Philosophical Intuitions Are Surprisingly Robust Across Demographic Differences

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Within the existing metaphilosophical literature on experimental philosophy, a great deal of attention has been devoted to the claim that there are large differences in philosophical intuitions between people of different demographic groups. Some philosophers argue that this claim has important metaphilosophical implications; others argue that it does not. However, the actual empirical work within experimental philosophy seems to point to a very different sort of metaphilosophical question. Specifically, what the actual empirical work suggests is that intuitions are surprisingly robust across demographic groups. Prior to empirical study, it seemed plausible that unexpected patterns of intuition found in one demographic group would not emerge in other demographic groups. Yet, again and again, empirical work obtains the opposite result: that unexpected patterns found in one demographic group actually emerge also in other demographic groups. I cite 30 studies that find this sort of robustness. I then argue that to the extent that metaphilosophical work is to engage with the actual findings from experimental philosophy, it needs to explore the implications of the surprising robustness of philosophical intuitions across demographic differences.

To be published in Epistemology and Philosophy of Science. The paper will appear as a commentary on a target article by Timothy Williamson, but it should be easily accessible even to people who have not read Williamson’s original article.

When we make frequent use of a method, it is only natural to ask whether the method is a reliable one. Suppose, for example, that we are using a method that is supposed to be 95% accurate. If this method indeed turns out to give us the wrong answer only 5% of the time, then there is no problem – the method is working exactly as it should. By contrast, if we discover that the method gives us the wrong answer 35% of the time, we would be faced with a very serious issue.

The situation in armchair philosophy is no different from anywhere else. On one popular characterization, armchair philosophy makes use of a method that relies on intuitions. Even the most ardent defenders of this intuition-based method do not describe it as infallible. Clearly, intuition sometimes gives us the wrong answer. A question arises, however, as to whether this method has an acceptable level of reliability. If we discover that its reliability is more or less what we thought it was, this discovery would not point to a major problem. By contrast, if we find that it yields incorrect answers far more often than we thought it did, we would have reason to begin reevaluating this whole approach to philosophical research.

1 For helpful comments on a previous draft, I am grateful to Joanna Demaree-Cotton, Keith DeRose, Hagop Sarkissian, and Timothy Williamson.
As Timothy Williamson notes in his target article, early research in experimental philosophy argued that we might be faced with precisely that sort of difficulty. One argument for this conclusion started out with the claim that people's intuitions show a strong impact of demographic factors (gender, ethnicity, age, etc.). On this view, the intuitions of older men from the United States could be radically different from, say, the intuitions of younger women from Hong Kong. Though the metaphilosophical issues here are complex, one can at least see how this empirical claim might have implications for questions about the reliability of intuition.

Williamson nicely summarizes a widely-shared narrative about the fate of this argument. According to this narrative, early experimental philosophy studies seemed to suggest that demographic factors had a large impact on people's intuitions, but more recent studies suggest that the impact of demographic factors is smaller and more circumscribed. Taken as a whole, then, the empirical literature simply does not indicate that demographic factors have a greater influence than we would have expected.

To the extent that we accept this narrative, it might seem that we should also accept a rather bleak assessment of the metaphilosophical importance of research on demographic effects. The assessment would go something like this: early studies seemed to be pointing to a surprising phenomenon that at least had the potential to have important metaphilosophical implications, but in the end, this research program simply failed to pan out.

I will argue that this assessment is mistaken. The main problem is that discussion of experimental philosophy within the metaphilosophical literature has been excessively shaped by the chronological order in which experimental philosophy studies happened to come out. Early studies seemed to suggest that demographic factors had a large impact on philosophical intuitions. These studies led to a sense that it was somehow built into the very nature of experimental philosophy that it aims to find differences between demographic groups. Thus, the metaphilosophical literature implicitly privileged findings that involve differences between demographic groups over those that involve robustness across demographic groups.

But of course, the aim of experimental philosophy is not to argue for any preconceived view about people's intuitions. Rather, the aim is to find the truth about people's intuitions. This obvious fact is vividly on display in the actual body of experimental philosophy research, where the very same philosophers who show that certain intuitions differ between demographic groups (e.g., Machery et al., 2004) can often be found arguing that other intuitions are robust across demographic groups (e.g., Machery et al., 2017).

If we ignore the existing metaphilosophical literature and just look directly at the body of empirical research, we naturally arrive, I think, at a very different assessment. This assessment focuses on findings of robustness. Work in experimental philosophy is often concerned with intuitions about seemingly abstruse issues, such as the nature of the true self or whether the universe is governed by deterministic laws. There was every reason to expect that such intuitions would differ radically between demographic groups. Yet actual research on this topic
has yielded a surprising result. Again and again, studies find that effects observed within one demographic group can also be found in a variety of others.

Of course, this is not to say that philosophical intuitions do not differ at all between groups. (Researchers have identified specific cases in which they clearly do.) Still, when one examines the body of research as a whole, it is impossible not to be struck by the extraordinary degree to which philosophical intuitions are robust across demographic differences. This is an important finding that promises to have profound implications for metaphilosophical questions.

To make a case for this more optimistic assessment, I review existing research in reverse-chronological order. I begin with more recent findings and argue that they point to something extremely surprising and important. Then, only in the final subsection, I turn to the early findings that did so much to shape the narrative within the metaphilosophical literature.

Cross-cultural studies

A series of studies have taken experimental paradigms originally used with participants in Western cultures and used those same experimental paradigms with participants in a variety of different cultures. Strikingly, the results tend to show that effects obtained with Western participants also emerge among participants from other cultures.

More specifically, studies do find cross-cultural differences in intuitions about moral responsibility (Hannikainen et al., 2018), but they find cross-cultural robustness for the Gettier intuition (Machery, et al. 2017), the Gettierized epistemic side-effect effect (Yuan & Kim, 2018), metaethical intuitions (Beebe et al., 2015; Sarkissian et al, 2011), libertarian intuitions about free will (Sarkissian et al. 2010), the striking lack of impact of stakes on epistemic intuitions (Rose et al., in press), and the tendency to regard morally good mental states as falling within the "true self" (De Freitas et al., 2018).

Developmental studies

Other studies have asked whether the effects obtained in research on adults also emerge in children. Obviously, there are bound to be important differences between children and adults, but the most salient result of this research has been the degree to which children do show many of the effects obtained in research on adults. Children have been shown to exhibit some of the surprising patterns of intuition that adults show about free will (Nichols, 2004), metaethics (Heiphetz & Young, 2016; Nichols & Folds-Bennett, 2003), generics (Tasimi et al., 2017), trolley problems (Pellizzoni et al.,2010), the side-effect effect (Leslie, et al. 2006), and causation (Samland, et al. 2016).

Replication studies

Finally, a series of recent studies have replicated studies from earlier papers on demographic effects. In other words, researchers have simply rerun studies from these earlier papers, using
precisely the same procedure but a larger sample size. The results of replication studies are sometimes framed in terms of what they suggest about whether previous papers were right or wrong, but in my view, this framing fails to bring out what is most important about them. To get at the most philosophically important implications, it might be best just to look at the results of the replication studies themselves and see what they show about patterns in people's intuitions.

In research on epistemic intuitions, replication studies found no cultural differences in intuitions about Gettier cases, Truetemp, the cancer conspiracy case, or the zebra case (Kim & Yuan, 2015; Nagel et al. 2013; Seyedsayamdost, 2015). In research on gender differences, replication studies did find a gender difference in intuitions about the brain in a vat case (original study: Buckwalter & Stich, 2014; replications: Adleberg et al., 2015; DeRose 2018), but they found no gender difference in intuitions about Gettier cases, compatibilism, dualism, Twin Earth, the violinist case, causal deviance, the trolley problem, the Chinese Room, the Plank of Carneades, or the magistrate and the mob (Adleberg et al.,2015; Seyedsayamdost, 2015). In other words, even when we look just at cases in which philosophers were specifically concerned that there might be differences between demographic groups, the majority of studies find robustness.

**Interim conclusion**

I have been suggesting that one surprising finding coming out of the experimental philosophy literature is the shocking degree to which demographic factors do not impact people's philosophical intuitions. In support of this claim, I have cited 30 studies, by 91 different researchers, comprising a total sample size of 12,696 participants. Many of these results would be highly surprising even in isolation. Taken together, they are downright shocking.

These findings raise important questions both empirically and metaphilosophically. At an empirical level, the key question is how to explain the surprising robustness of philosophical intuitions. One possible answer would be that the capacities underlying people's philosophical intuitions have an innate basis. In mentioning this answer, I don't mean to suggest that it will necessarily turn out to be correct. Rather, the point is that this is the kind of hypothesis we should be investigating.

At a more metaphilosophical level, the question is what this result teaches us about the methods used in philosophy. Presumably, we will only be able to engage in a serious way with this metaphilosophical question to the extent that we can formulate plausible answers to the empirical question. So, for example, if we answer the empirical question by suggesting that philosophical intuitions have an innate basis, we will be faced with a new and difficult metaphilosophical question: *What do we learn about the reliability of people's intuitions when we learn that they have an innate basis?* Similarly thorny metaphilosophical questions arise for other plausible answers to the empirical question.
To be honest, I don’t have a good sense of how to go about answering these metaphilosophical questions. The reason is in part that existing metaphilosophical research has almost entirely neglected them. Instead, it has focused on another, very different issue.

**Reevaluating the implications of early studies**

Let's now go back in time to the very earliest studies in experimental philosophy. As we noted above, some of the early studies that appeared to show demographic differences have failed to replicate, but that does not mean that none of them were real. The most important exception is the classic Machery et al. (2004) study indicating a difference in intuitions about reference between Western and Asian participants. Subsequent studies confirm that there is indeed a real demographic difference here (e.g., Beebe & Undercoffer, 2015; Machery et al., 2009; but see Cova, et al., 2018). This is a beautiful and deeply important result, which has been justly celebrated.

Unfortunately, this deeply important early study has led to a wildly inaccurate portrayal of the field of experimental philosophy within the metaphilosophical literature. Within that literature, it is often suggested that experimental philosophy research on demographic factors is basically about differences between demographic groups. It is then assumed that metaphilosophical discussions of this research should be concerned almost entirely with such differences. In some cases, it is argued that demographic differences have metaphilosophical implications; in others (as in Williamson's work), it is argued that they do not. Either way, though, the discussion is always about the differences.

In general, I am reluctant to criticize the work of other philosophers, but I have to say that this framing of the issue is completely wrong. Any reasonable review would have to conclude that many of the most surprising results are not about differences but about robustness. To the extent that the metaphilosophical literature continues to ignore these results, it will simply be failing to engage with some of the questions that most need answering.

**References**


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