2.1. Calibration

One critique of the use of intuitions in philosophy concerns our ability to discern whether intuitions are reliable; the canonical presentation of this worry is Cummins (1998). Cummins is concerned with the apparent fact that we lack independent means of verifying the reliability of our intuitions; since, Cummins says, within realms such as logic, mathematics, and the *a priori* parts of philosophy, our only access to the domains in question comes via intuition, if our intuitions were systematically misleading, then we would have no way to correct the error. We lack independent grounds on which we can calibrate intuitions.

In response, Sosa points out that the case against intuition here appears to be no stronger than an analogous case for radical skepticism.

The calibration objection, if effective against intuitions will prove a skeptical quicksand that engulfs all knowledge, not just the intuitive. No source will then survive, since none can be calibrated without eventual self-dependence. That is so at least for sources broadly enough conceived: as, say, memory, introspection, and perception. None of these can be defended epistemically as reliable unless allowed to yield some of the data to be used in its own defense.<sup>18</sup>

And if, Sosa goes on to point out, one attempts to defend perception by, say, corroborating sight with sound, or one person's perception with another's, it is entirely plausible that the same defense may well apply to the case of intuition.

In general, the assimilation of skeptical worries about intuition into general skeptical worries to which all nonskeptics are committed to denying is a powerful and effective move characteristic of Sosa's work on intuition. For an application of the strategy to another set of worries, see Sosa (1998) pp. 266-68.

## 2.2. Experimentalist critiques

More recently, experimental philosophers have mounted an empirically based challenge to the use of intuitions in philosophy. For example, Weinberg, Nichols, and Stich (2001) surveyed Rutgers undergraduate students about various epistemological thought experiments, and found not only that some students did not agree with the standard intuitions epistemologists typically rely upon, but also that in some cases, ethnic background correlated with epistemic judgment. For example, students with an East Asian ethnic background tended to be more likely than Western-descended students to describe subjects in Gettier cases as 'really knowing' the contents in question. According to experimentalist critics, experiments like this one—and others that followed it—cast significant doubt on the propriety of the use of intuitions in philosophy.

Ernest Sosa has engaged extensively with these experimentalist critiques.

One of his significant contributions involves the interpretation of survey data involving thought experiments; we needn't assume, Sosa suggests, that they reflect genuine disagreement. Another, which comes out in some of his

---

<sup>18</sup> Sosa (2007a) pp. 63-64.

exchanges with Stephen Stich, concerns the normative significance of philosophical analysis. Let us consider these in turn.

### **2.3. Do Survey Results Reflect Disagreement?**

Epistemologists typically think that subjects in Gettier cases lack knowledge. Weinberg et. al. take themselves to have demonstrated that a surprising number of people—a majority of American undergraduates of East Asian descent—disagree. But is it clear that there is genuine disagreement here? Only on the assumption that, when the survey subjects say ‘the subject knows,’ the word ‘knows’ in this sentence refers to the same relation epistemologists are interested in.

Sosa writes:

And the disagreement may now perhaps be explained in a way that casts no doubt on intuition as a source of epistemic justification or even knowledge. Why not explain the disagreement as merely verbal? Why not say that across the divide we find somewhat different concepts picked out by terminology that is either ambiguous or at least contextually divergent? On the EA [East Asian] side, the more valuable status that a belief might attain is one that necessarily involves communitarian factors of one or another sort, factors that are absent or minimized in the status picked out by Ws [Westerners] as necessary for “knowledge.” If there is such divergence in meaning as we cross the relevant divides, then once again we fail to have disagreement on the very same propositions. In saying that the subject does not know, the EAs are saying something about lack of some relevant communitarian status. In saying that the subject does know, the Ws are not denying that; they are simply focusing on a different status, one that they regard as desirable even if it does not meet the high communitarian requirements important to the EAs. So again we avoid any real disagreement on the very same propositions. The proposition affirmed by the EAs as intuitively true is not the very same as the proposition denied by the Ws as intuitively false.<sup>19</sup>

Sosa’s suggestion here is this: maybe there’s no real disagreement here; some group of subjects say that such and such ‘is a case of knowledge,’ while philosophers and other subjects say that such and such is not a case of knowledge, and there’s no genuine disagreement, because the former subjects don’t mean knowledge by ‘knowledge’.

The suggestion does of course correspond to a genuine possibility; there is nothing incoherent about the idea that a superficially similar language could in fact be divided into two distinct, subtly different languages—perhaps we’d rather say idiolects—where some words take slightly different meanings. British English and American English plausibly stand in this sort of relationship, and competent speakers may sometimes fall into accidental verbal disagreement in discussions about eating ‘biscuits’ or ‘grilling’ vegetables.

---

<sup>19</sup> Sosa (2009) p. 108.

I doubt, however, that the possibility Sosa raises will ultimately prove a very plausible one in this instance. As Sosa notes, verbal confusions of the kind at issue here comprise cases where disquotation fails:

- a. S says “There is a bank nearby.”
- b. S says that there is a bank nearby.

To move from a to b is to disquote. The move is enthymematic, and requires some such assumption as this:

In saying “There is a bank nearby” S means that there is a bank nearby.

In asserting b, I must mean something specific: for example, I cannot mean both financial institution and river bank.<sup>20</sup>

So disquotation is legitimate only when the terms are used univocally. Consequently, Sosa’s suggestion about the subjects of East Asian descent who wanted to say “the subject knows”—that they in fact are expressing no disagreement with traditional epistemologists’ commitment to the truth of our sentence “the subject does not know”—entails that this is a case where disquotation fails. In other words, it is inconsistent with Sosa’s strategy that it is correct to report the survey reports by saying that a majority of subjects of East Asian descent thought that the Gettier cases were cases of knowledge. This is, however, (I submit) a fairly radical suggestion. It is extremely natural to describe the experiment as one in which subjects expressed judgments about whether fictional characters had knowledge. Absent any particular reason to think otherwise, pointing out the possibility that they might not does not have much dialectical force. The point is, of course, closely analogous to the one Tyler Burge makes in his classic (1979): Oscar believes he has arthritis, and he expresses the belief with the sentence “I have arthritis,” so his word “arthritis” means the same thing as his doctor’s (*viz.*, arthritis).

Furthermore, supposing that the reason the survey reports did not express beliefs about knowledge is that quite generally, these subjects mean something other than what we mean by the word “knows,” it would follow quite generally that disquotation fails with respect to these subjects’ “knowledge” sentences. Suppose I overhear one of my students asking a classmate, “do you know what time it is?” If Sosa’s suggestion is correct, and my student is of East Asian ethnic descent, then it would be incorrect for me to describe my student as having asked if her classmate knew what time it was. This is somewhat incredible.

My objection to Sosa’s suggestion is not the main one that has been advanced by experimental philosophers, although it does enjoy certain affinities with it. As I do, they challenge Sosa with having done little more than showing a way for it to be possible that intuitions are not challenged by the experimental data; he does not go at all far toward showing that they are not *in fact* challenged.<sup>21</sup> A central

---

<sup>20</sup> Sosa (2010a), p. 419.

<sup>21</sup> *E.g.* Stich (2009) p. 233.



characteristic of the debate at this stage seems to involve argumentative attempts to shift the burden of proof between the defender and the skeptic about intuition; I do not have much of substantive evaluation to offer at this juncture, so I merely point to the debate and move on.

One difference between my worry for Sosa's line here and the sort often presented by experimentalists—as, for instance, by Stich (2009)—is that my challenge is framed at a relatively intuitive level. Certain disquotational moves are intuitively permissible, but cannot be permissible if there is the kind of meaning divergence Sosa suggests; so positing such divergence has a high intuitive cost.

The extant debates about Sosa's suggestion often end up involving questions about concept individuation. This is in my view at best a distraction. The question is ultimately one about meaning and reference: what does the word 'knowledge' refer to in a given subject's mouth? Perhaps one can involve concepts if one likes: word meanings are concepts; the concepts are different; so the word is ambiguous. But what, if anything, does this 'conceptual ascent' contribute? Steve Stich's response to Sosa emphasizes concepts in a way that looks to me largely irrelevant:

There is a vast literature on concepts in philosophy and in psychology..., and the question of how to individuate concepts is one of the most hotly debated issues in that literature. While it is widely agreed that for two concept tokens to be of the same type they must have the same content, there is a wide diversity of views on what is required for this condition to be met. On some theories, the sort of covert ambiguity that Sosa is betting on can be expected to be fairly common, while on others covert ambiguity is much harder to generate. For Fodor, for example, the fact that an East Asian pays more attention to communitarian factors while a Westerner emphasizes individualistic factors in applying the term 'knowledge' would be no reason at all to think that the concepts linked to their use of the term 'knowledge' have different contents.

To this Sosa replies, reasonably enough, that articulating and defending a theory of concept individuation is a lot to ask of a theorist looking to diagnose a verbal dispute.<sup>22</sup> It is entirely possible, in many cases, to recognize verbal disputes at the intuitive level. I agree about the methodological claim, even if, as indicated above, I disagree about its verdict in particular instances. Sosa cites, in favor of his suggestion, the famous example of William James:

That example is interesting when juxtaposed with one due to William James, worth quoting in full. ...

SOME YEARS AGO, being with a camping party in the mountains, I returned from a solitary ramble to find every one engaged in a ferocious metaphysical dispute. The corpus of the dispute was a squirrel – a live squirrel supposed to be clinging to one side of a tree-trunk; while over

---

<sup>22</sup> Sosa (2010a).

against the tree's opposite side a human being was imagined to stand. This human witness tries to get sight of the squirrel by moving rapidly round the tree, but no matter how fast he goes, the squirrel moves as fast in the opposite direction, and always keeps the tree between himself and the man, so that never a glimpse of him is caught. The resultant metaphysical problem now is this: Does the man go round the squirrel or not? He goes round the tree, sure enough, and the squirrel is on the tree; but does he go round the squirrel? In the unlimited leisure of the wilderness, discussion had been worn threadbare. Every one had taken sides, and was obstinate; and the numbers on both sides were even. Each side, when I appeared therefore appealed to me to make it a majority. Mindful of the scholastic adage that whenever you meet a contradiction you must make a distinction, I immediately sought and found one, as follows: "Which party is right," I said, "depends on what you practically mean by 'going round' the squirrel. If you mean passing from the north of him to the east, then to the south, then to the west, and then to the north of him again, obviously the man does go round him, for he occupies these successive positions. But if on the contrary you mean being first in front of him, then on the right of him, then behind him, then on his left, and finally in front again, it is quite as obvious that the man fails to go round him, for by the compensating movements the squirrel makes, he keeps his belly turned towards the man all the time, and his back turned away. Make the distinction, and there is no occasion for any farther dispute. You are both right and both wrong according as you conceive the verb 'to go round' in one practical fashion or the other."

Here James appeals to no serious theory of content. He just offers two distinct things that can be meant in perfectly good English by the same words, such that if the words mean one thing then the target sentence is obviously true, while if they mean the other then it is obviously false. Dissolving this disagreement requires no theory of content.<sup>23</sup>

I agree with Sosa that diagnosing the situation needn't involve going very deeply into a theory of content. And perhaps there is a sense in which the debate between James's two parties is 'merely verbal'. But it is not such a sense that licenses the move Sosa suggests in response to the experimentalist survey data—we have not managed to "avoid any real disagreement on the very same propositions." There is genuine disagreement with respect to the proposition that the man goes round the squirrel.<sup>24</sup>

So Sosa considers the most central skeptical worries raised by experimental philosophers to be closely related to general worries that arise from

---

<sup>23</sup> Sosa (2010a), pp. 421-22.

<sup>24</sup> Chalmers (forthcoming) offers an approach to verbal disagreement that classifies James's case as merely verbal, but points out that it is not plausibly regarded as one in which the participants are fail to disagree about any particular proposition. Chalmers is noncommittal about whether disputes about knowledge like the ones Sosa discusses are candidates for treatment as mere verbal disputes.

disagreement about philosophical matters. The challenge, as Sosa often interprets it, is: what reason have we to think that our philosophical intuitions are right, since, surveys reveal, so many others think otherwise?<sup>25</sup> As Sosa points out, so understood, many of the particular challenges one faces here arise independently of experimentalist surveys; we know from our engagement with our philosophical colleagues that many of our philosophical judgments are controversial.<sup>26</sup>

#### **2.4. Defeaters**

There are, however, other kinds of skeptical challenges that arise from this and related experimental work. Some articulations of the skeptical worries for traditional armchair philosophy emphasize that the experimental results demonstrate particular biases or errors to which we are vulnerable; this is thought to undermine our rational confidence in relying upon them.<sup>27</sup>

Sosa provides the same response here that he offered to the calibration-based objection discussed in §2.1: that there are potential sources of error and bias affecting intuition no more undermines the use of intuition in generality than do the corresponding errors in perceptual judgment mandate skepticism about the external world. As in the case of perception, our propensity for intuitive errors provides us with reason to engage carefully with intuition, not to abandon intuition altogether.<sup>28</sup>

#### **2.5. Arbitrariness**

A final way of presenting experimentalist worries involves the extent to which intuitions may be used to demonstrate anything of normative interest. For example, Stich (1993) argues that intuitions, being the product of our cultural upbringings, are fundamentally arbitrary in a way inconsistent for settling value matters, particularly in epistemology. Insofar as epistemology is a normative enterprise, to describe a state as knowledge is to commend it in a normatively significant kind of way. Of course Sosa the virtue epistemologist will have no quarrel here—see Sosa (2010b)—but, Stich continues, if we theorize about knowledge by consulting our intuitions, we proceed arbitrarily in a way inconsistent with knowledge's alleged value. We could easily, Stich says, have been brought up in a culture which promotes different intuitions, in which case we would end up valuing differently; it is 'xenophobic' to privilege our actual values to these hypothetical ones. Weinberg et. al. (2001) connects this critique explicitly to cross-cultural survey results.

Sosa's response here, like his response to the disagreement data, is pluralist: perhaps it is so that different cultures end up embracing subtly different

---

<sup>25</sup> See e.g. Sosa (2007c), p. 102.

<sup>26</sup> Sosa (2007b) pp. 68-69.

<sup>27</sup> E.g. Swain, Alexander, and Weinberg (2008).

<sup>28</sup> Sosa (2007c) p. 105. Weinberg (2007) argues that this move is not available, because philosophical intuition is fallible in a way importantly worse than perceptual experience is; however, Ichikawa (forthcoming 1) argues to the contrary.

epistemic values. We need not quarrel with them. Indeed, in many cases, we can and should share their values as well. (Knowledge is good; so is justified true belief.)

Here, unlike in the analogous case regarding interpretation of survey data, Sosa's pluralist response strikes me as wholly correct. Although Stich argues otherwise in his (2009), I do consider Sosa's arguments on this score rather more compelling. For a Sosa-sympathetic rehearsal of the dialectic between Stich and Sosa, see Ichikawa (forthcoming 2).<sup>29</sup>

## **Bibliography**

Bealer, G. (1992). The Incoherence of Empiricism. *Aristotelian Society Supplementary Volume* 66:99-138.

Bealer, G. (1998) Intuition and the Autonomy of Philosophy. In *Rethinking Intuition: The Psychology Of Intuition And Its Role In Philosophical Inquiry*. Eds. Michael DePaul and William Ramsey. Oxford: Rowman & Littlefield, 1998. 201–39.

Burge, T. (1979) Individualism and the Mental. *Midwest Studies in Philosophy* 4: 73-121.

Chalmers, D. (forthcoming) Verbal Disputes. *Philosophical Review*.

Conee, E. and Feldman, R. (1998) The Generality Problem for Reliabilism. *Philosophical Studies* (89)1:1-29.

Cummins, R. (1998). Reflection on Reflective Equilibrium. In Michael R. DePaul and William Ramsey, eds., *Rethinking Intuition*, Pp. 113-27. Rowman & Littlefield Publishers, Inc.

Ichikawa, J. (forthcoming 1). Experimentalist Pressure Against Traditional Methodology. *Philosophical Psychology*.

Ichikawa, J. (forthcoming 2). Who Needs Intuitions? Two Experimentalist Critiques. In T. Booth and D. Rowbottom, eds., *Intuitions*. Oxford University Press.

Ludwig, K. (2007). The Epistemology of Thought Experiments: First Person versus Third Person Approaches. *Midwest Studies in Philosophy* 31:128-159.

McBeath, K., Shaffer, D., and Kaiser, M. (1995). How Baseball Outfielders Determine Where to run to Catch Fly Balls. *Science* 28(268): 569-573.

Nozick, R. (1981). *Philosophical Explanations*. Harvard University Press.

---

<sup>29</sup> Thanks to Carrie Ichikawa Jenkins, Ernest Sosa, and John Turri for helpful comments.

- Sosa, Ernest (1998). Minimal Intuition. In Michael R. DePaul and William Ramsey, eds., *Rethinking Intuition*, Pp. 257-70. Rowman & Littlefield Publishers, Inc.
- Sosa, E. (2007a). *A Virtue Epistemology*. New York: Oxford University Press.
- Sosa, E. (2007b). Intuitions: Their Nature and Epistemic Efficacy. *Grazer Philosophische Studien*.
- Sosa, E. (2007c) Experimental Philosophy and Philosophical Intuition. *Philosophical Studies* 132(1): 99-107.
- Sosa, E. (2009) A Defense of the Use of Intuitions in Philosophy. In D. Murphy and M. Bishop, eds., *Stich And His Critics*, Blackwell.
- Sosa, E. (2010a) Intuitions and Meaning Divergence. *Philosophical Psychology* 23(4): 419-26.
- Sosa, E. (2010b) Value Matters in Epistemology. *Journal of Philosophy* 107(4).
- Stich, S. (1993) *The Fragmentation of Reason*, MIT Press.
- Stich, S. (2009) Replies to Critics. In D. Murphy and M. Bishop, eds., *Stich And His Critics*, Blackwell.
- Swain, S., Alexander, J., and Weinberg, J. (2008) The Instability of Philosophical Intuitions: Running Hot and Cold on Truetemp. *Philosophy and Phenomenological Research* 76 (1):138-155.
- Tversky, A. & Kahneman, D. (1974) Judgment under Uncertainty: Heuristics and Biases. *Science* 185(4157):1124-1131.
- Weinberg, J. How to Challenge Intuitions without Risking Skepticism, *Midwest Studies in Philosophy* 31.
- Weinberg, J., Nichols, S., and Stich, S. (2001). Normativity and Epistemic Intuitions, *Philosophical Topics*, 29 (1-2):429-460.