

PHILOSOPHICAL METHOD AND INTUITIONS AS ASSUMPTIONS

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Abstract: Many philosophers claim to employ intuitions in their philosophical arguments. Others contest that no such intuitions are used frequently or at all in philosophy. This article suggests and defends a conception of intuitions as part of the philosophical method: intuitions are special types of philosophical assumptions to which we are invited to assent, often as premises in argument, that may serve an independent function in philosophical argument and that are not formed through a purely inferential process. A series of philosophical case studies shows that intuitions in these arguments contain the relevant features. The view has implications for philosophical method, offering a compromise between opponents on the divisive debate of the merits of experimental philosophy: experimental philosophy provides an especially useful role in philosophical assumption analysis.

Keywords: assumption, epistemology, intuition, intuitions, metaphilosophy, philosophical method, philosophical methodology, premise.

1. Introduction

A divide has emerged in contemporary philosophy. Intuitions, thought by many to be ubiquitous and of great import to philosophy,¹ have come under attack. Skeptics claim that intuitions are not used as evidence nearly as frequently in philosophy as commonly thought.

A current presentation of this skeptical thesis comes in Cappelen's *Philosophy Without Intuitions* (Cappelen 2012). Cappelen supports his claim that intuitions are not used as evidence in philosophy by attacking two arguments in support of the centrality of intuition use. He first addresses the argument from intuition talk, the argument that the frequent use of “intuition” in philosophy indicates the use of intuition as evidence in philosophy. He then turns to the argument from philosophical practice, which purports to define intuitions by their features and demonstrate the use of philosophical evidence containing those features.

¹ For instance, Weinberg and colleagues claim “the practice of appealing to intuitive judgments . . . [is] long standard in analytic philosophy” (Weinberg et al. 2012, 256). Bealer calls intuitions part of the “standard justificatory procedure” (1998, 205). Notably, the frequency and importance of intuition use in the field is acknowledged by both experimental critics of intuition use (e.g., Buckwalter and Stich [2014]) and those defending intuition from such experimental attacks (e.g., Sosa [2009]).

Cappelen's strategy against this argument is to enumerate what he takes to be the important features of intuitions and then to demonstrate that in actual philosophical cases in which intuitions are supposedly employed as evidence, nothing containing those intuition features can be found.

I respond to this skeptical critique by suggesting a new conception of intuitions. As a first pass, not *all* intuitions are necessarily members of a psychological kind; instead, the broadest commonality among intuitions is their use or function in philosophy. Intuitions can be thought of as special kinds of philosophical *assumptions*, ones to which we are invited to assent that are suitable for argument (for example, providing evidence without further justification) and that are not purely inferentially formed.

After an overview demonstrating the breadth of theories of intuition, I outline this conception of intuitions as special types of assumptions. I then present a series of philosophical case studies (following Cappelen 2012) that show intuitions are offered in practice as instances of this kind of philosophical assumption. In the penultimate section I outline implications of the view for philosophical method and argue it offers a compromise between opponents on the divisive debate of the merits of experimental philosophy. Importantly, this conception indicates a way in which experimental philosophy can—and should—contribute to a project of more closely analyzing these kinds of assumptions often offered in philosophical argument.

2. Intuition

Before we turn to the details of intuition-centrality claims and the account of intuition, it will be helpful to survey some conceptions of philosophical intuition. Providing a comprehensive review is an unwieldy task, and it is not one I purport to achieve here. Nevertheless, there are reasons to investigate intuition with an eye to the recent and historical use of the term. The accounts of intuition presented here are chosen in part for their *disunity*; they indicate the breadth of intuition conceptions. In spite of this breadth, three themes about intuitions emerge from this study.

Accounts of intuition typically posit some sort of evidentiary role for intuitions; intuitions provide evidence for (or justification for, or a reason for believing) some philosophical claim. Intuition accounts also often suggest that intuitions have a particular phenomenology. Often this is related to intuitions' apparent epistemic status; intuitions seem true or have a phenomenology of being obvious or apparent. The final recurring theme is a condition of exclusion. Intuitions cannot be (entirely) inferentially produced; intuition accounts typically hold that intuitions are not the product of a purely inferential process.

I begin with a brief overview of the landscape of the use of “intuition” in philosophy, beginning with Descartes's intuition. For Descartes, intuition was one way in which we can attain knowledge (Descartes 1983).

Specifically, intuition is what allows knowledge of first principles. Starting from the simplest principles, evinced by intuition, we strive to learn more complex propositions. This view reflects an important sort of feature of intuition held by many today; intuitions are often characterized as seeming foundational, self-evidencing, “given” (cf. Bengson 2015), or axiomatic.

An important modern use of “intuition” is in the work of Chomsky, who appealed to “linguistic intuitions.” As Hintikka (1999) argues, Chomsky’s case for an innate universal grammar provides a foundation for his use of “intuition.” Here again, the evidentiary status of intuitions is a central concern. If an innate universal grammar exists, introspective access to such a grammar may provide linguistic evidence.

Intuition also has a history in the philosophy of mathematics. Gödel (1947) characterized intuitions as allowing access to mathematical truths, suggesting we ought to be as confident in intuition as in (for example, visual) perception. Poincaré (1952) also noticed the evidentiary power of something like intuitions; he found that certain mathematical propositions would strike him as true and could later be verified.²

For a well-known example of a contemporary view of philosophical intuition, consider Bealer’s account of intuition as a *sui generis*, irreducible, natural, propositional attitude (Bealer 1998, 213). This account emphasizes the phenomenological character of intuitions and characterizes them as something like a psychological kind. Bealer describes intuitions as “*intellectual seemings*”; we have the intuition that P when it is the case that upon simply considering P, P seems necessarily true.

Goldman (2007) suggests multiple possible targets of intuition. Intuition might, for instance, target natural kinds. Goldman also devotes much attention to psychological concepts as a target of intuition, suggesting the possession of a concept can (sometimes) imply that one has true intuitions about the relevant subject matter. Possessing a concept is the possession of a psychological structure that disposes one to apply the concept in such a way as to make accurate categorizations with respect to the concept’s content.

Intuitions are often held to play a particularly significant role in moral philosophy. McMahan describes a *moral* intuition as “a moral judgment, typically about a particular problem, a particular act, or particular agent, though possibly also about a moral rule or principle, that is not the result of inferential reasoning” (2012, 2). McMahan initially characterized intuitions as *spontaneous* moral judgments (2000) but more recently (2012) backed away from spontaneity as a condition for a moral intuition.

² Often philosophical discussion of philosophical intuition avoids contact with mathematical intuition, but on the account offered here one role of intuition in philosophy may be quite similar to one role of intuition in mathematics. Intuition in mathematics is used to provide the axioms—assumptions or premises—of mathematical argument, from which argument follows.

He also endorses an epistemic property, that “at least some of our moral intuitions have a certain presumptive epistemic authority” (2012, 104).

Wright provides an account of intuitions as used in logic: “By ‘intuition’ I shall here mean, roughly, a faculty of a priori, non-inferential rational insight, delivering propositional knowledge—knowledge of truths” (2004, 155). Wright suggests intuitions have a basic phenomenology (of obviousness) but notes that such a phenomenology does not imply their “cognitive success” (2004, 157).

This is a *very* brief and noncomprehensive survey, but it is one that should indicate the range of divergent theories of intuition. Yet, some similarities are apparent. First, all of the accounts here posit some kind of *argumentative role* for intuitions. For some this role is normative (intuitions *should* be used, for example, as evidence in philosophical argument), and for nearly all it is descriptive (intuitions *are* used, for example, as evidence in philosophical argument). Second, many accounts of intuition characterize intuitions as *noninferential*; they are not the result of purely inferential reasoning. Third, many posit a special kind of *intuition phenomenology*; intuitions have the phenomenology of “the obvious” or of an “intellectual seeming.” When an intuition is offered in argument, it seems it can stand on its own; nothing further must be said for the intuition to be offered in this way. These three features provide the foundation of the view of intuitions as special kinds of assumptions. With these features in mind, let us now consider the recent case against intuition.³

3. The Case Against Intuition

In response to the common view that intuitions are used often in philosophy, some have recently denied the widespread use of intuitions. Cappelen offers the most comprehensive defense of this position in *Philosophy Without Intuitions*. Cappelen presents what he takes to be a prevalent view about the importance of intuitions in contemporary philosophy, called Centrality:

Centrality (of Intuitions in Contemporary Philosophy): Contemporary analytic philosophers rely on intuitions as evidence (or as a source of evidence) for philosophical theories. (Cappelen 2012, 3)

As a preliminary remark, I interpret Centrality as the claim that contemporary analytic philosophers rely on intuitions as evidence for *or against*

³ Recall that this recent intuition-skeptical challenge is different from other challenges to the use of intuitions in philosophy (for example, experimental challenges to the *reliability* of intuitions). The intuition-skeptical challenge does not involve the unreliability or inaccuracy of intuition use; instead, it claims that there are no intuitions *at all* used in philosophy.

philosophical theories. I imagine this reinterpretation comes as no trouble to critics of Centrality.

It is worth noting that Cappelen restricts Centrality to the claim that philosophers rely on intuitions as evidence *for philosophical theories*. There are other plausible uses of intuitions in philosophy that fall outside the purview of Centrality as stated. One example is that of *discovery*. Rather than providing evidence for (or against) some philosophical theory, intuitions might be used as an instrument of discovery of a philosophical problem.

Take for example a Sorites argument. Williamson presents the following argument:

Consider the following argument, with premises above the line and conclusion below:

1 is a few
 If 1 is a few then 2 is a few
 If 2 are a few then 3 are a few
 .
 .
 .
 If 9,999 are a few then 10,000 are a few

 10,000 are a few (Williamson 1994, 22)

Williamson continues, “The premise ‘1 is a few’ is apparently true and the conclusion ‘10,000 are a few’ apparently false. The gradualness of the sorites series makes each of the conditional premises appear true” (1994, 22–23). Williamson’s appeals that each of the premises is true and that the conclusion is false might reasonably be described as intuitions. There is no explicit appeal to a theory that is made true or falsified here, yet the argument still seems philosophically important. In this case, the intuitions are used as evidence not of a theory but of discovery of a philosophical problem.

I will not argue further that intuitions are used for discovery, but I present the Sorites argument as an example in which intuitions might be used in a role of discovery.⁴ This view is not an outlier; in a survey of philosophers, more believed intuitions to be valuable in discovery roles than in justificatory roles (Kuntz and Kuntz 2011). Of course, what the majority of philosophers *say* about intuition use does not provide the

⁴ One might object that in “cases of discovery” there are always corresponding theories. In the Sorites argument, for example, the intuitions may support rejecting the principle of bivalence. The Sorites argument, however, serves as an example of the kind of philosophical problem that has philosophical importance, independent of further theoretical analysis (which itself might have additional philosophical value).

same kind of evidence as a theoretical or formal study in the topic. Nevertheless, given Cappelen is motivated in part by intuition talk, the use of “intuition” in philosophical writing, it is odd that Centrality restricts the use of intuition to evidence for or against *philosophical theories*. There may well be a case in support of Centrality by appeal to discovery intuitions, but here I restrict my focus, as does Cappelen, to intuitions as evidence for (or against) philosophical theories.

Cappelen presents two arguments for Centrality. The first, mentioned previously, is the argument from intuition talk. Roughly, the argument presented is that if philosophers characterize parts of their arguments as intuitions (or perhaps also as intuitive), then intuitions are used in these arguments. In attacking this argument, Cappelen is successful in demonstrating the varied uses of “intuition” in the literature. I agree the use of “intuition” in philosophy is often idiosyncratic and will not pursue the argument from intuition talk further.

Instead, I focus on the more crucial argument, Cappelen’s second suggestion, the argument from philosophical practice.⁵ A successful argument from philosophical practice will enumerate necessary features that can be used to identify intuitions. The argument from philosophical practice for Centrality begins by listing a number of features that can be used to identify intuitions, and then demonstrates through case studies that purported intuitions lack such features. There are a number of possible candidate features, and Cappelen (2012, 112) chooses three (as presented by Weatherson):

- F1: Phenomenology “An Intuitive Judgment has a distinctive phenomenology”
- F2: Rock “An intuitive judgment has a special epistemic status. . . . Intuitive judgments justify, but they need no justification”
- F3: Conceptual A judgment is an intuition “only if it is justified solely by the subjects’ conceptual competence” (Weatherson 2014, 518)

Cappelen’s strategy is to present a number of case studies—actual passages from contemporary philosophy—that purport to rely on intuitions as evidence, and to argue that none contains judgments with *any* of these features.⁶

My divergence from Cappelen begins with this list of features; I think F1–F3 are simply the wrong characterization of the most significant

⁵ Note also that Cappelen appears to concede that the argument from intuition talk is dependent on the argument from philosophical practice; even if the argument from intuition talk fails, the argument from philosophical practice can support Centrality, and if the argument from philosophical practice fails, the argument from intuition talk fails.

⁶ Here too, I follow Cappelen (2012), in surveying only contemporary philosophy. But given the broad nature of Cappelen’s claim, that intuitions are not used in philosophy *tout court*, the case-study analysis ought to consider both contemporary and historical philosophical texts.

features of an intuition. As stated, F1 is underspecified, but Cappelen often interprets it as requiring the phenomenology of seeming *necessarily* true. F2 packs an enormous weight into the epistemic status of an intuition by requiring that it *justify* without need for justification (cf. Weinberg 2014). In particular, Cappelen sometimes suggests this condition fails when other arguments are offered to support the intuition's implication or the intuition itself. But intuitions could have F2 while being able to be overridden by other considerations (cf. Weatherson 2014; Bengson 2015). The conceptual competence requirement, F3, is unnaturally narrow given the breadth of uses of intuition in philosophy (cf. Chalmers 2014).

In fairness to Cappelen, there are arguably philosophers who (individually) characterize intuitions as possessing one of F1–F3. For instance, Goldman (2007) articulates one possible account of intuition on which it involves concept application. Bealer (1998) endorses something similar to F1. But the argument against Centrality cannot succeed by picking a narrow list of features. More generally, even if we assume that many or most purported intuitions lack F1–F3, it is a great leap to conclude that intuitions are never used as philosophical evidence; instead, we might more reasonably conclude that we have the wrong list of intuition features (cf. Malmgren 2013). Cappelen's F1, F2, and F3 need not be *the* necessary features of intuitions; if different features can be used to pick out intuitions in philosophical examples, then the argument from philosophical practice is successful in supporting Centrality.

Before we turn to the next section, there is a final point worth brief mention. There is an important question about whether the burden of argument rests with Centrality supporters. Philosophers herald a number of other significant types of philosophical evidence, reasons to believe, and so on. Take knowledge, for example. If a skeptic claimed that knowledge is not part of the standard philosophical practice, would not the burden be on that claimant to provide a compelling list of knowledge's features? In other words, could the knowledge skeptic's claim really create a burden for other (knowledge-Centrality-supporting) philosophers to articulate clearly the conditions for knowledge and demonstrate that those features are present in paradigmatic cases? I cannot help but wonder, given divergent views about the nature of knowledge, whether such a case would get off the ground. I wonder further whether, even if features were agreed upon, such a case would be seen as successful when analyzed with standards comparably strict to those employed by Cappelen.

4. Reconsidering Intuition

Now consider a different view of intuition. Intuitions are a certain type of philosophical *assumption*, assumptions often used as argument premises to which we are typically invited to assent. They may serve an independent

argumentative role and are not purely inferentially produced. This conception develops from the three features identified at the end of section 2 as characteristic of intuitions.

Rather than viewing the wide range of *all* philosophical intuitions as members of a single psychological kind (a view whose problems are noted by Nado 2011), I propose we begin theorizing intuitions by looking to their use. Intuitions function in philosophy as special types of *assumptions*, to which we are invited to assent in the course of argument.

It is worthwhile to pause here to respond to an initial objection. Some might argue this “intuitions by use” suggestion begs the question; to counter the claim that intuitions are not used (frequently) in philosophy, I have suggested intuitions are those things that are used in a certain way in philosophy. But this objection misunderstands the proposed conception as one requiring the actual use of intuitions in philosophy. The suggestion is instead meant to highlight the way in which we can pick out intuitions. In contrast to the psychological kind of approach in which we seek to define intuitions purely in terms of their phenomenological or psychological properties, the present proposal identifies intuitions partly by looking at their functional properties. Until we delve into case studies, it is an open question whether this particular kind of assumption is used frequently, rarely, or never in philosophy.

First, the argumentative role condition requires that intuitions are *offered* as evidence in philosophical argument. I characterize intuitions in terms of providing “evidence.” But the view here could be modified in a variety of ways, if argument indicates substantial problems with this account or the benefits of others. For instance, it might be that intuitions are better conceived of not as providing *evidence* but rather as providing *justification* or perhaps a *reason* (for believing) some proposition.

A phrase that is somewhat obscure but also somewhat helpful in articulating this condition is that intuitions are *suitable for argument*. There is a kind of *prima facie* permissibility in offering intuitions in philosophical argument (for example, as premises) without saying any more. There is an argumentative function that intuitions appear to serve independently.

Second, intuitions are not produced by a purely inferential process. An intuition cannot be the mere product of some simple inference.

Finally, intuitions have a certain phenomenology. Fundamentally, intuitions appear to serve their argumentative purpose independently of further argument or reasons. This bears some similarity to Cappelen’s Rock and Phenomenology criteria, but it is importantly different. Cappelen seems to interpret the claim “intuitions justify, but they need no justification” to mean intuitions must have a foundational, nondefeasible justificatory role. This criterion, however, does not require that intuitions serve such a role. An intuition might seem to support a certain claim, but

it may (appear to) be strengthened or weakened by further reasons or evidence either about the claim or about the intuition itself.

Something similar to this conception of intuitions is offered by Dorr regarding metaphysical intuitions:

Often, saying “Intuitively, P” is no more than a device for committing oneself to P while signaling that one is not going to provide any further arguments for this claim. In this use, “intuitively . . .” is more or less interchangeable with “it seems to me that. . . .” There is a pure and chilly way of writing philosophy in which premises and conclusions are baldly asserted. But it’s hard to write like this without seeming to bully one’s readers; one can make things a bit gentler and more human by occasionally inserting qualifiers like “it seems that.” It would be absurd to accuse someone who frequently gave in to this stylistic temptation of following a bankrupt methodology that presupposes the erroneous claim that things generally are as they seem. But the sprinkling of “intuitively”s and “counterintuitive”s around a typical paper in metaphysics is in most cases not significantly different from this. It may be bad style, but it is not bad methodology, or any methodology at all, unless arguing from premises to conclusions counts as a methodology. (Dorr 2010)

There is significant agreement between the present proposal and Dorr’s conception. A large difference, however, exists between the two views on methodological implications of this conception of intuition. Where Dorr seems to suggest intuition use is not part of a distinctive methodology, the view here holds that intuitions are a fundamental part of a distinctly philosophical methodology.

To see the significance of this difference, note that intuitions are not just any old premises or assumptions; they are ones that seem (*prima facie*) worth making. Some argument could proceed by assuming any P, Q, and R, and articulating the results and implications. But, as will be seen in the next section, *philosophical* argument prizes certain types of assumptions, namely, intuitions.

5. Case Studies

Cappelen’s (2012) main argument against the argument from philosophical practice consists in a series of case studies. Cappelen argues that the “intuitions” used in these cases exhibit none of the features Phenomenology, Rock, and Conceptual. With the intuitions-as-assumptions view in hand, I examine a variety of cases, some of which have been treated by Cappelen (2012). To focus on the recent use of “intuition,” these studies are concentrated on modern texts: Thomson on Trolley cases, Temkin on the Torture-to-Limp Scenario, Kyburg on subjective probability, Williamson on vagueness and bivalence, and Frankfurt on equality.

5.1. *Ethics: Thomson on Trolley Cases*

The first case study is also analyzed by Cappelen (2012), and it represents one of the most frequently cited uses of “intuition” in ethics: the Trolley case. Thomson presents two cases:

Trolley: Suppose you are the driver of a trolley. The trolley rounds a bend, and there come into view ahead five track workmen, who have been repairing the track. . . . [Y]ou must stop the trolley if you are to avoid running the five men down. You step on the brakes, but alas they don't work. Now you suddenly see a spur of track leading off to the right. You can turn the trolley onto it, and thus save the five men on the straight track ahead.

Unfortunately, . . . there is one track workman on that spur of track. He can no more get off the track in time than the five can, so you will kill him if you turn the trolley onto him. Is it morally permissible for you to turn the trolley?

Organ: Now . . . imagine yourself to be a surgeon, a truly great surgeon. . . . [Y]ou transplant organs, and you are such a great surgeon that the organs you transplant always take. At the moment you have five patients who need organs. Two need one lung each, two need a kidney each, and the fifth needs a heart. If they do not get those organs today, they will all die; if you find organs for them today, you can transplant the organs and they will all live. . . . The time is almost up when a report is brought to you that a young man who has just come into your clinic for his yearly check-up has exactly the right blood-type, and is in excellent health. Lo, you have a possible donor. All you need do is cut him up and distribute his parts among the five who need them. You ask, but he says, “Sorry. I deeply sympathize, but no.” Would it be morally permissible for you to operate anyway? (Thomson 1985, 1395–96)

Thomson notes that everyone she has asked answers in the affirmative to the Trolley case but in the negative to the Organ case. These responses are what I take to be the relevant *intuitions*. Cappelen discusses these exact cases, arguing Thomson immediately seeks reasons to justify these claims and concludes, “Killing one is worse than letting five die” and “killing five is worse than killing one” (Thomson 1985, 1396 and 1397). Call these Thomson's *principles*.

Cappelen argues that the intuition in Trolley does not have Rock status. He writes, “What [Thomson] doesn't do is treat this answer as having Rock status. She certainly doesn't treat it as a point where justification gives out, where philosophers don't require reasons, or where we have reached rock bottom and can have nothing but a clash of intuitions. The whole point of the paper is to question this conclusion by contrasting it with the judgment about the doctor. So within two pages, that initial, pre-theoretic judgment is called into question. The goal of the paper is to look for reasons and evidence beyond the pre-theoretic judgment” (2012, 161).

Cappelen's treatment of Thomson's cases indicates the strength of the Rock condition. To have Rock status, intuitions must not only provide

argumentative weight (justification, for Cappelen), they must not require any further support. On an even stronger reading of Rock, intuitions cannot gain further support.

Thomson invites us to assent to her *intuitions*, but by seeking to derive *principles*, she acknowledges that these intuitions do not necessarily provide the full story. Thomson concludes:

The surgeon's choice is between operating, in which case he kills one, and not operating, in which case he lets five die; and killing is surely worse than letting die—indeed, so much worse that we can even say

(I) Killing one is worse than letting five die.

So the surgeon must refrain from operating. By contrast, the trolley driver's choice is between turning the trolley, in which case he kills one, and not turning the trolley, in which case he does not *let five die*, he positively *kills* them. Now surely we can say

(II) Killing five is worse than killing one.

But then that is why the trolley driver may turn his trolley: He would be doing what is worse if he fails to turn it, since if he fails to turn it he kills five. (Thomson 1985, 1396–97).

The *intuitions* Thomson uses serve a special function in philosophical argument. If it is not obvious that the intuitions provide argumentative weight in support of the principles, consider alone the claim “killing one is worse than letting five die.” I believe it is with good reason Thomson introduces this claim *after* giving the Organ case and claiming the Organ intuition. Specifically, Thomson uses the claim “killing is surely worse than letting die” with the Organ intuition to arrive at the conclusion “killing one is worse than letting five die.”

The intuitions-as-assumptions view does well here: we are invited or taken to assent to these intuitions about the morality of hypothetical actions. These intuitions themselves support Thomson's principles, but their argumentative status is not beyond reproach. Finally, the intuitions are not produced through a purely inferential process.

5.2. Ethics: Temkin on Torture-to-Limp Scenario

The Trolley cases are particularly well-known and often-used examples of philosophical intuitions, but the use of intuition in ethics is widespread. Take as the next example an intuition from Temkin's *Rethinking the Good*. Temkin proposes the following scenario:

Imagine a scale of uncomfortable experiences, ranging from a level of 1, the discomfort of a mosquito bite, to a level of 100, extreme torture. Suppose a

moderately uncomfortable limp is an 11—significantly worse than a mosquito bite, but not nearly as bad as extreme torture. Start with a choice between A, level 100 discomfort for two days or B, level 80 discomfort for four days. B's discomfort is 20 percent less than A's, but lasts twice as long. Many believe A is better than B. Next, compare B to C, where C stands to B as B stands to A. C is 20 percent less intense than B, level 64, but lasts twice as long, eight days. Again, many think B is better than C. The tenth choice would be between J, discomfort level of 13.4 for 1,024 days and K, discomfort of level 11 for 2,048 days. Again, many would think J is better than K. Given these rankings, the transitivity of “better than” entails that A is better than K. . . . (2012, 158)

There seem to be a number of intuitions offered here: the claims A is better than B, B is better than C, and so on. Temkin adds an additional intuition: if we were to choose for a loved one choice K or choice A, we would choose K. From these intuitions, Temkin builds a case for a philosophical conclusion against “all things considered” transitivity.

The intuitions that $A > B$, $B > C$, and so on, as well as $K > A$, are all *assumptions*. Temkin suggests that many people endorse these and invites us to assent to these assumptions in his argument. They are also assumptions that seem worth making. Temkin takes them to carry some argumentative weight; the philosophical conclusion about transitivity is the result of a deduction from premises, including the initial intuitions. Finally, the intuitions certainly do not appear to be simply inferred from some higher principle.

5.3. Probability Theory: Kyburg on Subjective Probability

Intuitions also serve argumentative functions in areas outside ethics. Kyburg (1978) argues against several interpretations of a subjective theory of probability. One considered interpretation is that subjective probability is a normative theory of belief; a person's degrees of belief ought to conform to the probability calculus. An implication of this theory, according to Kyburg, is:

[O]ne should be very certain indeed of propositions that seem both very powerful and empirical. Thus if one has a degree of belief equal to p in a certain relatively rare kind of event (e.g., that the next ball drawn from an urn will be purple), and if one supposes that one's degree of belief that the second ball is purple, given that the first one is purple is no more than $2p$, and if one regards the draws as exchangeable in the subjectivist's sense, then one should be 99% sure that p plus or minus 0.01 of the draws, in the long run, will yield purple balls. . . . That is, indeed, what one's initial beliefs commit one to, if they conform to the probability calculus. On the other hand, most of us would regard the consequence as unintuitive . . . there is no way to make one's beliefs conform to the probability calculus . . . without doing violence to some rational intuitions. (1978, 177)

Kyburg invites us to assent to his assumption that we are not 99 percent sure that p plus or minus 0.01 of the draws, in the long run, will yield purple balls. Without further argument, this assumption (clearly not produced through any kind of purely inferential process) counts against a philosophical theory of subjective probability.

The intuition used here may not have the phenomenology of seeming *necessarily* true or have the Rock status, including the preclusion of *any* further justification or inquiry. But the intuition is one Kyburg supposes “most of us” to have, and it is one that, while open to rejection, functions in a philosophical argument against a particular philosophical theory.

5.4. *Logic: Williamson on Vagueness and Bivalence*

Williamson cites an important assumption with the properties of an intuition in the first pages of *Vagueness*:

At the core of classical (i.e. standard) logic and semantics is the principle of bivalence, according to which every statement is either true or false. This is the principle most obviously threatened by vagueness. When, for example, did Rembrandt become old? For each second of his life, one can consider the statement that he was old then. Some of those statements are false; others are true. If all of them are true or false, then there was a last second at which it was false to say that Rembrandt was old, immediately followed by a first second at which it was true to say that he was old. . . . Indeed, it is widely felt to be just silly to suppose that there was such a second. Our use of the word “old” is conceived as too vague to single one out. On such grounds, the principle of bivalence has been rejected for vague languages. (1994, 1–2)

For all t for which Rembrandt lived, we are invited to consider the statement “Rembrandt was old at t .” Our beliefs about these statements are taken as assumptions, and they possess the relevant features. Consider the assumption “it is silly to say there is a first second at which Rembrandt was old.” Williamson notes this assumption is widely held; most people would assent to this view. From this assumption (presumably alone), the principle of bivalence has been rejected for vague languages; the assumption, on its own, provides argumentative weight. Finally, this assumption is not produced through a purely inferential process.

5.5. *Political Philosophy: Frankfurt on Equality*

For a final example, I turn to political philosophy. Frankfurt uses an assumption to argue against egalitarianism:

Quite often, advocacy of egalitarianism is based less upon an argument than upon a purported moral intuition: economic inequality, considered as such, just

seems wrong. . . . I suspect, however, that in many cases those who profess to have this intuition concerning manifestations of inequality are actually responding not to the inequality but to another feature of the situations they are confronting . . . not the fact that some of the individuals in those situations have *less* money than others but the fact that those with less have *too little*. . . . Mere differences in the amounts of money people have are not in themselves distressing. We tend to be quite unmoved, after all, by inequalities between the well-to-do and the rich; our awareness that the former are substantially worse off than the latter does not disturb us morally at all. . . . The fact that some people have much less than others is morally undisturbing when it is clear that they have plenty. (Frankfurt 1987, 32–33)

Frankfurt invites us to assent to the claim that we are unmoved by inequalities between the well-to-do and the rich. This claim is then used against egalitarianism, the theory that economic inequality is inherently wrong. The assumption, which we are taken to share, provides some (if not all) of the weight of the argument against egalitarianism. As in the other examples, here this assumption is not formed as the result of a purely inferential process.

6. Philosophical Method and Experimental Philosophy

The argument so far could be seen as an effort at a compromise between *proponents* of philosophical intuition use and its skeptical *doubters*. I agree with the doubters that the term “intuition” does not refer to any psychological kind and that the use of intuitions may not be as great as suggested by the sometimes careless and liberal use of the term. Yet I have argued with the proponents that intuitions—special kinds of philosophical assumptions—are used frequently and crucially in philosophy. In this section I suggest one more compromise based on the conception of intuitions as kinds of assumptions, a compromise on some merits of experimental philosophy.

My focus is exclusively on the branches of experimental philosophy that deal with the systematic investigation of intuition use through psychological (typically survey) methodology. While other types of activities arguably fall under the category of experimental philosophy, much of the most recent work has been concerned with investigating intuition (Knobe and Nichols 2008; Stich and Tobia forthcoming). One distinction worth mentioning is between what are often called the *positive* and *negative* projects of experimental philosophy. The positive project characteristically seeks to construct philosophical theories through positive folk psychology (e.g., Arico et al. 2011). The negative project typically focuses on the susceptibility of intuitions to vary with irrelevant factors and uses these studies to argue against the reliability of intuitions as philosophical evidence (e.g., Schwitzgebel and

Cushman 2012). Importantly, projects of both these types seem to endorse Centrality.

This “positive/negative” terminology is widespread, and I employ it here; but I note some serious reservations about it. In particular, I worry that although both projects involve empirical research, the “positive/negative” nomenclature suggests “negative” projects necessarily challenge philosophical practice and “positive” projects necessarily support it, *regardless* of the actual empirical findings.

A great virtue of experimental philosophy is theoretical responsiveness to empirical results. A “negative” experimental philosopher who aims to test the reliability of philosophical intuitions (a classic “negative project”) should not necessarily draw “negative” inferences from *any* result; if the empirical results suggest, for instance, that philosophical intuitions are reliable, the “negative” project should now be articulating the (“positive”) philosophical implications of this result. Similarly, a “positive” project that attempts to use empirical research about intuitions to build a theory should be wary of possible “negative” findings; for instance, if the data suggest the survey population does not understand some relevant philosophical concept, then this should be noted and theorized “negatively” rather than “positively.”

It is nevertheless possible that different experimentalists viewing the same data may draw different conclusions or inferences. But while “negatively” and “positively” inclined experimentalists might exist, the idea of a necessarily positive or negative *program* is antithetical to the empirical method. Those looking to empirical evidence should seek to draw the best-supported inferences, whether positive or negative.

Some experimental philosophy research may be classified as “negative” because so many of the results support “negative”-style inferences. For instance, studies on the reliability of philosophers’ intuitions suggest against expertise in philosophical intuition (Shulz, Cokely, and Feltz 2011; Machery 2012; Schwitzgebel and Cushman 2012; Tobia, Buckwalter, and Stich 2013; Tobia, Chapman, and Stich 2013; Knobe and Samuels 2013; Vaesen, Peterson, and Van Bezooijen 2013; Schwitzgebel and Cushman 2015; Tobia forthcoming). This negative characterization is not part of the pre-empirical theory but is rather an interpretation of the empirical findings; “negative” conclusions about the reliability of expert intuition are drawn on the basis of empirical results. But the matter is far from settled. A reasonable amount of available evidence supports “negative” theories about the reliability of expert intuition, but future work could very well redeem or support “positive” theories. This, like all others, is not a “positive” or “negative” project; it is an empirical one.

Some skeptical doubters of the use of intuition in philosophy have been highly critical of experimental philosophy, particularly “negative” projects that aim to challenge the reliability of intuitions. Cappelen calls

experimental philosophy “a big mistake” that “attacks a practice that doesn’t exist” (2012, 221). Cappelen believes that Centrality is false, and if intuitions are not used in philosophy, experimental philosophy is a mis-conceived project; a greater understanding of people’s intuitions or the reliability of those intuitions has no relevance to philosophical theories if intuitions are not used in supporting those theories.

Others take a similar line. Williamson writes, “The project of Experimental Philosophy . . . does not withstand scrutiny. . . . If experimental Philosophers want to put their activities on a proper scientific basis, they would do well to drop misleading terms like ‘philosophical intuition,’ and face up to their failure to identify any distinctive philosophical method to be transformed or overturned” (2013, 470). If intuitions do not play a role in philosophy, as doubters suggest, then the projects of constructing theories from intuitions or worrying about the reliability of intuitions are both unimportant to philosophy.

With the view in hand that intuitions are a special class of assumptions, there is at least one clear role for experimental philosophy. This result requires concessions from *both* experimentalists and anti-experimentalists. For instance, experimentalists must give up any appeal to comprehensively eliminate “intuition” from philosophy on the basis of intuition unreliability because not all intuitions are of the same psychological kind. But anti-experimentalists must acknowledge the potential usefulness of experiments in providing evidence about intuitions that may be relevant to their argumentative status.

A crucial element of the view advanced here is that intuitions are a motley crew. Further philosophical and empirical work may succeed in further categorization of subsets of intuition (for example, some subset of intuitions that *are* based purely on conceptual competence). And experiments may provide evidence we can take to bear on the argumentative status of some individual intuitions or subsets of intuition.

Examples are helpful here. First, consider an experimental philosophy project investigating “experience machine” intuitions. De Brigard (2010) argues that our intuitive response to Nozick’s (1974) Experience Machine case is best explained by status quo bias, the psychological preference of our current state to different states. If our evidence compellingly suggests experience machine intuitions are explained by status quo bias, this provides a reason to at least reevaluate the status of the intuition used in philosophical argument. It would be absurd to conclude that this lends any support to *abolishing* all intuition use in philosophy, but upon learning more about the cause or genealogy of our experience machine intuitions, we may decide they no longer serve the argumentative or philosophical role they once served. Further evidence of a cause of an assumption may well bear on the argumentative status of that assumption.

For a second example, consider the often-told story of Phineas Gage.⁷ Phineas was a railroad worker who one day suffered a traumatic brain injury; afterward the man was unusually more cruel than Phineas before the accident, so much so that friends and family thought he was no longer the same Gage. This response is sometimes taken as an intuition supporting particular theories of diachronic personal identity. Tobia 2015 presents experiments showing that “reverse” Phineas Gage cases, in which the original man is cruel and the post-accident man is exceedingly kind, elicit different identity intuitions: in those cases, it seems more that the two men are the same person. This result does *not* imply the original Gage intuition must be abandoned. Instead, it suggests that Phineas Gage case intuitions may be responding to a different feature (for example, direction of change) than was commonly thought (for example, magnitude of change).

These examples are instructive for two reasons. First, they indicate the power of experimental philosophy to provide evidence bearing on the status of philosophical intuitions. Second, they show that such projects do not necessarily require restricting or abandoning the use of intuitions. By providing evidence about the nature of an intuition, experimental philosophy offers more evidence upon which we can evaluate the intuition. This is but one role of experimental philosophy, but it strikes me as a tremendously useful one, part of a broader line of inquiry we might call assumption analysis.

7. Conclusion

The use of intuition in philosophy is a difficult and widely discussed topic, which often makes trouble when we try to determine what, exactly, an intuition *is*. There is important work to be done in further subclassification of intuitions, but for now I conclude that the assumption conception as applied to the case studies reveals the centrality of intuitions across several areas of philosophy. The view does not bode well for appeals for total bans on intuition use in philosophy, but it leaves open the possibility of experimental challenges to specific intuitions and subsets of intuitions. Crucially, it indicates the usefulness of experimental philosophy for an important and neglected project of intuition or assumption analysis.

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⁷ For these purposes, I am concerned with the classically told story of Phineas Gage, but it should be noted that this story may take liberties, departing from the true historical story of Phineas Gage. See Macmillan 2002.

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