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The Reliability and Nature of Philosophical Intuitions

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Abstract: The nature of philosophical intuitions has been a popular topic for philosophical debate. Here, I survey the views available about the nature of intuitions, how to discern and discriminate intuitions from beliefs, feelings, and seemings, and whether or not intuitions count as evidence. Then, I present an account of intuitions that is based on dual-process theory, and argue that philosophical intuitions should be understood as ordinary intuitions are in this account. After analysis of the environment in which philosophical intuitions are learned and receive feedback (although intuitions about logical structures of argument is a notable exception), I conclude that philosophical intuitions are unreliable and that they should not count as significant philosophical evidence. However, I also maintain (the seemingly paradoxical position) that philosophers can have reliable intuitions about some philosophical questions. These positions can both be understood by a dual-process theory account of intuitions, and the reliability that we associate with these processes. Given this paradoxical account of the reliability of philosophical intuitions, I think the reliability of philosophical intuitions falls somewhere between those intuitions of an expert chess-player and an avid sports gambler.

I. Introduction

The debate over the nature and role of intuitions as philosophical tools has become a much-discussed topic in the last fifty years of contemporary analytic philosophy. There is widespread disagreement about what intuitions are, what their role in philosophy is, and how we should distinguish between intuitions and other feelings, beliefs, seemings, and similar psychological attitudes.

I am interested in what types of things (specifically, what species of psychological attitudes) intuitions are, and whether or not philosophical intuitions are a result of philosophical expertise. There are many interesting accounts of philosophical intuitions, but I believe that a significant percentage of them have ignored the contemporary empirical literature which could help enormously in determining the nature and reliability of intuitions. Although philosophical intuitions may be different than the ordinary intuitions that researchers in cognitive science claim to study, I am inclined to think that the difference, if there is one, is not so severe as to prevent this research from being useful. It will be the aim of this paper to provide an account of intuitions that is derivative from dual-process theories about decision making, and use this account to analyze whether or not we should think that philosophical intuitions are generally reliable.

2. The Phenomenology of Intuitions: Intellectual Seemings

Herman Cappelen (2012) argues that contemporary analytic philosophers do not rely on intuition, despite what they might say to the contrary. He analyzes a series of cases in which he deconstructs the “intuitionist” language used and argues that the language used is not necessarily referring to intuitions themselves. As an example, he thinks that many philosophers use “intuitively” to hedge their bets about a proposition. In order to sound less confident, a philosopher might say “Intuitively, p ” rather than just state p outright. While he presents a compelling case for understanding intuition-language in this way, it is made clear in his work that there is very little understanding of what an intuition actually is. Moreover, it remains a mystery as to what type of cognitive process

intuiting something is, and whether or not it is reliable. In order for his case to be successful (that the majority of contemporary analytic philosophers do not use intuitions as evidence), I think that a better account of the nature of intuitions is necessary. Although I am not interested in diagnosing whether or not philosophers use intuitions, his work provides a useful starting point for examining how philosophers think about intuitions in our discipline.

Philosophers often refer to the ‘intuitiveness’ of an idea, or speak about their ‘intuitions’ regarding philosophical positions. While philosophers often use language like this, a simple and concise definition is not easy to find. It is no easy task to provide a definition of intuition. By examining cases in which philosophers arguably use intuitions, we can tease out similarities in an attempt to provide a working definition. A further interest here will be the phenomenological aspect of intuitions, how it feels to have an intuition and what cognitive mechanisms might provide the foundation for such a phenomena.

We often use intuitions as a methodology for philosophy. In a paper, an author will present a case that they think either supports or falsifies a philosophical thesis.¹ The ‘gut’ reaction that we have to that thought experiment (perhaps it is that Mary has learned something new, or that we are not morally obligated to remain plugged in to

¹ See Mizrahi (2013). Some of what I say here about the reliability of philosophical intuitions seems to suggest that this method is not ideal. Given that my paper is focusing on what intuitions are and how reliable they are, it is a further (and important) question about how we ought to integrate them into our discipline.

Thomson's violinist in order to keep them alive, or that we should not push the fat man off the bridge to stop the trolley) is illustrative of what many philosophers might refer to as 'intuition'. This definition squares nicely with an approach to intuitions given by Lewis, van Inwagen, and Williamson as an 'inclination to believe', or that which makes beliefs 'attractive' to us (Alexander, 2012).

Cappelen gives three criteria for identifying the intuitive: (F1) it seems true, or has a special phenomenology, (F2) it has a 'rock' status, or has a special epistemic status which needs no further justification, (F3) Based solely on conceptual competence. These are not only useful diagnostics for recognizing intuition in written philosophical texts, but they can also be useful guides for detecting intuition-talk in ordinary philosophical discourse (verbal, in classrooms, etc.). If we think of prototypical examples of intuitions (as in the method of cases), these criterion seem useful for detecting when a philosopher is relying upon the intuitive.

Many philosophers have argued that the special phenomenology that intuitions have is what separates intuitions from other psychological attitudes. Cappelen, in his section on Diagnostics for Intuitiveness, gives us several quotes from philosophers about how the phenomenology of intuitions can help us recognize an intuitive judgement from other types of judgements. Here is a quote from Pollock:

“Logically intuiting something is a phenomenologically unique experience which, although may not be analyzable into other more familiar kinds of

experience, is nevertheless a kind of experience a person can be quickly taught to recognize and label.” (Pollock 1974)

Pollock seems right that one can be taught to recognize this method of “logically intuiting something”. The question remains as to what they are recognizing, and what the nature of the intuitive experience is. It seems to me that this process can be analyzable in more familiar kinds of experience, and indeed is itself a species of more familiar kinds of experience. Here is a quote from Bealer (1996) which attempts to get at the same sort of phenomenology that Pollock is describing:

“...when you first consider one of de Morgan’s laws, often it neither seems to be true nor seems to be false. After a moment’s reflection, however, something happens: it now seems true; you suddenly “just see” that it is true.” (Bealer 1996)

One might resist the notion that they have anything like this sort of special phenomenology. In fact, Cappelen writes, “I cannot, even with the best of will, discern a special feeling that accompanies my contemplation of the naive comprehension axiom” (Cappelen p. 117). Rather, my confusion lies in the fact that I think this ‘special feeling’ associated with philosophical intuitions is a feeling that is similar to non-philosophical intuitions. If this is true, it is not the case that philosophical have any sort of special phenomenology above and beyond intuitions of other sorts. While we haven’t yet explored the concept of intuition that I am employing here (a recognition from associative memory), it will be sufficient here to deny the inclination to give special privilege to philosophical intuitions.

Cappelen continues to argue that, if there were some widespread empirical evidence that found this ‘special’ feeling in other people, then he would think that his own expe-

rience was somehow defective. At this point, however, Cappelen thinks that all we have (to corroborate this “intuition-phenomenology”) are the anecdotal reports of intuition-theorists, and that this is not a satisfactory basis for understanding the phenomenology of intuitions. I think that Cappelen is mistaken here. We aren’t just relying on anecdotal reports from intuition-theorists, this type of ‘special’ feeling is reported by people in many different disciplines.² This will become clearer once we can establish the role of intuitions in philosophy.

3. Intuitions and their Role in Philosophy

In this section, I would like to survey the recent philosophical work about the nature of intuitions and their role in philosophy. This will be important in attempting to illustrate how the current philosophical literature has largely ignored the strides made in cognitive science, and why some of the philosophical disputes about the nature of intuition can be dispensed with altogether.

Some philosophers (e.g. Lewis 1983, Williamson 2007, Ichikawa 2010) have maintained that intuitions are just beliefs. Ichikawa (2010) specifically argues that intuitions function in the same way that other beliefs do - beliefs about the age of the Earth, the length of the lines in the Müller-Lyer illusion, whether or not Gettier cases are cases of knowledge or not. There is no principled difference, he argues, between philosophical cases of intuition and other types of belief, such as geological, biological, historical, etc. Un-

² The next section provides some concrete examples of this ‘special’ feeling that I think intuition-theorists are pointing to.

der this account, intuitions about Thomson's violin are just beliefs about whether or not unplugging oneself is morally justifiable or not. If intuitions are *just* beliefs, we might think that they play the same role that any other beliefs in philosophy will play.

Some philosophers (see Brogaard 2012, Talbot 2010, Bealer 1996) have argued that intuitions are "seemings". As the quote from Bealer earlier in this paper indicates, they are things that seem true to us without us having access to why they seem true to us. They are not based on memory, inference, and perception - because these have a partly known history. As an example, we might know why the Müller-Lyer illusion appears to us the way it does based on our knowledge of visual perception and processing, but (according to Talbot and Bealer among others), the same is not true for our intuitions about such things as de Morgan's laws.

Another condition of the intuitive that many have identified is their unique etiology. According to these views, what separates intuitions is that we are not able to trace their lineage through introspection. Many philosophers maintain the position that the etiology of intuitions is not introspectively available to us. Intuitions seem to appear "out of thin air" - they are not clearly based on memory, perceptual experiences, inference, or other etiologies which we regularly refer to in order to explain many of our different beliefs. (Cohnitz & Häggqvist 2009)

I think that the etiology of intuitions is a poor way to mark intuitions from non-intuitions. The problems with this approach are similar problems that arise in the literature

about the difficulty of introspection. Unless we think that our ability to trace the lineage of our psychological attitudes is reliable, it will be difficult to discern what intuitions are without a high error rate.

Here is an example of a way in which we regularly fail to trace the lineage of our beliefs. Roediger and McDermott (1995) put subjects through two experiments. In the first experiment, subjects studied lists which were comprised of twelve words which were related by a common theme (e.g. bed, rest, awake). Then, they were presented with an associated word that was *not* represented in the list, and were asked whether or not it appeared. When subjects were asked to immediately free recall these words in a test environment, the non-represented associated words were recalled 40% of the time, and were recognized with high-confidence. In a second experiment, an expanded set of lists procured a false recall rate of 55%, and subjects produced false alarms on a recognition test which was comparable to the hit rate. If we asked the subjects to introspectively investigate the etiology of their belief that sleep was one of the words presented, we would probably get an account that comprised of visual sense data, memory recall, etc. However, this introspective investigation is, of course, wrong. They did not have the visual sense data that they are reporting, the memory is simply mistaken.³

³ Further, we know that introspection itself is a very unreliable source (See Schwitzgebel 2008, Nisbett & Wilson 1977). When asked to give verbal reports about what's going on internally, individuals are notoriously inaccurate. In one instance from Nisbett & Wilson 1977, subjects were asked why they picked a certain item of clothing given a choice of three different garments. Subjects displayed a significant right-handed bias (a large majority choosing the right-most item), but came up with explanations that involved the quality of the material, the color of the garment, and which item most appropriately matched their own personal clothing style.

If intuition-theorists that think etiology is an important means in discerning intuitions from non-intuitions, then we will need a reliable means of determining etiology. Most philosophers who argue this position seem to think that introspection is a key component of discovering the appropriate etiology for a belief state or perceptual state. If we can discern where a particular belief state or perceptual state came from (i.e. from our normal visual perception, from our knowledge of mathematics, etc.), then it is likely not an intuition. This can be called into question on two grounds that we have seen here. First, it seems clear that we can fictionalize etiologies for belief and perceptual states that did not actually occur (e.g. false memories, verbal reports found in Nisbett & Wilson). Second, the general unreliability of introspection makes it questionable exactly what method we are using to uncover the etiologies. Accounts which wish to distinguish intuitions on the grounds of an inaccessible, unknowable etiology face a significant difficulty. They must explain why it is we think we have reliable access to the etiology of visual data (or other prototypical examples), but not intuitions.

4. A Dual-Process Theory Model of Intuitions as Recognition

In order to understand how dual-process theorists think about intuitions, it will be useful to briefly describe dual process theory. Dual-process accounts of reasoning have advocated for understanding human reasoning as being comprised of two systems, aptly named 'System 1' and 'System 2' by Daniel Kahneman. System 1 involves unconscious reasoning, it processes information quickly, has a large capacity, and is effortless and

automatic. System 2 processing is careful, calculating, conscious reasoning that is related to working memory and takes a lot of effort and control. ⁴

An account of intuition from dual-process theory is found in Kahneman's book, *Thinking, Fast and Slow*. Gary Klein, who Kahneman eventually collaborated with, studied the leaders of firefighting teams. He followed them when they fought fires and interviewed the leaders about how they allocated resources between fires, about the decisions they made, and how they thought they made them. The idea was that the quick nature of fighting fires did not allow fire-fighting leaders to make decisions by weighing the positive and negative attributes of many different options. Klein and his team of researchers initially thought that commanders would restrict their analysis to a pair of options in order to speed their decision-making procedure, but this turned out to be wrong. They seemed to generate just one option, and that ended up being the only one that they needed to go through the procedure of decision-making.

As they later reported, fire-fighting leaders drew on a repertoire of patterns that had been compiled due to decades of actual and simulated experience in the field. Once they had identified a plausible option, they then considered it by mentally simulating the consequences of implementing it in real-time scenarios. If it seemed to work, they would implement it. If it was not quite the best approach, they would slightly modify it.

⁴ It is important to note that these systems are not meant to be identical with any physical structures of the brain. Kahneman is quick to point out that these are merely names for very general processes, but I don't think that this need detract from my proposal here. Nothing relies on the systems' being actually identifiable with parts of the brain.

Finally, if it did not seem to be easily changed, they would turn to the next most plausible option and repeat the process.

This involves both System 1 and System 2 processing. A tentative plan comes to mind as an automatic function of associative memory (System 1), and then mentally simulated to see if this plan is appropriate for the current situation (System 2). Herbert Simon, a pioneer in the theory of decision making, has an apt definition of intuition that Kahneman also quotes: “The situation has provided a cue; this cue has given the expert access to information stored in memory, and the information provides the answer. Intuition is nothing more and nothing less than recognition.”

Phenomenologically speaking, this definition makes sense (one might even call it intuitive!). The feeling of recognizing an individual’s face, a certain song or melody, a story, etc. has a very distinct feel to it. It is not easily described in technical terms, but can be roughly captured by a sort of “A-ha!” feeling when we connect the dots. This seems to dovetail nicely with the descriptions of philosophical intuitions as described by philosophers including phrases such as: ‘seems-true’, ‘feels right’, and a sort of ‘gut reaction’.

There is a difference between the decisions of the firefighters and the case methodology used in philosophy. A critic might argue that decisions that require action are different than the sorts of results that would be produced from thinking about our reaction to a case. While there is a difference here, I don’t think it is very severe. Even though the firefighters do not make explicit their propositional attitudes, I imagine that if they

were asked, they would respond with “I believe that X was the best course of action I could take”. This sort of propositional attitude matches up nicely with “I believe that Mary learns something new when she first sees a red apple”, or other responses to famous philosophical cases.

Many philosophers may object here that I am adding in unnecessary metaphysical baggage about intuitions. Most of what I have already argued for is consistent with the ‘intellectual seemings’ view held by Brogaard, Talbot, et. al. In the next section, I hope to make it clear why I think drawing from the dual-process literature can help us better understand the nature of philosophical intuitions and the processes that we derive them from.

4.1 High-Validity Environments, Acquiring Information, and Feedback

The benefits of seeing philosophical intuitions as system-one judgments is that we already have some information on how we might determine whether these intuitions are reliable. These judgments aren’t procured by looking at the individual intuitions, but about the field of study to which they belong. The reliability of intuitions depend upon whether the domain of the propositions they are about produce consistent results.

In order to see what I mean about the domain of the propositions, we can look to Paul Meehl’s *Clinical vs. Statistical Prediction: A Theoretical Analysis and a Review of the Evidence*. In this work, Meehl looked at the intuitions of experts in many different domains and compared them to algorithms which were designed to make the same sort of pre-

dictions. In a study (the results of which closely mirror the other studies discussed), trained high-school counselors tried to predict the grades of college freshmen at the end of the school year. They were able to meet with each student for a forty-five minute session, review their grades from high school, obtain the results of several aptitude tests and a four-page personal statement. The statistical algorithm only used the results of one aptitude test, and the grades from high school. The formula was more accurate in predicting grades of students than the majority of the professionally-trained counselors (11 out of 14 scored less than the formula).

The wealth of research that has followed in comparing humans and algorithms has produced the same results in many different fields: diagnosing cardiac disease, evaluating credit risks for banks, the odds of recidivism by current prisoners, the winner of various sports games, etc. (Kahneman p 223) The unifying theme of these fields is that each of them have a significant degree of uncertainty and unpredictability. They include many, many variables and the experts who attempt to pick them are prone to error. These are called “low-validity environments”, where environments which are highly regular and predictable are sometimes called “high-validity environments”.

In this account, intuitions will be a judgment that results from System 1 processing. In low-validity environments, the reliability of intuitions (even from experts) will be very low when comparing the reliability of intuitions in high-validity environments. For example, the accuracy of high-school counselors attempting to predict college GPAs will be much lower than the accuracy of chess-players figuring out their next optimal move.

A good example of a reliable intuition in a high-validity environment are moves made by professional chess players. Interestingly, it seems that these judgments very loosely fit our three criteria. The right move 'seems true' to them, they spend their time deliberating whether or not the move will be successful, not strictly justifying it to themselves, and it is based on their conceptual competence in the game of chess. The game of chess also seems to be a high-validity environment. Kahneman puts forth two conditions for when we should trust intuitive judgements:

- (1) An environment that is sufficiently regular to be predictable.
- (2) An opportunity to learn these regularities through prolonged practice.

For a chess player, it is easy to see that both of these conditions are fulfilled. The pieces on a chess board are always the same, and the different ways in which they move are constant. The moves that their opponent make are varied, but they do often at least operate in similar ways, resulting in general strategies such as controlling the center of the board, or having a strong pawn structure.

For philosophers, however, it is not clear whether intuitive judgements about cases (whether it is Thomson's violinist, or Gettier-style cases) fit this criteria. If the philosophical environment is not constituted of regularities, then we can recall Kahneman's rule: "intuition cannot be trusted in the absence of stable regularities in the environ-

ment.” (241) In the following section, I turn to the question of whether or not philosophy is a high-validity environment.

5. Is Philosophy a ‘High-Validity’ Environment?

I do not think that philosophy fits either of Kahneman’s two proposed criteria. Let us address, (1) An environment that is sufficiently regular to be predictable, with respect to intuitions in philosophy. The environment of philosophical intuitions is wide-ranging and difficult to define. It seems that the environment is anything but regular. In fact, intuitions in philosophy may actually cover *several* other domains at once. To come back to the case of color-blind Mary, the answer to whether or not Mary has learned something new depends upon our beliefs about not being able to see color, about the perceptual experience of seeing color for the first time, about what qualifies as knowledge, and much more. Philosophy is notorious for failing to come to a consensus, and this seems to suggest that its’ domain is far from regular and predictable.

The second criteria is a bit more interesting as it relates to philosophy as an environment: (2) An opportunity to learn these regularities through prolonged practice. It might appear that philosophers do have an opportunity to learn what regularities exist in philosophy through prolonged practice.⁵ We read philosophical treatises which argue for various theses, and have the ability to fine-tune our judgements towards sound

⁵ It might seem that my answers conflict. If I think philosophy is not a domain which has regularities that can be predicted, how can I think that people can learn regularities at all? Here I am granting that there may be *some* regularities (esp. in logic) that philosophers may learn, although the domain as a whole is mostly irregular.

arguments and what they entail. We are given feedback about our answers through guidance from professors and our peers, and are able to adjust our attitudes accordingly.

Philosophers regularly draw upon arguments with similar logical structures, going from a set of premises to conclusions. However, most philosophical intuitions are not only about the logical form of arguments, but are also be about whether various premises in the argument are true or false. For example, we might think that the Zombie argument is logically valid, but our intuitions about whether or not zombies are conceivable do not rely on the 'prolonged practice' of recognizing philosophical validity. Instead, it seems that it relies on consulting our own ideas about what is conceivable and what is not.

Another important aspect of developing accurate intuitions is feedback and the ability to practice. In order to develop the proper intuitions, chess-players must get constant feedback on their moves (either by running them through an analytics machine, analyzing them post-game, or by the win/loss that they incur after the move). Additionally, becoming an expert chess player takes thousands of hours of practice and study. One must not only have feedback, but be able to use that feedback in practice.

In philosophy, it is not clear that the feedback is the same kind of feedback that the chess player receives. We may, for example, have our intuitions confirmed by other philosophers who share the same intuition. However, this feedback is not necessarily

corrective - a chess player will receive feedback that will tailor their future intuitions. A philosopher might receive false feedback, based on their immediate surroundings also having unreliable intuitions. We cannot do a statistical analysis of philosophical intuitions in the same way that we can for intuitive chess-moves.

A further question is whether my position entails that there are no philosophical experts, and therefore that all intuitions about philosophy (from both purported experts and the 'folk') have roughly equal footing. In the medical community, for example, we would take doctors to have expertise concerning diagnosis, proper medication, etc. while the average person would have relatively little reliability in the area. This is one area in which Cappelen's argument will have ramifications. If Cappelen is right that contemporary analytic philosophers do not use intuitions as evidence, then this conclusion is not particularly troubling. Philosophers don't need to have expert intuitions, they just need to be able to formulate the best arguments for the positions that they believe in.

While I do not think that philosophy produces the same sort of regularity that gives us reason to trust medical experts, I do think that philosophers have more reliable intuitions regarding philosophy than non-philosophers. This seems problematic for my view. On the one hand, I am saying that philosophical intuitions are unreliable as sources of evidence. On the other, I am trying to maintain that philosophers generally have a higher reliability than the folk when it comes to philosophical cases. Upon closer inspection, I hope to show that this view is not as paradoxical as it originally seems.

Although Williamson's (2011) defense of the difference between trained philosophical intuitions and philosophical intuitions of the folk is unfortunately nicknamed 'the expertise defense', I think his response is persuasive:

“.. the expertise defence does not imply that a good philosophical education involves the cultivation of a mysterious sui generis faculty of rational intuition, or anything of the kind. Rather, it is supposed to improve far more mundane skills, such as careful attention to details in the description of the scenario and their potential relevance to the questions at issue.”

This is an important point, and one that I think many critics of philosophy often overlook. Philosophers are not claiming to have formed a faculty of rational intuition through careful cultivation, but are claiming to have sharpened skills such as careful attention to details in the description of a case, and their potential relevance to a broader issue. For example, in the case of the violinist, philosophers are especially tuned to the obligations which we have towards someone we do not know, our freedom to behave as we wish with our body, our moral responsibility to assist others when it is reasonable to do so, etc.

An issue that Williamson deals with in the same paper is how to justify the reliability of philosophical intuitions (and the consequent use of thought experiments) given the lack of empirical evidence for it. He cites a critique from Weinberg, Gonnerman, Buckler, & Alexander (2010, henceforth WGBA), in which they argue that whether or not

philosophical training confers real expertise (in terms of significantly greater reliability) is an empirical question. The burden of proof, according to WGBA, relies upon philosophers in order to prove that their training results in a higher level of reliability.

However, Williamson thinks that there are reasons to think that philosophers will fare better than average in a number of areas. He cites WGBA's three conditions for expertise, which closely resemble some of what we've seen previously from Kahneman: repetitive practice with fast, accurate feedback, decomposition of the task into sub-tasks, use of external aids.

We will look at whether philosophy, under Williamson's conception, fits each of these categories. Williamson argues that philosophy meets (a), but that WGBA overestimate the degree to which philosophy should satisfy this condition. He argues that philosophers often receive repetitive practice going through thought experiments (especially by the time they receive their PhD) through feedback on papers, discussions in class, and reading material. It is not always accurate feedback, and sometimes is not as fast as a chess grandmasters' feedback will be. But this is not an accurate comparison, Williamson argues, because nobody expects the difference between a professional philosopher and a novice to be as wide of a gap as the gap between a chess grandmaster and a beginner chess player. You might see that this should be similar to how we perceive the reliability of philosophical intuitions. We should not see them as reliable as a chess grand-master, although perhaps they are more reliable than the avid sports-better. Without giving an exact quantification, it seems that it would reside somewhere

in between these two extremes (while probably leaning more towards the gambler, unfortunately).

Williamson thinks that philosophers are doing (b) all of the time. He thinks that philosophy, and especially the treatment of philosophical cases (or thought experimentation) divides quite easily into sub-tasks. "First one must read and digest the description of the scenario...then judge what would be the case in the described scenario.. then [it] decomposes into several questions" (Williamson 2011). Further, philosophers often have to wonder whether or not the scenario is possible - whether it be logically possible, physically possible, or actually possible. This too, depends upon further analysis of the described case and the argument which the author intends to use it for.

Williamson thinks that formal methods act as decision aids for some (although admittedly not all) thought experiments. He considers an example of a law of tense logic 'If P then it will be the case that P', and argues that one can test it by envisioning a last moment of time and using formal techniques to check whether or not the schema has a false instance. He also points to more common examples, such as truth tables and other visual aids that often aid the philosophy of decision theory.

The difficulty here is that most of the domains in which philosophers would profess expertise are seemingly unresolved, especially in relation to areas such as disease diagnosis, chess playing strategies, etc. It is not clear what the experimental evidence would need to indicate in order for the positive conclusion to be reached. One might think

that convergence of philosophical intuitions among trained individuals would be some indication of relative expertise. It would be quite odd to suggest that expertise existed in a field that had persisting and widespread disagreement. Of course, it could be that philosophers are just a sort of homogenous, closed-feedback group in which conclusions are reached due to the nature of the members as a collective rather than an actual expertise in the area.

One indicator of a high-validity environment might be that theories converge. In the natural sciences, for example, theories tend to converge as the investigation continues. In low-validity environments, we don't see this kind of convergence. Sports betting doesn't converge on any sort of predictive algorithm, and not all bettors' behavior starts to match. It would not be a very lucrative field if they did.

However, there is some evidence that philosophers as a group may converge on some topics. This doesn't mean that philosophers agree about most things, or that we should expect convergence on a wide array of philosophical topics given the difficulty of the questions asked. Instead, we might see convergence as a milder form of the convergence in science.⁶ It is not as focused and efficient as progress in the physical sciences, but I would reiterate Williamson's claim here that we should not expect it to be. Philosophical questions are quite unlike scientific questions, and sometimes involve a much higher level of explanation and argumentation to settle. When looking for a compari-

⁶ Mild is an understatement, here, given the data available on how little philosophers actually agree upon. However, it is necessary to point out that some areas of philosophy have more convergence than low-validity environments have.

son from the disagreement in philosophy over meta-ethics, it would be silly to compare it with agreement over germ theory.

However, after noting that scientific and philosophical disagreement should be treated differently, this does not mean we should refrain from optimism about some philosophical convergence about many issues. It seems that professionally trained philosophers do converge on a number of different topics already. This is not to say that these positions are correct, but that a majority of philosophers feel they have good reason to accept them. Bourget and Chalmers (2013) indicate that a significant majority of philosophers agree on a number of issues:

“In particular, the following views all had normalized positive answer rates of approximately 70% or more: a priori knowledge, the analytic-synthetic distinction, non-skeptical realism, compatibilism, atheism, non-Humeanism about laws, cognitivism about moral judgment, classicism about logic, externalism about mental content, scientific realism, and trolley switching.” (Bourget & Chalmers 2013)

Consider an issue in which philosophers seem to disagree with the general population. Over 70% of professional philosophers (Bourget & Chalmers 2013) accept or lean towards atheism. In contrast, according to a Pew Forum report (Pew 2012), over 80% of the world's population is religious, which likely correlates significantly with theism.⁷ This is a significant difference between professional philosophers and the rest of the world.

⁷ There are some religions that are not theist, such as certain sects of Buddhism, but the large majority of religions are theistic.

One might worry that there is some self-selection effect - perhaps atheists are much more attracted to philosophy in general, and it has nothing to do with the quality of argumentation (or lack thereof) that so many philosophers are also atheists. For such a large population, the analysis would be very difficult to discern statistically, and with the incredible amount of variables that will influence any individual's beliefs. However, I don't see any positive reasons to suspect that this is the case. Unless there is an aversion within the theological community towards philosophy that I am unaware of, most theists I have encountered are generally quite positive about philosophical thought, and seem more than happy to engage it.

We might consider philosophers to have a better grasp on the arguments for and against theism than the average population.⁸ After all, part of any rigorous philosophical program will undoubtedly include introduction to philosophy of religion courses, if not further study. Many of the arguments which the general population take to be strong arguments for God have been rejected by the philosophical community (i.e. non-reasonable belief, "I just believe" or "I just feel that this is right", or "This is what I grew up with, and it makes sense to me").

⁸ Certain philosophers (Plantinga 1981) will think that the arguments are mostly irrelevant to the question of whether believing in God is appropriate, but I won't deal with that here.

Although this is only a rough presentation of the logical space of possibilities, it seems some evidence for trusting philosophical intuitions about the existence of God.⁹ If we place some importance on having sufficient reason (presented in the form of argumentation) for belief in God, then philosophers are perhaps in the best situated domain to be most familiar with the range of arguments that consider God's existence.

7. Objections Considered

In this section I will address possible objections to the understanding of intuitions presented here. The first objection is that philosophical intuitions are not in the same category as other types of intuitions. Philosophical intuitions aren't like chess-player intuitions. Chess player intuitions are about courses of actions (what their next move will be), while philosophical intuitions are judgments about beliefs. Even further, we might suspect that there is something different about the nature of philosophical questions that makes intuitions about those questions different than other questions.

This objection points to what might be a salient difference between philosophical intuitions and other types of ordinary intuitions. However, it doesn't seem to me that this objection is very forceful. I remarked on this in the earlier section, that we could plausibly ask the subject about their intuitions and they could be stated propositionally.

⁹ The extent to which we will trust the beliefs of philosophers is an open question, so it may be the case that it is relatively unimportant compared to other evidence in our overall consideration of whether or not we should believe in God.

Chess-player intuitions could be re-construed as judgments about beliefs: the chess player believes that moving her queen to e4 is the best possible move given their current board position. Further, she believes that her method of obtaining this belief is reliable. While she will still need to mentally simulate the response by her opponent and the subsequent change of moves (similar to the fire-fighter leaders and the analysis from Klein), the belief has a prima facie justification because of her expertise, and her prolonged, reliable practice in a stable environment.

An interlocutor might ask: Aren't intuitions supposed to be self-justifying? For example, it doesn't seem that chess player moves are self-justified, they justify it by further thinking about whether or not that move is the correct move. But philosophy intuitions, as many philosophers use them, don't seem to work this way. We don't necessarily ask philosophers to justify their intuitions, but we may ask them to give us why they think they have that intuition.

While this objection seems to pinpoint a clear difference, I think that this is a misuse of what it means for an intuition to be "self-justified". Self-justified here means that they need not justify themselves for *having* that intuition. But we don't accept that the intuition is right without further argumentation. I do not think that many philosophers would argue for the thesis that if a philosopher has an intuition about a topic, that they do not need to argue for their position. We can recall the discussion of the fire-fighter leaders whose intuitions operated in a certain procedure. First, an option came to them that was based on decades of experience in both real scenarios and imagined. Then,

they mentally simulated the option and decided whether or not it was optimal for the situation on hand. They either adjusted it to fit accordingly, or sometimes abandoned it entirely in favor of an alternative.

The difference seems to be that philosophers have no reliable way to adjust their intuitions to outcomes, as chess players and firefighters do. But this difference does not detract from our overall categorization, it merely highlights that philosophy is not as high-validity as fighting forest fires or playing chess.

As I have hinted at previously, there are notable exceptions to the rule. Some philosophers who study logic can come to intuition whether certain, seemingly complex, arguments are valid or invalid. They can then perform the necessary proofs in order to determine whether or not their intuition was reliable. If this is the case, we might expect that expert logicians' intuitions about logical proofs will be fairly reliable. However, it does not seem that these are the intuitions that philosophers are most interested in. Generally, intuitions are about cases (such as Gettier cases, or ethical thought experiments), and not about the validity of a logical proof.

One issue which I have not discussed here, and should be at least briefly noted, is a particular danger of relying upon System I style thinking for evidence. This danger is that it is very easy to subjectively experience other, even more unreliable cognitive processes as being the same as intuitions we generally hold to be reliable.

As Kahneman (2011) notes, System 1's job is to solve problems quickly and provide fast answers to questions. Sometimes, when the available resources are not there, we will substitute an easier question for the harder question we currently face. One example of this is called the 'affect heuristic'. The affect heuristic is when we substitute the question "How do I feel about X?" for "Is X true?" or some variant. We do this because the latter question is often very difficult and involves complex, and cognitively expensive, reasoning processes. Therefore, sometimes we might draw a conclusion based upon the affect heuristic that is quite divorced from what we might otherwise conclude given the proper time to analyze the proposition. It is difficult to tell, phenomenologically, when we are substituting and when we are relying on intuitions formed from associative memory. It is clear that we can not trust our own confidence levels about these things, as we have seen the unreliability of these measurements above.

A better strategy for philosophical practice is to refrain from intuition whenever possible. This is clearly not possible during our daily lives, as we face a number of decisions that require quick action, and it would be foolish and wasteful to spend our time carefully analyzing each and every decision. However, this does not seem to be the case in philosophy. We do not need to rely on intuition, and instead we can rely on arguments, analysis, and debate. When appeals to intuition are made, we can realize that they are somewhat reliable but fail to acknowledge that they serve as any significant evidence towards a given conclusion. While intuitions might be indications of evidence in some areas, they do not suffice by themselves as evidence. This important distinction, when

taken seriously, could improve the philosophical dialectic surrounding the use of intuitions.

8. Conclusion

To summarize what I have argued so far, we have briefly looked at the philosophical literature on the nature of intuitions (are they beliefs as Lewis and others argue, or 'seemings' as Pollock says, or something else entirely?). I have also argued that trying to discern intuitions through the criteria of an unidentifiable etiology will be a poor method. Not only are our powers of introspection highly suspect (I wrote about the impact of false memories, but there are many others), but we often construct false ideologies, such as the color and fabric quality, despite the obvious right-handed bias in the Nisbett & Wilson study, in order to maintain a coherent story when verbally reporting upon a belief, choice, or action.

We looked at how beliefs are categorized in dual-process theory. Kahneman and others posit that intuition is nothing more and nothing less than recognition from associative memory of similar past situations. This theory allows us to competently explain the role of intuitions in the expert chess-player, the leader of the fire-fighting troop who has to make quick, split-second decisions on how to allocate resources and firefighters, and other expert intuitions. We have seen that when we extend this account to philosophy, it helps to explain why we should think that philosophical intuitions are not very reliable. Given the low-validity environment of philosophy, we should not expect ex-

perts to have as reliable intuitions as those experts who practice in high-validity environments, such as chess.

I have also argued, somewhat paradoxically, that this does not indicate that there is no discernible difference in reliability of philosophical intuitions between philosophers and the folk. There is plenty of room for variation, and we should note that philosophical training will bolster skills such as reading the descriptions of cases carefully and picking out the salient details, applying the case to a particular model or theory, and analyzing the argument for logical possibility, physical possibility, and actual possibility. In their years of training, philosophers learn how to analyze the structure of arguments, and more readily point out errors in reasoning, such as fallacies or implicit biases.

Finally, I considered some brief objections to this way of characterizing intuitions and found that the theory seemed to hold despite them. If the best way to characterize intuitions is as a heuristic of dual-process theory, then many philosophical debates about the role of intuitions as evidence, the phenomenology of intuitions, and what intuitions are can be supplemented by the psychological literature that underlies these processes.

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