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Experimental Philosophy and Feminist Epistemology: Conflicts and Complements

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Experimental Philosophy and Feminist Epistemology: Conflicts and Complements

By

Amanda Huminski

This manuscript has been read and accepted for the Graduate Faculty in Philosophy in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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ABSTRACT

Experimental Philosophy and Feminist Epistemology: Conflicts and Complements

by

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Advisor: Jesse Prinz

The recent turn toward experimental philosophy, particularly in ethics and epistemology, might appear to be supported by feminist epistemology, insofar as experimental philosophy signifies a break from the tradition of primarily white, middle-class men attempting to draw universal claims from within the limits of their own experience and research. However, the relationship between the two is not so straightforward, and an analysis of their connection bears on broader questions concerning intuitions, philosophical methodology, and epistemic standards more generally. This dissertation project aims to 1) examine the conception of intuitions that appears to underpin many projects in experimental philosophy, 2) levy a charge of scientism against certain experimental philosophy practices, 3) explore how these two features contribute to a unique variety of epistemic objectification, and 4) draw on feminist epistemology to propose a revised view of intuitions and corresponding qualitative methodology for experimental philosophy. Ultimately, this dissertation accepts one broad premise of experimental philosophy - that the intuitions and insights of non-philosophers may be uniquely useful in addressing philosophical issues - and incorporates considerations from feminist epistemology to explore how to best integrate these viewpoints into theorizing in such a way that both resolves some tensions between these two methodologies, and in doing so, highlights cooperative benefits that may improve the methods of experimental philosophy.
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Chapter 1: An Introduction and Some Prima Facie Concerns

The recent turn toward experimental philosophy, particularly in ethics and epistemology, might appear to be supported by feminist epistemology, insofar as experimental philosophy signifies a break from the tradition of primarily white, middle-class men attempting to draw universal claims from within the limits of their own experience and research. However, the relationship between the two is not so straightforward, and an analysis of their connection bears on broader questions concerning philosophical methodology and epistemic standards more generally. This project accepts one broad premise of experimental philosophy - that the intuitions and insights of non-philosophers may be uniquely useful in addressing philosophical issues - and incorporates considerations from feminist epistemology to explore how to best integrate these methodologies into theorizing. The goal of this dissertation is to address a lacuna in the literature at the intersection of experimental philosophy and feminist epistemology, and ultimately to suggest a number of recommendations for experimental philosophy that will both resolve some of the tensions between these two methodologies, and in doing so, improve the methods of experimental philosophy. This chapter serves as an introduction, setting the parameters around the kind of experimental philosophy under consideration, exploring a handful of prima facie concerns that stem from feminist epistemology, and providing a summary of the chapters that follow.

1: Philosophy and Experiment

Kwame Anthony Appiah’s 2007 presidential address to the American Philosophical Association notes the historical relationship between philosophy and empirical science. Unless one endorses some radical version of idealism that can be supported by armchair concept analysis alone, philosophers and theorists must admit of some input from the empirical world, whether the experimental results of other fields or from their own first-hand observations. The dividing line between abstract theorizing
and the interpretation of empirical data is indistinct, and Appiah assures his audience that “few of our canonical forebears confined themselves to the realm of unsullied abstraction.”1

If we accept Appiah’s point here, it is likely that a very sharp distinction between data collection and theorizing is indefensible. This is merely to say that an appeal to empirical data is not outside the bounds of philosophy, and the individuating, selecting, and interpreting of empirical data is itself a philosophical endeavor. Furthermore, the appeal to experimental data in philosophy is not itself a controversial issue. Philosophers of mind, for example, frequently make appeals to experimental data from cognitive science and psychology. The controversy rears its head with a particular method of uncovering a particular kind of empirical data.

Jesse Prinz articulates this division by claiming that all philosophy is “observational” in a broad sense, and then draws a finer distinction between “empirical philosophy,” i.e. – philosophy that draws on empirical data from other fields, and “experimental philosophy,” i.e. – philosophy that appeals to data from experiments designed and conducted by philosophers for the purpose of addressing philosophical questions. Even so-called armchair philosophy, according to Prinz, is observational in that the act of introspective concept analysis relies on the reflective observation of one's own intuitions, memories, associations, and mental states. Additionally, there are philosophical methodologies that are empirical in a narrower sense, i.e., “research that calls on controlled experiments and statistical analysis.”2 This includes appealing to experimental results obtained by psychologists, evolutionary biologists, anthropologists, etc. And finally, there are those philosophers who choose to collect data of their own, typically by asking “ordinary people to do what philosophers have traditionally done when reflecting on concepts,” that is, by asking ordinary people to reflect on their own intuitions, memories, associations, and mental states, often by appeal to thought experiments.3 It is this latter methodology that Prinz calls experimental philosophy. Even more specifically, this dissertation is concerned with

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1 Appiah (2008), 10.
2 Prinz (2008), 192.
3 Prinz (2008), 198.
experiments that rely on forced choice intuition solicitation (FCIS) studies. This is the particular methodology I intend to pick out in my use of the term “experimental philosophy.”

Philosophers from many subdisciplines turn to intuitions as part of theory construction, sometimes by appealing to intuitions as evidence that suggests (or refutes) particular philosophical theories. A taxonomy of contemporary views on intuitions appears in Chapter 2. Among these views, intuitions are defined primarily by their non-inferential, non-deductive, spontaneous, and unreflective features, so if appeals to intuition are explicitly non-rational, it seems to follow that they play some other kind of role in a philosopher’s argumentative strategy. So even when a theorist is appealing to his or her own intuitions, the phenomenal experience of having the intuition is what plays the evidentiary role. This is what Prinz is getting at, I believe, when he calls all of philosophical methodology observational, for even intuitions are phenomena internally observed by their bearers. For philosophers who appeal to intuitions as evidence, it is the recognition and observation of some particular intuition that plays the evidentiary role. And the collection, systematization, and statistical analysis of all of these intuition data points is what makes experimental philosophy empirical. Of course, whether or not intuitions provide good or reliable evidence, and for what kinds of hypotheses, is precisely at the heart of many metaphilosophical discussions about experimental philosophy.

Below are a handful of standard philosophical thought experiments that may be useful to consider before moving forward with a discussion about how intuitions regarding these examples relate to theorizing.

*Ethics: The Trolley Problem (Philippa Foot).* A runaway trolley car is barreling down the track towards five people. You are standing near a switch that can divert the car to a nearby track, on which one person is standing. Do you allow the trolley to continue on its path, or do you divert the trolley to save the five people, killing one person instead?

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4 Further, some intuition theorists consider any claim made without reflection an intuition (e.g., “that car is red”) – for the purposes of this project, I’m generally concerned with more content-rich intuitions, particularly in ethics and epistemology.
Philosophy of Mind: What Did Mary Know? (Frank Jackson). Mary has lived her whole life in a monochrome room and has never experienced colors beyond scales of gray. She is a neuroscientist and understands all there is to know about how color vision affects the brain. She accurately uses the color red to describe fire trucks, school houses, tomatoes, and so on. If Mary is one day given a ripe red apple will she learn anything new?

Philosophy of Language: Gödel/Schmidt (Saul Kripke). Every time people use the name “Gödel,” the only description they associate is “the man who proved the incompleteness theorems.” Suppose that in reality a student of Gödel’s, Schmidt, was the one to have proven the incompleteness theorems, and was found mysteriously murdered not long after. To which individual does the name “Gödel” refer?

These are but a few among the myriad thought experiments that are frequently appealed to by philosophers in many subdisciplines. How they are employed in argumentative strategies varies. Often they are meant to provide evidence of a potential counterexample to a theory. The Mary problem, for example, is supposed to call into question a physicalist theory by suggesting that some things (perhaps the phenomenal experience of the color red) aren’t captured by a theory which supposes that all phenomena are physical in nature. Mary knows all there is to know about the physical properties of seeing the color red, but we are expected to respond that Mary learns something new when she sees a red apple for the first time. Of course, even if all of our intuitions fall in line with regard to the Mary problem, this neither proves nor disproves anything. Intuitions about thought experiments don’t play a rational role or provide proof, but they often seem to provide empirical illustration, rhetorical force, or a shift in focus or priorities that paves the way for further research and argumentation.

Intuitions, it seems, offer a particular kind of evidence in philosophical theorizing. This presents a difficult questions about the reliability or accuracy of intuitions and the relationship between evidence and theory. The difficulties are exacerbated when we look at the methods typically used to collect this kind of evidence. Often in the canon of philosophy, as Appiah suggests, intuitions about thought experiments are awarded a natural or objective status: “We conjecture a scenario, and
then announce that, in such case, ‘it would be natural to say’ X, Y, or Z.”\(^5\) However, even in circumstances where it is explicitly argued (or implicitly assumed) that intuitions are fallible like any other observational evidence, there have historically been only certain kinds of intuitions that are brought to bear on philosophical argumentation. Namely, the intuitions of *philosophers*.

### 2: Experimental Philosophy and Its Critics

Proponents of experimental philosophy argue that if there is something to be gained by appealing to intuitions in cases like those listed above, we might question whether the intuitions of philosophers are the best intuitions to examine. Instead, we should be concerned with gathering intuitions from a range of individuals. Experimental philosophy supposes that philosophers should be conducting empirical research, like psychologists and linguists, in order to find patterns and commonalities among intuitions of diverse sample sets. An experimental philosopher need not be committed to the idea that polling intuitions is the way to resolve all philosophical debates, but merely to the notion that in debates in which intuitions play an evidentiary roll, a systematic collection of intuitions from a diverse sample set is preferable to the isolated intuitions of individual philosophers and their colleagues. Joshua Knobe and Shaun Nichols, in the introduction to their anthology *Experimental Philosophy*, offer a number of motivations for and defenses of experimental philosophy. These primarily fall into two categories: the theory-leadeness motivation, and the diversity motivation.

The theory-leadeness motivation construes philosopher’s intuitions as problematic precisely because of their experience and presumed expertise. Metaphysicians, for example, who have spent years mulling over the Ship of Theseus, are among the least likely to offer intuitions that provide any kind of novel evidence that isn’t already incorporated into their theorizing. It might be the case that philosophers are simply overly familiar with the standard thought experiments, and have already internalized all of the relevant arguments and counterarguments. Or it might be because they have

\(^5\) Appiah (2008), 15.
latched onto a theory and even when presented with new thought experiments that might offer contradictory suggestions, their intuitions are unflappable, adhering to the outcome predicted by their theory of choice. The diversity motivation points to the fact that the profession of contemporary analytic philosophy is predominantly comprised of white, Western, middle-class men. If the goal of philosophical inquiry is to find timeless truths or universal principles, it is unlikely that the intuitions of such a small subset of people, representing such a small subset of perspectives and experiences, would provide any insight at all.

At first glance, both the theory-leadeness and diversity motivations seem conducive to the goals of some varieties of feminist epistemology, namely the goals of reducing both bias and epistemological power imbalances in the pursuit of more accurate theories. Furthermore, perhaps feminist epistemology might provide some theoretical support for the methodology endorsed by experimental philosophy. The problem of bias in theorizing has been discussed in relation to a Marxist standpoint framework (Nancy Hartsock, 1983; Alison Wylie, 2003; and others), a strong objectivity methodology (Sandra Harding, 1986), a science as social knowledge framework (Helen Longino, 1990), and a naturalized epistemology framework (Louise Antony, 2001), among others—this is not meant to provide an exhaustive or comprehensive exploration of work on bias in theorizing, but merely to point out that the topic has been discussed broadly among feminist epistemologists. Catherine Womack and Norah Mulvaney-Day make a similar suggestion: “including a multiplicity of voices and views also fits within a view of feminist epistemic practice that recognizes the ways in which value judgements and the social contexts in which they occur exert strong influences on resulting theory.”\(^6\) However, it is yet unclear whether FCIS studies provide the best solution (or any solution at all) to a set of problems that feminist epistemology has been grappling with for decades. Furthermore, it is worth worrying about whether experimental philosophy (either necessarily as a discipline or contingently in its practice thus far) actually creates more problems than it purports to resolve.

Despite the compelling concerns about theory-leadeness and diversity, experimental philosophy is not without its critics. To endorse the claim that polling intuitions may help decide among

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philosophical theories, one needs to accept two premises: 1) intuitions are particularly useful to philosophical theorizing, and 2) the more intuitions we probe, the better. Criticism of experimental philosophy often takes the form of questioning one, or both, of these premises.

There has been much debate concerning the usefulness of intuitions to philosophical theorizing, but the basic criticism is that intuitions have no special properties that afford them an elevated epistemic status. Some advocates of experimental philosophy methodologies actually agree with this critique. They reject the conclusion that experimental data can help decide among theories and instead argue that experimental results suggest that we should reject the claim that intuitions are useful to philosophical theorizing at all, for if intuitions vary wildly among a sample set, they are clearly contingent and unreliable. How this argument is fleshed out will depend on the subfield in question: How ethicists discuss the role of intuition in argumentation will likely differ from how it is discussed by metaphysicists or epistemologists.

For example, in a paper concerning the role of intuitions in philosophy of language, Michael Devitt offers the following observation:

It would, of course, be appropriate to give a person’s intuitions an important evidential role if we could be confident that they reflected knowledge. And the received view is that a competent speaker of a language does indeed have knowledge about her language, propositional knowledge, “tacitly” at least, simply in virtue of being competent in the language.

Here Devitt criticizes what he takes to be a commonly held idea in semantic theorizing: that competence in a language provides a speaker with some sort of privileged access to knowledge about semantic properties of that language that can be accessed via intuitions. Were this the case, then polling the intuitions of competent speakers with regard to Kripke’s Gödel/Schmidt thought experiment would go a long way in determining how proper names actually refer. This is precisely the methodology that Edouard Machery and Stephen Stich employed in a 2004 paper, “Semantics, Cross Cultural Style,” in which they conclude that cross cultural differences in intuitions about a Gödel/Schmidt-like case provide compelling evidence that might assist in deciding among competing theories about the

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7 For example, see Wesley Buckwalter and Stephen Stich in “Gender and Philosophical Intuition” (2013).
reference of proper names. Devitt rejects this view of intuitions and disagrees with the conclusions of Machery and Stich. He instead argues for a view of intuitions as “empirical theory-laden central-processor responses to phenomena, differing from many other such responses only in being fairly immediate and unreflective, based on little if any conscious reasoning.” This particular debate is extensive, but primarily revolves around the objection that folk intuitions just don’t provide the right kind of information to be of much use to philosophical theorizing. Devitt allows that intuitions can be useful, but no more useful or important than other kinds of judgements.

The second line of criticism against experimental philosophy is often called the expertise critique, which rejects the notion that the more intuitions we gather, the closer we are to converging on the truth. On the expertise critique, it is not the appeal to intuitions that is itself problematic, but rather, the appeal to non-expert intuitions. Collecting scores of naïve intuitions may not be helpful, but if we can pinpoint the right intuitions to gather, we may only need to examine the intuitions of a small group of “experts.” As Knobe and Nichols summarize a version of this criticism:

It would be absurd for physicists or biologists to conduct surveys on folk intuitions about physics or biology. Rather, physicists and biologists specialize in their domains and advance the field by exploiting their specialized knowledge. The same is true of philosophy. Just as physicists don’t consult folk physics, so philosophers needn’t consult folk philosophy.

The Knobe and Nichols response to this line of criticism allows that it may be accurate in some highly technical subdisciplines of philosophy, but for some philosophical problems such as free will and morality, there would be no problem if there were no commonsense intuitions on the topic. If it weren’t for conflicting intuitions about the Trolley Problem, for example, there may be no philosophical debate. On the other hand, Devitt, in addition to his general critique of the role of intuitions in semantic theorizing, further suggests that because “reference” is such a technical term in semantics, if we are to appeal to any intuitions at all about how terms refer, we should appeal to the well-trained intuitions of expert semanticists. The weight of this expertise critique depends on the particular philosophical question at hand, and what kind of expertise is presumed relevant.

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9 Devitt (2006), 103.
10 Knobe and Nichols (2008), 21.
3: Experimental Philosophy and Feminist Epistemology

The lines of criticism in the previous section arise from the large body of literature surrounding experimental philosophy. While the engagement between feminist philosophy and experimental philosophy has been minimal in comparison, there are some further theoretical concerns about experimental philosophy raised by feminist theorists. In this section I explore concerns already voiced in the literature, and further propose some additional concerns stemming from other areas of feminist epistemology.

In the first section of this chapter, I introduced worries raised by Appiah and Prinz about the distinctions among abstract philosophy, empirical philosophy, and experimental philosophy. The line between unsullied abstraction and empirical research is further blurred when we consider the problem of underdetermination of theory by data. Famously advanced by W. V. O. Quine, but now a standard concern in philosophical circles, the problem of underdetermination allows that any set of data is insufficient to necessitate assent to an explanatory theory. The problem of underdetermination is not unfamiliar to feminist epistemologists. Louise Antony, for example, adopts a Quinean framework and allows that “there are an infinite number of distinct and incompatible hypotheses consistent with any body of data, never mind that there are always more data just around the corner, and never mind that we are logically free to reinterpret the ‘data’ to save our hypotheses.” If the empirical data underdetermines theory, and may itself be “reinterpreted” to salvage favored theories, the worry for feminist epistemologists is what social or cognitive apparatuses come to bear in the leap from data to theory. Feminist meta-analysis of scientific research programs often finds that gendered and racialized biases play a role in theory building. Elisabeth Lloyd, for example, looks at a variety of scientific studies about the female orgasm and suggests that while the available data is insufficient to adequately draw any conclusions about its origin, androcentric bias in the science of evolutionary biology has led to a number of unsupportable hypotheses. This is in no way to suggest that the

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13 For example, see Elisabeth Lloyd in The Case of the Female Orgasm: Bias in the Science of Evolution (2005).
hypotheses generated by experimental philosophers are rife with the kind of bias discussed here, but merely to introduce the concern that the interpretation of experimental results is just as susceptible to these kinds of worries as any scientific endeavor.

Antony has also recently presented more specific concerns about some current projects in experimental philosophy. Antony’s criticism arises as a response to a paper by Wesley Buckwalter and Stephen Stich. Buckwalter and Stich offer a review of a number of projects in experimental philosophy that polled the intuitions of undergraduate students on some standard philosophical thought experiments, and after some data analysis, they find statistically significant differences between the intuitions of male and female undergraduate students. Furthermore, they hypothesize that this trend might provide some account of why women are underrepresented among philosophy faculty and graduate students. They suggest that if a woman in an undergraduate philosophy classroom consistently has intuitions that fail to fall in line with “standard” philosophical responses, or the responses of her male peers and professors, she is unlikely to pursue a career in academic philosophy. This might be because she is convinced that she doesn’t “get” philosophy, or that she is bad at it, or she may remain steadfast in her views and conclude that philosophy is a waste of time. The ultimate claim of Buckwalter and Stich, should we be convinced of this hypothesis, is that we should revise or reject the use of thought experiments in philosophy because 1) if intuitions vary so much according to gender, they are clearly contingent and unreliable, and 2) we don’t want to alienate potential philosophers who think they haven’t got the “right” intuitions.

After a critique of the methodologies employed by Buckwalter and Stich, Antony goes on to suggest that if their project is ultimately an attempt to remediate the underrepresentation of women in philosophy, it is misguided. Antony suggests that the more plausible explanation for the underrepresentation of women in philosophy is likely to include such factors as implicit bias, gender schematic thinking, stereotype threat, and conflicts between gender norms and occupational norms, and that research projects that aim to examine these factors will be more fruitful. It is interesting to note that what Antony is advocating for would be an empirical approach to solving this problem, namely, by studying the cumulative effects of such factors. She is not suggesting that data collection
and analysis aren’t useful tools, but rather that the particular experimental philosophy project in
question has somehow missed the point. Furthermore:

> There are dangers associated with claiming the existence of gender differences. Such
> claims are readily accepted – evidence in their favor conform to essentialist thinking
> about gender, and to specific stereotypes about gender, and so may be accepted because
> of confirmation bias rather than a dispassionate examination of the evidence.¹⁴

So Antony is claiming that there are likely factors at play that may skew data about gender differences,
and that because of confirmation bias, these kinds of studies may be susceptible to false positive
interpretations. These are critiques specifically leveled at projects that purport to show gendered
differences in intuitions, but Antony’s final worry is more generally applicable. She worries about
possible interpretations of the Buckwalter-Stich project: “The anti-feminist line says that if women
can’t (or won’t) do philosophy, so much the worse for women. The feminist line says that if philosophy
is not informed by women’s minds, so much the worse for philosophy.”¹⁵

Antony’s critique can be seen, more generally, as a manifestation of the problem of
underdetermination of data. A spreadsheet of questionnaire responses tells us little about the
reference of proper names, in the same way that a page of readouts from a seismograph tells us little
about the nature of earthquakes. There are theoretical frameworks (epistemic, moral, pragmatic) in
the background of the Buckwalter-Stich hypothesis that support the premise that excluding women
from philosophy is, in fact, a problem. Without these frameworks, the conclusions drawn from their
project (assuming that we accept the gender difference in intuitions in the first place) are up for
grabs. Allowing that the first Buckwalter-Stich hypothesis about systematic gendered differences in
philosophical intuitions holds water, one might conclude (as Buckwalter and Stich do) that we should
reject thought experiments, or one might conclude that we should reject women philosophers.

Similarly, concerning the cross-cultural differences of intuitions about the Gödel/Schmidt case,
whether this provides evidence that adjudicates some semantic debate, or provides evidence that
intuitions are generally unreliable, depends largely on the theoretical commitments of the interpreter –
this includes other evidence they value, believe, understand, or have access to. Either the Machery-

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¹⁴ Antony (2012), 251.
¹⁵ Antony (2012), 251.
Stich results suggest that we now have a way to adjudicate among theories about reference, or they suggest that intuitions about reference are unreliable. Determining what these experiments suggest about philosophical theories is itself a theoretical endeavor. So let us allow that intuitions are theory-leaden, but *theory* is also theory-leaden. If the goal of experimental philosophy is, in part, to combat the theory-leadenness of philosopher’s intuitions, we might be concerned about what commitments are creeping back in at the level of interpretation. It doesn’t necessarily follow that philosophers should not be designing and running experiments, but suggests that concerns about interpretation and bias may present themselves (and thus need to be examined and addressed) at every phase of the process.

Lisa Schwartzman offers an additional feminist critique of experimental philosophy, which is in some sense a version of the expertise critique discussed in the previous section. Schwartzman argues that experimental philosophy doesn’t offer a robust enough account of how intuitions are formed, and suggests that “given the widespread nature of racism and sexism, and given the evidence of their effects on everyone, intuitions (of philosophers and others) are likely to reflect these biases and perspectives.”

Recall the diversity motivation for experimental philosophy, which suggests that the intuitions of philosophers who are predominantly white, Western, middle-class, men are likely to reflect some biases that might be contradicted if we examined the intuitions of a diverse range of people. Schwartzman agrees that the intuitions of a dominant, homogenous group might be biased in some way, but she also suggests that the intuitions of most people are likely to be biased in similar ways. Recent experimental work on implicit bias seems to suggest she’s on the right track - members of marginalized groups often hold implicit biases against the very groups to which they belong.

Schwartzman’s worry is that certain political and social ideologies will merely be replicated in the data gathered by experimental philosophy projects, and instead what is required to combat bias in theorizing is a critical analysis of social structures and ideology that leads to these biases. This kind of critical analysis requires, it seems, a particular kind of expertise in analyzing social structures.

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16 Schwartzman (2012), 310.
17 For example, see Yoav Bar-Anan and Brian A. Nosek in “A Comparative Investigation of Seven Implicit Measures of Social Cognition” (2012).
The previous two concerns that emerge from feminist philosophers mirror the more general theory-leadeness and expertise critiques of experimental philosophy. Antony’s concern is that philosophical theories or other commitments merely resurface at the level of data interpretation, echoing concerns about theory-leadeness in intuitions, and Schwartzman seems to be concerned that eliminating bias in intuitions requires a particular kind of expertise in examining the social-psychological structures involved in the formation of intuitions.

The critique most salient to this project appears in a recent paper by Catherine Womack and Norah Mulvaney-Day, couched in feminist bioethics, which specifically questions the use of forced-choice surveys in experimental philosophy for two reasons:

First, given the abstractness and brevity of the scenarios used, survey response patterns underdetermine the psychological processes leading to the responses. Second, employing methods that do not allow respondents to reframe scenarios to reflect features that they find salient in fashioning their responses may cause philosophers to miss out on potentially fruitful explanations for responses.18

I fully endorse both of Mulvaney-Day’s claims, and in many ways, the bulk of this dissertation project aims to explain, expand, and substantiate their concerns. In subsequent chapters, I further articulate their concerns about underdetermination and the limited scope of forced-choice surveys, and argue that these problems are grounded in a dualistic view of intuitions (Chapter 2) and scientistic methodologies (Chapter 3), which result in the epistemic objectification of study participants (Chapter 4). Ultimately, I propose a revised view of intuitions (Chapter 5) that underpins specific recommendations for experimental philosophers (Chapter 6).

4: Additional Feminist Considerations in Brief

In the following subsections I draw on other areas of feminist epistemology, and feminist theories more generally, to suggest four additional concerns. Two of these concerns, a diversity façade and the threat of essentialism, do not play a major role in the remainder of this dissertation, but appear here to flag some issues that may arise in the periphery of this discussion. The remaining two

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18 Womack and Mulvaney-Day, 120.
concerns, experimental philosophy and scientism and native informants and epistemic objectification, begin to set the stage for the argumentative arch of the remainder of this dissertation.

4.1: A Diversity Façade

First, there is a concern that experimental philosophy, by purportedly incorporating diversity into philosophical theorizing via FCIS studies, may evade any impetus to address the problem of homogeneity among the researchers themselves. It is interesting to note that the essays comprising the first volume of the Nichols and Knobe Experimental Philosophy anthology, which was the only published anthology explicitly dedicated to experimental philosophy at the time it was released, are all authored by men. If experimental philosophers defend a claim about the importance of intuitions in building philosophical theories, and they succeed in diversifying the pool of intuitions that informs these theories, there may be little reason to be concerned about diversifying the pool of theorists. Of course, one could still argue for the diversification of the philosophical profession on other terms, but any epistemic rewards of encouraging diversity among philosophers themselves would have already been secured by experimental philosophy methods. Theorists could be satisfied that they’ve “diversified” their theories while preserving the academic status quo. Furthermore, the research questions probed, the way in which the questions are framed, and their relative priorities would still be decided by the experimenters. Not only does this seem to be a faulty methodology (experimental philosophers and feminist epistemologists agree that the ultimate goal is to approach the right answers to our questions), it also seems to conflict with the self-purported diversity motivation of experimental philosophy.

4.2: The Threat of Essentialism

There is a potential threat of essentialism that appears in experimental philosophy. In the Buckwalter and Stich paper, for example, Louise Antony is rightfully concerned about the implications of claiming that women have systematically different philosophical intuitions than men. The
Buckwalter and Stich article lacks a nuanced attempt to examine, or even comment on, the genesis of these differences (if we are to accept them in the first place) – are they innate, learned, contingent, social-psychological, contextual, etc.? Similarly, in Machery et al.’s work on cross-cultural differences in semantic intuitions, the authors claim that their hypothesis about variations in semantic intuitions is driven by Richard Nisbett’s work in social psychology, which categorizes Westerners as typically more motivated by “analytic thought” and East Asians as typically more motivated by “holistic thought.”

This difference is introduced in Machery et al.’s work without fanfare, caveat, or further nuance.

Of course, examining potential gender and cultural differences does not entail essentialism. I would like to suggest that two worries arise, however, when this kind of work is published either by theorists who lack training in social science or social theory, or in publications that lack the standards typically applied in those fields. The first worry is simply whether these experiments meet the standards typically required to make the kinds of generalizations they claim to make. For example, does polling groups of undergraduate students at large research universities authorize the claim that women’s philosophical intuitions differ systematically from men’s? While at times Buckwalter and Stich are careful to note the limits of their sample size, their hypotheses are often framed as more general investigations of “gender differences in philosophical intuition.” Moreover, it is possible that lacking a more nuanced approach to such generalizing claims could contribute to essentialist or colonialist thinking. The task of examining differences of gender, race, or ethnicity while remaining attentive to the relationship between essentialism and one’s diction, framing, context, and use of metaphors is not an easy task. It is, however, a task that feminist epistemology has been grappling with for decades.

4.3: Experimental Philosophy and Scientism

There is a potential worry about whether the methodologies of experimental philosophy might be contributing to a drift towards scientism in academic philosophy. The worry about scientism is not a
rejection of science or scientific standards, but the worry that scientific methodologies and the results they produce may become the only allowable forms of explanation and discourse, and that the faith in their accuracy may be so dogmatically defended that other experiences, questions, and methods of intellectual exploration are ignored or suppressed. Experimental philosophy need not represent or contribute to trends of this sort, but the fervor and speed at which experimental philosophy has expanded in recent years might not signify a breakthrough in philosophical methodology, but rather a rush to fortify the legitimacy of one’s work with spreadsheets and numbers. One might worry that even if much experimental philosophy presents new and innovative ways of addressing deeply entrenched philosophical questions, such a rapidly expanding trend will change the standards of success and authority in the field of academic philosophy. This may not be a wholly negative change, but it could conceivably mean that patience, insight, curiosity, and intellectual rigor will matter less to philosophy than training in statistical analysis, which could plausibly further alienate just those individuals that the field has trouble attracting in the first place. Of course patience, insight, curiosity, and intellectual rigor are not mutually exclusive with training in statistical analysis, but it would surely be a mistake to allow the latter to completely replace the former. A more nuanced exploration of experimental philosophy and scientism is offered in Chapter 3.

4.4: Native Informants and Epistemic Objectification

Finally, there is a concern raised about the role of “native informants” in both postcolonial theory and feminist epistemology. Generally, the problem amounts to a concern about the way in which theorists, in perhaps a good-willed effort to include the voices of marginalized peoples, might elicit information from their informants that is then appealed to as merely evidence, rather than informing the framework of the theory itself. This relegates the informant to the role of data point, which gives the appearance of diversity while still prohibiting the informant from joining the expert in

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21 For a broader discussion of scientism and progress in philosophy, see Nancy Bauer in *How To Do Things With Pornography*.  
22 For example, see Uma Narayan in *Dislocating Cultures* and Gayatri Chakravorty Spivak in *A Critique of Postcolonial Reason*.  

theory building. It is then the expert theorist who is responsible for collecting and evaluating the evidence - deciding which questions to research, deciding which data is representative and which is anomalous, deciding when sufficient data has been collected, and drawing conclusions from this body of evidence. A further exploration appears in Chapter 4, in which I draw on the work of Miranda Fricker to argue that experimental philosophy, for these reasons, perpetrates a detrimental kind of epistemic objectification.

5: Looking Ahead

The remainder of this dissertation consists of five additional chapters. Chapters 2 through 4 expand upon many of the issues raised in this introduction, Chapter 5 presents a revised view of intuitions that I call intuitional holism, and Chapter 6 offers a series of recommendations for experimental philosophy.

In Chapter 2, I offer a taxonomy of contemporary views on intuitions and argue that the majority of these views rely on a flawed dualism between the content of intuitions and the rational processes or mechanisms that are thought to be incorporated into theorizing. This dualism positions intuitions as different in kind from other kinds of beliefs or commitments, and fails to take into account the way that rational processes are not content-neutral. In Chapter 3 I propose a definition of scientism, and argue that many projects in experimental philosophy that rely on FCIS studies are scientistic in their application of scientific methodologies and accompanying rhetoric. In Chapter 4, I discuss the reciprocal relationship between the dualism discussed in Chapter 2 and the scientism discussed in Chapter 3, and ultimately argue that this contributes to a kind of epistemic objectification that has both epistemic and potentially moral implications - and in particular, threatens to undermine many of the purported epistemic motivations of experimental philosophy. In Chapter 5, I offer a more holistic view of intuitions that draws on work in feminist epistemology. And finally, in Chapter 6, I suggest that embracing a more holistic view of intuitions can evade many of the problems discussed throughout this dissertation, and offer a series of other recommendations for experimental philosophy.
Drawing largely on the work of Womack and Mulvaney-Day, as well as general methodological recommendations from feminist standpoint theory and feminist empiricism, I recommend a revised approach to experimental philosophy that prioritizes qualitative methods and integrates research from a variety of other fields, including anthropology, public health, and comparative literature.
Chapter 2: Philosophical Intuitions

In this chapter I examine a taxonomy of views in contemporary philosophy about the nature of intuitions and their role in philosophical theorizing, particularly with regard to the elicitation of intuitions via thought experiments. Ultimately I argue that an overwhelming majority of these views on intuitions assume a strict divide between the evidentiary role that intuitions play in theory-building, and the inferential processes that would seem to take in the evidence from intuitions and, drawing on the capacities of reason and the restrictions of logical consistency, flesh out the substance of said theories. Depending upon which contemporary view of intuitions one adopts, either intuitions provide lousy evidence and are irrelevant to philosophical theorizing, or, if we can manage to substantiate the evidentiary status of intuitions, the inferences built upon this evidence will be rational and mechanical. Both options seem to presume that once we solve the messy question of what, exactly, intuitions are, what to do with intuitions will be obvious. I argue that this assumption relies on a flawed dualism between the content of intuitions and the rational processes or mechanisms by which these intuitions are thought to be incorporated into theorizing.

This diversity of views about intuitions is particularly relevant for experimental philosophers, as the debates about intuition typically center on the question of whether intuitions provide useful or reliable evidence for philosophical theorizing. For the purposes of this chapter and the remainder of this dissertation, I am primarily concerned with methodologies that rely on forced choice intuition solicitation (FCIS). If intuitions, or certain intuitions, do provide some kind of useful evidence, this kind of collection and analysis of intuitions by experimental philosophers would seem to be a worthwhile endeavor - though the particular role intuitions play in theorizing may still be up for debate. However, if the evidentiary status of intuitions can’t be substantiated, then the entire project of experimental philosophy is called into question. Some specific projects in experimental philosophy themselves intend to undermine the evidentiary role of intuitions precisely by attempting to show, through experiment, that intuitions are malleable and inconsistent, but these projects also rely on an assumption that intuitions play the role of evidence (in this case, lousy evidence) in theorizing.
The ultimate goal of this chapter is to argue that the majority of contemporary views on intuitions presume an unnecessary dualism between intuition and reason, which undermines certain epistemic goals of experimental philosophy. I begin by exploring a taxonomy of contemporary views on the role of intuition in philosophical theorizing, followed by a critique of the ways in which contemporary debate about intuition mistakenly centers on questions about evidence. Drawing on empirical psychological research on confirmation bias, I argue that questions about the evidentiary role of intuitions are misguided. Finally, I argue that this dualism presents an epistemic problem for experimental philosophers in their effort to draw conclusions about how human beings think.

1: A Taxonomy of Views on Intuitions

Perhaps the most comprehensive attempt at surveying the landscape of views on intuitions is presented in Herman Cappelen’s book *Philosophy Without Intuitions*. Cappelen presents a unique view on the role of intuitions in philosophy - that no such role exists. He argues that philosophers, in fact, do not rely on intuitions for any part of their theorizing, and thus the array of positions outlined in the literature on intuitions are all moot. I ultimately disagree with this claim in Chapter 5 of this dissertation, arguing that the role of intuitions is actually more embedded in theorizing than even Cappelen’s opponents suggest. However I agree with Cappelen, in a sense, that intuitions don’t provide the right kind of evidence for philosophical theorizing - but not that they are irrelevant. Regardless, Cappelen’s taxonomy is comprehensive, so using his framework and review of the literature, with a few addendums, I explore how this array of views on intuitions presumes a kind of problematic dualism.

According to Cappelen, the array of views on intuitions position them squarely in the category of mental states. Aside from the outlying position of George Bealer, who argues that intuitions constitute their own category of *sui generis* mental states, the remainder of the views on offer characterize intuitions as beliefs or inclinations to believe.23 Cappelen labels these philosophers *reductionists about intuitions*, in that intuitions do not constitute their own type of mental state, but

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rather, are reducible to beliefs or inclinations to believe.\textsuperscript{24} Among these reductionists, there are liberal reductionists who “take ‘intuition’ to denote any belief or inclination to believe,” as well as an array of others, who take intuitions to be reducible to some special category of beliefs that possess other defining features.\textsuperscript{25}

Among these narrower reductionist views there are four primary belief-accompanying features that set the parameters of various views on intuitions, constituting a collection of “belief plus” positions: belief plus phenomenology, belief plus content, belief plus justification, and belief plus etiology - with some specific views comprised by conjunctions or disjunctions of these features.

\textit{Belief + phenomenology}. Cappelen characterizes the belief plus phenomenology view by quoting Alvin Plantinga, who claims that intuitions are (among other things) beliefs plus “that peculiar form of phenomenology with which we are all well acquainted, but which I can’t describe in any way other than as the phenomenology that goes with seeing that such a proposition is true.”\textsuperscript{26}

\textit{Belief + content}. Those who view intuitions as beliefs plus some particular content “exclude all judgements concerning contingent truths from the intuitive,”\textsuperscript{27} which is to say, on Capellen’s interpretation of this “belief plus content” view, only beliefs about necessary truths can be intuitions.

\textit{Belief + justification}. The belief plus justification feature might more accurately be described as belief plus justificatory status. Although Cappelen does not discuss this option in his taxonomy, I would include those who view intuitions as beliefs defined by their lack of justification. Among those that view intuitions as justified beliefs, some define the specific kind of justification negatively, in terms of what it is not - for example, David Chalmers describes intuitions as beliefs with a broadly noninferential dialectical justification, i.e., beliefs justified in philosophical dialectic, but specifically not justified by inference, perception, introspection, memory, or testimony.\textsuperscript{28} This is not to say that

\textsuperscript{24} For the sake of brevity, I will henceforth refer only to “beliefs” rather than “beliefs or inclinations to believe,” as nothing in my final argument depends upon this distinction.
\textsuperscript{25} Cappelen (2012), 9. Cappelen interprets Peter van Inwagen, David Lewis, and Timothy Williamson to be among these liberal reductionists.
\textsuperscript{27} Cappelen (2012), 10.
\textsuperscript{28} Cappelen offers no examples of this claim, but I interpret David Chalmers to endorse a view of this kind (2014).
there exist no inferential justifications for the content of intuitions, on Chalmers’ view - for example, there may additionally be perceptual justification for the content of a particular intuition, but the belief is categorized as an intuition if the bearer fails to recognize whatever inferential justification might exist. Others argue that intuitions derive their justification from their obviousness, “invoking a special faculty whereby we can ‘see’ or become directly intellectually aware of certain truths.”

Still others view intuitions as beliefs specially justified by conceptual competence. The view that intuitions are somehow grounded in conceptual competence is perhaps one of the most popular (and controversial) positions in the landscape. If this position were correct, it would appear to be an obvious endorsement of experimental philosophy - if intuitions provide direct or privileged access to concepts, via the intuitions of those who competently deploy those concepts, then finding competent users of concepts and polling their intuitions would provide conclusive evidence regarding those concepts. It’s no surprise that debates around this particular view of intuitions proliferate in the experimental philosophy literature.

*Belief + etiology.* Finally, there are those who view intuitions as beliefs with some specific etiology, generated in some specific psychological way. This etiology may be broadly noninferential, in Chalmer’s sense of the term, so arising not from inference, perception, introspection, memory, or testimony. I take many of the views previously discussed, for example Plantinga’s view, to also be committed to a noninferential etiology of intuitions. There are others, however, who view intuitions as beliefs arrived at by inference, and defined just by the lack of introspective transparency into those inferential processes. Michael Devitt presents a variation of this view when he claims that intuitions are “empirical, theory-laden central-processor responses to phenomena, differing from many other such responses only in being fairly immediate and unreflective, based on little if any conscious reasoning.” I take Devitt to be suggesting that intuitions are no different from other kinds of judgements or beliefs,

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29 Cappelen (2012), 10. Cappelen cites Alvin Plantinga and Charles Parsons as proponents of this view.
31 For example, see the debate around experimental semantics in Machery et. al. (2004) and Devitt, “Whither Experimental Semantics?” (2012).
32 Devitt (2006), 103.
except in that the inferential processes (the etiology) giving rise to intuitions are not obvious to their bearers.

On an inferential view of intuitions, you might take these nonobvious inferential processes to be either contingently or necessarily obscured. One might think that only beliefs arrived at by inferences that are conceptually unavailable to the bearer of those beliefs can properly be counted as intuitions. Or one might think that any belief arrived at via nonobvious inference counts as an intuition, including beliefs for which the bearer simply hasn’t taken the time, energy, or interest to introspect on what kinds of inferences gave rise to that particular intuition.

Interestingly, this view of intuitions as inferential-yet-obscured is not incompatible with Chalmers’ view that intuitions are beliefs with broadly non-inferential dialectical justification. For example, it might be the case that the psychological etiology that gives rise to a certain intuition is, in fact, inferential, but because the inferential component is obscured from the bearer (and presumably from any observer), the justification for taking the intuition seriously, or incorporating it into theorizing, must be non-inferential. In Chapter 5 of this dissertation, drawing on the work of David Chalmers and Michael Devitt, I argue that these two features (inferential etiology and broadly non-inferential dialectical justification) align with the holism about intuitions that I endorse from a feminist epistemology perspective.

**Figure 1. Illustration of contemporary views on intuitions**
In the preceding paragraphs, I explored a variety of views on the nature of intuitions - i.e., what intuitions are. From any position on the map laid out in Figure 1 above, there remains the further question of how intuitions might be used in philosophical theorizing. Contemporary accounts of the potential evidentiary role of intuitions fall broadly into two camps, a psychological view and a non-psychological view. On the psychological view, it is the occurrence or experience of the intuition that provides evidence or support in theorizing, whereas on the non-psychological view, it is the content of the intuition that plays this role. For example, in examining intuitions produced by a thought experiment like the trolley problem, assume that we are confronted with an individual (or a group of individuals) who report having the intuition that one would be ethically required (or allowed, etc., depending on which ethical phenomenon we are attempting to study) to pull a lever to kill one person in order to save the lives of five others. There are two ways we might imagine that this information could be taken as evidence in theorizing about the viability of utilitarianism as an ethical theory. If x is a proposition expressed by “one is required to pull a lever to kill one person in order to save the lives of five others,” we could either take the proposition “x,” or the proposition “y has the intuition that x,” as evidence in support of utilitarianism. In the first case, we take the content of the intuition as evidence, in the second case, we take y’s having or experiencing the intuition as evidence. The entirety of views discussed above rely on a psychological interpretation of intuitions - it’s not clear that any views on offer take seriously a non-psychological view of intuitions, except perhaps as a straw man. This chapter remains mute on which view of intuitions accurately reflects how they are appealed to in theorizing – it is sufficient to point out that the majority of positions on offer assume a psychological view.

Whether the first order (nonpsychological) or second order (psychological) interpretation of philosophical evidence actually provides good or convincing support is a separate question. If one can settle the descriptive questions of what intuitions are and what role intuitions do play in philosophical theorizing, there remains the normative question of whether or not they should play that role - that is to say, on either the nonpsychological or psychological view, one can take a positive or negative position on the appeal to intuitions in philosophy. Furthermore, any argument presented as to why
intuitions as interpreted on a psychological view provide bad (or good) evidence in theorizing would have to be different than an argument as to why intuitions as interpreted on a nonpsychological view provide bad (or good) evidence in theorizing.

So it seems the list of open questions is expanding. What is the nature of intuitions? Does the content of intuitions provide evidence? Does the psychological phenomenology of intuitions provide evidence? Is the evidence provided by intuitions reliable? In the following section, I ultimately argue that this collection of debates about the kind of evidence philosophers might extract from intuitions mistakenly presumes a dualism that exaggerates the divide between intuitions and other inferential processes. Were this dualism collapsed, this collection of debates becomes moot.

2: Intuitions as Evidence

In a meta-analysis of experimental projects in epistemology, Weinberg, Nichols, and Stich take certain normative epistemology projects to rely on a (pejoratively titled) “Intuition-Driven Romanticism” strategy, “which can be viewed as a ‘black box’ which takes intuitions (and perhaps other data) as input and produces implicitly or explicitly normative claims as output.”33 Weinberg, et. al., articulate a problem that arises for these normative projects in particular: “What reason is there to think that the output of one or another of these Intuition-Driven Romantic strategies has real (as opposed to putative) normative force?”34 In other words, how could the intuitions of individuals (regardless of how we characterize intuitions) be converted by the “black box” into claims that carry normative force?

This picture of how intuitions are used in experimental philosophy, and a corresponding critique, is articulated in a more general sense by Timothy Williamson and his critic Jessica Brown in making explicit the questions about evidence that arise in debates about intuitions. To begin, Williamson takes the majority of philosophers to be committed to a psychological view of intuitions in

33 Weinberg et. al. (2008), 21.
34 Weinberg et. al. (2008), 21.
which the belief itself constitutes evidence in theorizing. It is interesting and important to note here that Williamson makes no distinction among the varieties of reductionist views about intuitions - the fact that they all take intuitions to be a type of belief appears, for Williamson, to be sufficient to demonstrate the psychologism of this collection of views:

They think that, in philosophy, ultimately our evidence consists only of intuitions (to use their term for the sake of argument). Under pressure, they take that to mean not that our evidence consists of the mainly non-psychological putative facts which are the contents of those intuitions, but that it consists of the psychological facts to the effect that we have intuitions with those contents, true or false. On such a view, our evidence in philosophy amounts only to psychological facts about ourselves.\(^{35}\)

The consequent problem, for Williamson, would be a gap between our evidence in philosophy (psychological facts) and the non-psychological facts that we would like our theories to support, “since psychological evidence has no obvious bearing on many philosophical issues.”\(^{36}\) Williamson extends the critique of Weinberg et.al. beyond a problem in deriving normative force from claims based on intuitions construed as psychological facts. Williamson argues more broadly that any non-psychological claim derived from intuitions is suspect.

Brown ultimately attempts to mitigate Williamson’s concerns about this gap between the psychological facts provided by intuitions and the non-psychological facts we might like our theories to endorse. She does so by arguing that there is no inherent conflict between a naturalist or empiricist view about knowledge and a psychological view of intuitions. She states:

Philosophers differ over the extent of our direct access to states of affairs in the world. For instance, some hold that perception provides direct access to nonpsychological states of affairs in the world. However, others hold that perception provides direct access only to certain psychological states in virtue of which one has indirect access to nonpsychological states of affairs in the world.\(^{37}\)

The idea here being that even if intuitions fail to provide direct access to facts about the external world, there are varieties of naturalism about knowledge that might accommodate intuitional evidence on the grounds that intuitions are analogous to perceptions, in that they may provide “direct access only to certain psychological states in virtue of which one has indirect access to nonpsychological

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\(^{35}\) Williamson (2004), 235.

\(^{36}\) Williamson (2004), 234.

states of affairs.” One might argue over the degree to which the “indirect access” in the case of intuitions and perceptions differ, and additionally argue that perceptions meet some threshold that intuitions fail to meet, but Brown’s point is that this is a matter of degree and not kind. If intuitions arise via some relation to the external world, at least some intuitions might genuinely constitute evidence.

Despite their differences, both Williamson and Brown, in articulating concerns in the literature about the use of intuitions as evidence, 1) appeal extensively to analogies between intuition and perception, and 2) fail to distinguish among the many characterizations of intuitions as different types of beliefs. I contend, however, that this appeal to perception is misguided, and belies a more general problem in focusing the discussion on evidence. If intuitions are a variety of beliefs, in one of the ways explored earlier in this chapter, or some other way entirely, the broader question appears to be: can beliefs be evidence for philosophical theorizing? The short answer, I suggest, is no. The long answer, however, is not that beliefs are irrelevant, but that beliefs in general, and intuitions more specifically, are too integrally tied to the inferential processes involved in theory building to be characterized as “evidence.”

Conversely, the view underlying this debate presumes that the inferential processes at play in interpreting evidence are content-neutral. The conflation of views that position intuitions as a type of belief appears to suggest that something like Weinberg et. al.’s “black box” picture is applicable beyond the scope of normative epistemology projects. The concern isn’t merely whether content-neutral inferential processes can produce normative conclusions from psychological facts, but more generally, whether content-neutral inferential processes can operate on evidence from intuitions and produce anything but more psychological facts.

The debate appears to boil down to the extent to which intuitions are similar or dissimilar to perception, combined with an assumption that perception provides an uncomplicated (or far less complicated) example of the kind of evidence that can usefully substantiate philosophical theories. However, this is getting at the wrong question. This underlying view presumes that accepting intuitions as relevant would position all intuitions as input for the black box of inferential processes (to be
explained by the study of logic and, perhaps, cognitive science) that spits out either finite conclusions or entire philosophical theories. Psychological facts in, psychological facts out, the critics seem to suggest, and we don’t intend philosophy to be a study of psychological facts. Or, following Brown, we need some story about how intuitions arise from indirect access to nonpsychological facts, and once interpreted by the content-neutral black box, provide us with conclusions or theories that say something (indirectly) about the nonpsychological state of affairs in the world.

3: A Dangerous Dualism

This black box picture, I propose, constitutes a kind of dangerous dualism about intuitions. The picture is dualistic in that it proposes two disparate mental processes that fail to allow mutually reflexive interactions. Intuitions are positioned as evidence, as inputs that differ in kind from the content-neutral inferential processes that are taken to evaluate and analyze evidence, with no consideration for the ways in which inferential processes are not entirely fixed and may be influenced by the beliefs on which they operate.

Two caveats: First, I take “inferential processes” to include both logical processes and practices around the reliability of non-deductive reasoning - I hesitate to propose necessary and sufficient conditions for what might constitute inferential processes, as I use the term, as the final section of this chapter suggests that the strict division between intuitions and inferential processes is unwarranted. Second, I do not attempt to provide an account of the precise cognitive or psychological processes explaining the interplay between intuitions and other inferential processes. I do suggest, however, that some widely-studied psychological phenomena, such as confirmation bias, provide at least some empirical reason to doubt the dualistic picture presented in much of the work on intuition.

Confirmation bias refers to a situation in which an individual’s prior beliefs can impact their inferential processes, or their ability to exercise those processes, with regard to the evidence at hand. This phenomenon has been widely studied and supported by abundant empirical work in experimental psychology. For example, experimental psychologist Raymond Nickerson offers a comprehensive
literature review and accompanying disambiguation of multiple varieties of confirmation bias. Most relevant to this discussion are a collection of experiments supporting the dual phenomenon of “hypothesis-determined information seeking and interpretation.” These are instances of confirmation bias in which prior commitment to a hypothesis or belief influences either data gathering, data interpretation, or both.

Nickerson proposes five separate, but closely related, categories of hypothesis-determined information seeking and interpretation. First, restriction of attention to a favored hypothesis occurs when data is interpreted to support some favored hypothesis, disregarding the ways in which the very same data may support alternate, or even conflicting, hypotheses. Second, preferential treatment of evidence supporting existing beliefs is the tendency to be less attentive to evidence that may disconfirm a hypothesis, or, Nickerson suggests, attentive to it in a purely negative way - “for example, to seek to discredit it or explain it away.”

Third, looking only or primarily for positive cases involves seeking only experiments or empirical evidence that confirms a favored hypothesis, rather than testing the converse hypothesis against disconfirming evidence - no matter how much confirmatory evidence one finds, the case will not be as strong as disconfirming conflicting hypothesis. Fourth, overweighting positive confirmatory instances is not avoiding disconfirmatory evidence, but rather psychologically overweighting confirmatory evidence in comparison with the same amount of disconfirmatory evidence: “people generally require less hypothesis-consistent evidence to accept a hypothesis than hypothesis-inconsistent information to reject a hypothesis.” Finally, seeing what one is looking for is the general tendency to find supporting evidence or patterns in data when no such support exists at all.

The line between evidence seeking and evidence interpretation, in all of these cases, is blurred. For example, looking only for positive cases and overweighting positive confirmatory instances seem to present problems with evidence seeking and evidence interpretation, respectively, but only by a matter of degree. For example, if I hold the hypothesis that astrological signs are good

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indicators of certain character traits, when confronted with counterexamples to my hypothesis (a stubborn Gemini, let’s say), I might either refuse to consider the stubborn Gemini as evidence, or, if I allow the counterexample into my pool of evidence, psychologically underweight it’s import, as compared to the stubborn Taurus I also know. The pre-interpretive step here is allowing data to count as evidence at all - this judgement, however, is not automatic, and is itself tinged with the same kind of hypothesis bias that can affect data interpretation. Even if we were allow, however, that there are cases in which evidence is self-presenting, or more clear cut, Nickerson’s expansive literature review highlights many cases in which confirmation bias appears to creep in primarily in data interpretation, as in the cases of preferential treatment of evidence supporting existing beliefs and overweighting positive confirmatory instances.40

To put it in our black box terms, assuming we can isolate cases in which confirmation bias explicitly intervenes at the level of data interpretation, a belief (a favored hypothesis) affects the functioning of inferential processes, which in turn takes an input (disconfirmatory empirical evidence) and produces a suspect output (confirmation of the favored hypothesis). If intuitions are a kind of belief, as the literature suggests, this kind of reciprocal interplay likely also holds between intuitions and inferential processes. In other words, we have no reason to believe that intuitions and inferential processes are so strictly divisible - intuitions don’t seem to be the kind of thing that inferential process merely take up and operate on, churning out conclusions. Rather, intuitions, like other kinds of belief, have the tendency to alter the functioning of inferential processes.

Contemporary literature on intuitions, however, both maintains that intuitions are a kind of belief and goes on to debate the evidentiary status of intuitions in the abstract - it’s as if we were to ask what kind of evidence a hypothesis, in the abstract, provides in scientific inquiry. A hypothesis is intimately connected to the inquiry and can affect the output in myriad ways, but to ask what kind of evidence it provides seems to be a misguided question. The dualism in question arises from treating

40 At the time of writing in 1998, Nickerson cited 11 works supporting just these two confirmation bias phenomenon.
intuitions as a category of evidence, separate and different from other beliefs, isolated from the functioning of inferential processes.

And where is the danger in this kind of dualism? First, there is the question of whether positioning intuitions as input in the black box picture accurately captures the relationship between intuitions and inferential processes. Depending on what, exactly, we want to articulate about the relationship between intuitions and inferential processes, this is either a deeply epistemic question (concerning broader skeptical worries about the general relationship between evidence and beliefs) or an empirical psychological question. I do not aim to respond to either of those questions here. Regardless, the question seems complex enough to reject the implicit intuitions-as-input picture as an obvious answer. So at the very least, we’ve shifted the burden of proof back to the intuition theorists to either defend the black box picture or to explain what other assumptions underlie the intuitions-as-evidence debate.

The second consideration about this kind of dualism, which may be particularly pressing for experimental philosophers, is a concern about the ways in which intuitions from non-philosophers are solicited and interpreted in FCIS studies. One motivation for experimental philosophy, as articulated in Joshua Knobe and Shaun Nichols’ “An Experimental Philosophy Manifesto,” is the impetus to explore diversity among philosophical intuitions: “Where we do find diversity, then, we can ask more informed questions about the relative merits of these different ways of thinking about the world.”41 The idea being that if we can collect sample sets of diverse intuitions, it doesn’t matter who does the inferential processing - if we (professional philosophers) know that respondents in some group tend to have the intuition that x, we can engage in the philosophical exercise of hypothetically assuming x as an input and then evaluate what theories or conclusions it seems to suggest.

There are potentially two related problems with this picture: an epistemic problem and a potential ethical problem. The remainder of this chapter focuses on the epistemic problem; a further discussion of the potential ethical problem appears in Chapter 4. The epistemic problem arises if we

41 Knobe and Nichols (2008), 11.
adopt the black box picture and engage in the systematic collection of intuitions as mere input - this picture appears to maintain the fixedness and precision of the inferential processes in question while relegating any potential diversity to the realm of belief. Experimental philosophers would have to assume that their own inferential processes are identical (or significantly similar) to those of the study participants if they want to make the leap from examining participants' intuitions to making assumptions about what conclusions or theories these intuitions suggest. This fails to take two things into account: 1) the ways in which actually holding a particular intuition (as opposed to undertaking the mental exercise of assuming an intuition) can affect the inferential processes employed in drawing conclusions, and 2) the ways in which other prior beliefs or commitments might also affect those processes.

For example, we can certainly imagine that two individuals might have the same intuition about a simple Trolley Problem style thought experiment, but, upon probing, maintain commitments to opposing moral philosophies. We see this play out often in undergraduate classrooms. Students are introduced to the Trolley Problem, polled about their initial intuitions, and the conversation that unfolds reveals that even students who initially agreed about the right course of action often come to articulate their rationale in very different ways, occasionally disagreeing about why, for example, pulling the switch is the right thing to do. It is not a given that any particular individual who has the intuition that one ought to pull the switch will invariably hold a general utilitarian commitment.

For this reason, there seems to be a misstep in the way that certain experimental philosophy methods (particularly those that rely on FCIS studies) draw generalized conclusions about participants' commitments or worldviews. If we have reason to doubt the black box picture, or to suspect that there is some other relationship at play between intuitions and inferential processes, experimental philosophers may well be drawing conclusions from their data sets that provide little, if any, insight about how their sample populations are “thinking about the world.”

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42 Knobe and Nichols (2008), 11.
Consider a recent experiment performed by Adam Bear and Joshua Knobe in which they aim to isolate which predictor conditions influence the kind of psychological behaviors that participants find compatible in a causally deterministic universe. One group of participants in this study was asked to rate a list of 30 psychological behaviors (e.g., “People try their hardest to win a race,” “People unconsciously resent their bosses,” etc.) along four predictors: physical - people do this thing purely as the result of physical processes in their brain and body, human - people can only do this thing because of special properties of human minds that distinguish them from animals, unexpected - people do this thing unexpectedly and unpredictably, and exert control - people can only do this thing by exerting control over their instinctual behavior. The responses from this group of participants was used to independently find correlations between the 30 behaviors and the four predictors.

A separate group of study participants was given the following vignette:

Imagine a universe (Universe A) in which everything that happens is completely caused by whatever happened before it. This is true from the very beginning of the universe, so what happened in the beginning of the universe caused what happened next, and so on right up until the present. For example, one day John moved his leg. Like everything else, this action was completely caused by what happened before it. So, if everything in this universe was exactly the same up until John acted in this way, then it had to happen that John would move his leg.43

Afterward, each of the participants who read the vignette were assigned to one question about one of the 30 psychological behaviors, asking them to agree or disagree (on a 1-7 Likert scale ranging from “strongly disagree” to “strongly agree”) with a statement like “In Universe A, people can fall in love.” The results were then analyzed for a correlation between predictors and compatibilism - i.e., which types of actions (physical, human, unexpected, exert control) are more or less compatible in a causally deterministic universe? Some of the conclusions that Bear and Knob draw from this analysis include: “our results suggest that ordinary people think that individuals could not even perform certain actions in such a [causally deterministic] universe” and “we did find strong support for the idea that

exerting control over instinctual behavior is crucial to what people find incompatible with causal determinism.”

Bear and Knobe’s discussion of the results and implications is of course longer and more detailed than my brief summary captures, but I merely aim to highlight some of the language used in their conclusions - at least some of their concluding remarks are couched in terms about what “ordinary people think” or what “people find incompatible with causal determinism.” While Bear and Knobe certainly acknowledge the limits of their study (“more work is needed to definitively show that factors like dualistic cognition play no role in judgements about causal determinism”), the generalizations in their conclusions about this particular experiment make a leap from forced choice responses about an isolated set of 30 psychological behaviors to exceedingly general claims about how people (in general) think.

It is difficult to imagine any other situation, if I am at all interested in exercising the principle of charity, in which a single response to a forced choice question would allow me to make a general claim about how my interlocutor thinks. However, the dualistic model of intuitions facilitates just this kind of generalizing. I take something like the following line of reasoning to underlie this kind of thinking: (P1) FCIS studies accurately capture the intuitions of study participants, (P2) intuitions, once interpreted by the “black box” of fixed inferential processes, produce the same conclusions, regardless of who does the interpreting, and (C) experimenters, in interpreting the intuitions of study participants, can arrive at conclusions about what philosophical theories are endorsed by or consistent with the beliefs or commitments of study participants. The misstep here is in (P2) - I’ve argued throughout this chapter that this view of the relationship between intuitions and other inferential processes is mistaken, and so we have good reason to doubt the resulting generalized conclusions about what study participant’s think, or what worldview they’re committed to, or what pre-theoretic philosophical viewpoints they might hold.

In the previous discussion of Bear and Knobe’s study, I attempted to illustrate an epistemic worry about the dualistic model of intuitions. The related ethical problem is that, in relegating the intuitions of non-philosopher study participants to mere data points in theorizing, experimental philosophers are at risk of engaging in a kind of epistemic objectification that “undermines a speaker in her capacity as a giver of knowledge.” This term, coined by Miranda Fricker, echoes the work of post-colonial theorists Uma Narayan and Gayatri Chakravorty Spivak which criticizes the way in which anthropologists may engage with “native informants” as mere input, or data points, without attempting to engage them as co-theorists, capable of interpretation and theory-building.

Experimental philosophers should also consider the ethical concern of denying certain speakers full epistemic agency in the ways in which intuitions are solicited as mere data points. Of course, this relates also to the epistemic problem - if we are refusing to engage with certain individuals as knowledge-producers, there are likely gaps and inaccuracies in our theories. Chapter 4 of this dissertation addresses these interrelated ethical and epistemic concerns in more depth, arguing that trends toward scientism in experimental philosophy (discussed in Chapter 3) exacerbate the dualistic view of intuitions and corresponding epistemic objectification.

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47 Fricker (2007), 133.
48 For example, see Uma Narayan in Dislocating Cultures and Gayatri Chakravorty Spivak in A Critique of Postcolonial Reason.
Chapter 3: Experimental Philosophy and Scientism

The primary goal of this chapter, stated simply, is to level a charge of scientism against experimental philosophy. This accusation requires defending and building out a number of scaffolding assumptions. The first section of this chapter will provide a definition and elucidation of scientism. The definition I offer does not intend to encompass every use of the term “scientism,” but rather to propose one specific definition conducive to the aims of this chapter, in which scientism is defined by the misapplication of scientific methods and generalizations, combined with overreaching conclusions and a rhetorical veneration of science. The second section of this chapter offers a contemporary non-philosophical example of scientism, for illustrative purposes. The third section will set the parameters for the particular strain of experimental philosophy under discussion, and explore some contemporary examples that align with the definition of scientism previously established. Ultimately, this chapter aims to defend a charge of scientism against experimental philosophy, and to set the stage for Chapter 5 of this dissertation, in which I argue that the scientistic methodologies of certain kinds of experimental philosophy contribute to the epistemic objectification of study participants in a way that undermines some of the purported objectives of experimental philosophy.

1: A Proposed Definition of Scientism

The definition of scientism introduced in this chapter involves three necessary conditions: (1) the application of particular scientific methods to questions or problems that are unlikely to be uniquely illuminated by those methods (i.e., that we have good reason to believe may be better addressed by other scientific and/or “unscientific” epistemic methods), (2) the overreaching of claims and conclusions purportedly supported by the results of said methods, and (3) a veneration of science that draws on the lexicon of the physical sciences and/or a denigration of “unscientific” approaches to address the issue at hand. The first two features of the definition are important in distinguishing scientistic endeavors from something like charlatanism, whereas this third feature of the definition is important in distinguishing scientistic endeavors from projects that are merely “bad science,” i.e.,
endeavors that have inappropriately applied methods and unsubstantiated conclusions, either by accident or incompetence.\textsuperscript{49}

There is a normative component in condition (1) regarding the judgement of what methods are best (or better) suited to address or illuminate some particular question or problem. Assume a proposal to address some contemporary problem with a particular scientific methodology - given the progress to date on the problem at hand, the conventions of the relevant field or realm of inquiry, and the evidence currently available, does there appear to be an alternate mode of inquiry or approach that is likely to be more fruitful in contributing to progress on the question? If the answer is yes, the proposed approach meets condition (1). Note also that this applies whether the alternate approach is an “unscientific” approach, or a different scientific methodology. For example, one might think that the problem or task of how to write excellent poetry or compose excellent music might never be susceptible to scientific intervention, and any attempt to do so will fulfill condition (1).

However for the purposes of this chapter, I’m primarily concerned about situations in which one scientific methodology is chosen over another, better suited scientific methodology. Consider the problem of carbon emissions. Imagine a proposed approach that aims to develop carbon-digesting nanotechnology to filter CO2 that is already present in the atmosphere. Compare this to the work already invested and progress already made in developing cleaner energy sources. Assuming a finite amount of intellectual and financial resources, there is at least some work to be done in deciding whether an investment in this novel nanotechnology is likely to be more fruitful than the approach already substantiated by current evidence and established conventions. Of course, I do not intend to begrudge novel scientific approaches. Certainly many successful scientific programs arose in contexts in which they were perceived to be inferior to alternate contemporary approaches. For example, consider the physician Barry Marshall who bucked established medical wisdom and conventions to prove that ulcers were caused by the bacteria $\textit{Helicobacter pylori}$. Dr. Marshall’s hypothesis was met with a

\textsuperscript{49} There exists a broader debate among certain feminist epistemologists and philosophers of science about whether the standards of scientific enquiry themselves necessarily result in theories or conclusions that manifest harmful social biases, or, on the other hand, whether these kinds of manifest social biases only result from faulty applications of scientific methods, and were we to simply refine our methodologies, these kinds of theories and conclusions could be avoided. This debate hinges on questions about the nature of bias, objectivity, and scientific enquiry, and is beyond the scope of this project. For further reading on this topic, see Helen Longino (1987), “Can There Be A Feminist Science?”
deep skepticism from the medical community. He had no success in experiments performed on lab mice, so infected himself with the bacteria, developed gastritis, and cured himself with antibiotics. Suffice to say, meeting condition (1) alone is insufficient to constitute scientism.

My suspicion as to why some scientific approach is more attractive than alternate approaches has to do with the appeal of quantitative analysis. In a recently popular book concerning the implications of big data analytics, economist Cathy O’Neil examines how certain decision-making processes, including practices with the potential to materially affect the lives of millions of individuals (e.g. around employment, parole, mortgage lending, etc.), have been automated via the use of enormous data sets and decision-making algorithms. O’Neil is concerned with particular types of algorithms that she labels “weapons of math destruction,” defined by three features: (1) they are opaque to the people affected by them - either purposefully protected as proprietary intellectual property, or the mechanisms by which they sort data are too esoteric for either their operators or subjects to understand, (2) they are scalable, encompassing massive data sets, potentially across multiple industries, and (3) they produce tangible harms in the world, and the harms to individuals are not taken up in a feedback loop by which the algorithms are then adjusted.

The allure of these types of algorithms is manifold. Efficiency and expediency is primary, but O’Neil also discusses the sheen of objectivity and fairness that mathematical models lend. For example, consider the practice of criminal sentencing. Many states have turned to “recidivism models” partly in an effort to curtail human biases based on race, gender, class, etc. in criminal sentencing, under the assumption that computerized risk models must be more fair and objective than the judgements (or guesses) of individual judges or juries. One such recidivism model, the LSI-R questionnaire, probes perpetrators on topics such as prior involvement with police, social acquaintance with convicted criminals, and drug and alcohol use, in order to mathematically predict recidivism rates and mete out sentencing accordingly. O’Neil argues that, collectively, the kinds of questions these

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50 Weintraub (2010).
models ask tend to stand proxy for exactly the decision-making based on race and class that they are intended to avoid, while maintaining the façade of objective statistical results.

I certainly don’t intend to implicate all instances of scientism in the missteps of the US criminal justice system, but merely to illustrate how strong the allure of quantitative analyses can be, even in the face of outcomes that contradict the intentions or motivations of the individuals engaged in them. More generally, O’Neil seems to warn against total confidence in the objectivity and fairness of our quantitative analyses, and the corresponding reliance on this presumed objectivity and fairness to justify the wielding of “formulas to impress rather than clarify.” The relationship between quantitative analysis and the first condition of scientism is somewhat of a conjecture, but I believe it is made more plausible by the examples examined in the latter sections of this chapter.

The remaining two conditions of scientism, (2) and (3), are interrelated, in that they address the content and rhetoric of how the results of a particular project are communicated. First, one might argue that content and rhetoric are inseparable. Touting some development in clean energy as a “miracle of science,” for example, seems to meet condition (3)’s requirement for a veneration of scientific methods, while at the same time relaying at least some content about the significance or scope of the conclusions of the project. There is also a sense in which overreaching conclusions themselves imply a veneration of “science” in the abstract, as if the application of methods that appear appropriately scientific is itself justificatory, absent any independent argumentation as to how the results substantiate the conclusion. The point of keeping these conditions separate can be further illustrated by example - the three examples below can clarify the way that all three of these features are intended to work together.

First, imagine that an undergraduate in a biology class is working on a final project, in which he is conducting an experiment to evaluate the effects of various wavelengths of the visible light spectrum on sunflower seed germination. To do so, he sets up 6 germination plates each containing one sunflower seed, under 6 different colored lightbulbs in the biology lab, spaced approximately 6 inches apart. He comes back a week later, finds that all of the seeds have germinated, and concludes that the

52 O’Neil (2016), 44.
wavelength of light has no impact on germination. The lab assistant, upon reviewing a draft of his experiment summary, notes a number of problems with the experiment (the distance between lights, the sample size, the week-long experimentation period, etc.) and suggests that the student’s conclusion might be too strong. The student recognizes the mistakes, and scrambles to revise the experiment before the final project is due. This situation, based on the above definition, does not constitute scientism. It’s a poorly executed attempt at an undergraduate biology experiment, but it is not accompanied by rhetoric to justify the experimental methods or conclusions, i.e., it meets criteria (1) and (2), but not (3). The student practitioner recognizes his mistakes, and does not attempt to defend them as appropriately scientific.

Second, consider a late night infomercial for diet pills, in which the announcer claims that the supplement was “developed with cutting edge science to boost your body’s metabolic, thermogenic, and biogenic processes to induce ketogenesis and shed fat fast, without diet or exercise.” The claims are accompanied by animations of neon-colored molecules attacking fat cells. A quick Google search would likely reveal no evidential support for the product itself, and suggest that the processes and results described are internally incoherent and impossible to support scientifically. This example also fails to meet the above definition of scientism. While the infomercial relies on a (purely) rhetorical appeal to scientific jargon, there’s actually no application of scientific methods to support the overblown claims, as there don’t appear to be any scientific methods applied or any claims coherent enough to attempt to support. This example meets criteria (3), but not (1) or (2).

Finally, consider a brilliant team of research oncologists who, using the best methods and data available, develops a massively effective new treatment for Leukemia that works quickly with minimal side effects. The statements from the research team, and discussions in the media, all boast that “modern medicine has cured Leukemia” and “science has declared victory over cancer.” Depending on the context, these statements might seem brash, but because they aren’t used to defend uncertain methods and dubious claims, this hypothetical situation also fails to meet the above criteria for scientism. This example also meets criteria (3), but not (1) or (2), though for different reasons than the previous example.
2: Historical Context

This section provides a historical and pragmatic defense of this definition of scientism, in the context of historical uses of the term. As a starting point, we can borrow Tom Sorell’s description, which broadly states that “scientism is a matter of putting too high a value on science in comparison with other branches of learning or culture.” Note that this description is not a definition of the term, and it does not yield precise necessary and sufficient conditions under which we can call a particular theory or methodology “scientistic.” Furthermore, it’s a claim about the valuation of science, not about the value of science - that is, how some theory, methodology, or individual prioritizes science as compared to some actual value of science, whatever it may be. This raises immediate questions about (1) the boundaries of science, (2) the kind of value under consideration - presumably epistemic, but potentially moral, pragmatic, etc., (3) the value of whatever it is we decide sits within those boundaries, and (4) the relative value of the “branches of learning or culture” that sit outside those boundaries. Scientism, then, is overstating the relative value of science (however “value” and “science” are delineated). The harm of which is that the results of our theories or methodologies are skewed, as the relative merit of other branches of learning are undervalued. This chapter does not aim to definitively answer questions about what constitutes the boundaries of science, or propose some relative value of science as compared to other modes of knowledge production, though reflections on those questions do appear.

C. P. Snow’s influential 1959 Rede Lecture, “The Two Cultures,” set the stage for an ongoing discussion about scientism. In Snow’s case, accusations of scientism arise as a part of a larger cultural conflict and lack of understanding between scientists and “literary intellectuals.” Literary types, Snow claims, view scientists as “brash and boastful” and “shallowly optimistic, unaware of man’s condition.” Whereas scientists view literary types as, “lacking in foresight, peculiarly unconcerned with their brother men, in a deep sense anti-intellectual, anxious to restrict both art and thought to the existential moment.” Though Snow is often cited as offering an early articulation of this cultural

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54 Snow (1961), 5.
conflict, the term “scientism” has since been defined and redefined, appropriated and reappropriated, in a multitude of ways.

Following Snow, however, in this chapter I assume a colloquial definition of “science” that holds the approach and methodologies of the physical sciences as its paradigm, often including hypothesis formation, data gathering, and predictive power, though the borders may be porous and contestable. There is a more radical view that science consists of any and all methods of gaining knowledge about the external world, including practices such as perception, introspection, recollection, and various practices of non-human animals. In forthcoming work that reclaims the label of “scientism” for experimental philosophy, Wesley Buckwalter and John Turri point out that this radical conception of science makes scientism “trivial and uninteresting.” I ultimately contest certain other claims made by Buckwalter and Turri, but their dismissal of this “trivial and uninteresting” scientism aligns with the minimal definition of science that I’d like to adopt. If science were merely any practice of gaining knowledge about the external world, most epistemic endeavors would value science above other types of knowledge production (more to the point, what “other types of knowledge production” would be leftover at all?) and the term would cease to be useful, either as an accusation of dubious epistemic practice or as a reclaimed label for the practices of experimental philosophy.

There is an accompanying methodological concern internal to this paper that I’d like to briefly address. I do not attempt to provide objective definitions of science or scientism that (1) align all other definitions or (2) attempt to provide demonstrably correct definitions. Rather, the point of this section is to provide a workable definition of scientism that highlights a particularly questionable phenomenon and can facilitate further discussion. One might argue that I am begging the question, or at the very least equivocating, by constructing a definition of scientism that then, by design, neatly captures the practices of some kinds of experimental philosophy. However, the definition of scientism previously offered, and its implications, are independently incriminatory of the practices I describe, whether or not we apply the label of “scientism.” Whether it’s the same “scientism” as the “scientism” under discussion by Buckwalter and Turri is of little interest.

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56 Buckwalter and Turri (forthcoming), 2.
Regardless, Buckwalter and Turri’s attempts at a reclamation of the term appear to run counter to most definitions of scientism. Sorrell, in an expansive intellectual history of the discipline of philosophy, explores the roots of scientism and its manifestation in the contemporary profession. Sorrell discusses scientism broadly, from an epistemic perspective, as any approach to knowledge which falls prey to the vice outlined above – the overvaluation of science as relative to other ways of seeking knowledge in the world. While he claims that scientism is “traceable to a number of related philosophical mistakes that were made by the early modern philosophers of science, figures such as Bacon, Descartes, and Locke,” the focal point of Sorrell’s discussion is on the implications of early 20th century scientific empiricism, particularly as it was advanced by the Vienna Circle.57

Sorrell, among others, notes the social conditions under which scientific empiricism and verificationism gained traction in philosophical circles – as a response to the ideology of dogmatic, fascist regimes sweeping continental Europe. The impetus was not only epistemic, in the commitment to a belief that scientific approaches are the utmost truth-conducive, but ostensibly moral as well. The moral aspect was twofold: (1) only empirical truth could combat the threat of dogmatism, and its political implications, and (2) science is humanity’s best hope for material improvements in quality of life, for example, as a defense against “the threat of man’s oldest and most formidable scourges, among them famine and pestilence.”58 These motivations of scientific empiricism resonate with Snow’s articulation of the indictment against literary intellectuals as “peculiarly unconcerned with their brother men.”

One of the worrisome implications of the approach of scientific empiricism, according to Sorrell, stems from attempts to pursue a “unified science” that makes these epistemic and moral assumptions about the physical sciences, as well as the social sciences, and in certain cases the arts and humanities. Ludwig von Mises, for example, says of poetry: “every poem, except in rare extreme cases, contains judgements and implicit propositions and thus becomes subject to logical analysis.”59 The misstep here, according to Sorrell, is not that von Mises is incorrect, but that the judgements and

propositions implicit and poetry are “incidental to the status of something as a poem.” Without indulging in the question about what things are not incidental to the status of something as a poem, I take the primary point here to be a general cautioning against the overvaluation of science, and the nature of the value in question.

It is not difficult to see why a unified science that attempts to encompass all human knowledge, and potentially all human activity, under the umbrella of scientific inquiry might rattle the sensibilities of scientists and non-scientists alike. And despite a contemporary disavowal of the Vienna circle, verificationism, and unified science, the lingering concern is that the persistence of this type of epistemic and moral rhetoric continues to be used to venerate science above all other modes of inquiry. And so, without attempting a detailed etymology, contemporary writing on “scientism” suggests a moment in which the term became an invective, of sorts. How the term has been brandished varies widely. A “scientistic” method or project might suggest that confirmation by the physical sciences is the only way to confirm the legitimacy, reality, or value of some phenomenon, or it might reject (or fail to consider) non-scientific approaches to understanding some phenomenon.

The worry then becomes that any project, theory, or approach that appeals to scientific methods might be labeled scientism if the results are not to some critic’s liking. On the other hand, legitimate concerns about scientism may be dismissed by labeling them “anti-science.” A precise delineation of these terms would require defending a definitive border around what constitutes “science,” and what kind of inquiries rightly fall under its purview. Still, the discussion thus far has revolved around what meets the criteria for the label of “scientism,” without addressing what might independently be wrong with the approaches so labeled. As discussed in the beginning of this chapter, this kind of border policing is outside the bounds of this project, and the point of articulating the uses and misuses, to date, of 1) scientific methods, and 2) the term “scientism,” is merely to illustrate the complex history of the debate.

More recently, Sorrell has taken aim specifically at experimental philosophy. In forthcoming work, he addresses “whether such findings [of experimental philosophy] are a valuable corrective to

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60 Sorell (1991), 18.
traditional philosophical appeals to intuition, or whether they are a distraction motivated in part by scientism.”61 The focus of Sorrell’s inquiry is a particular argument of Josh Knobe’s, in which Knobe deflects critics of experimental philosophy who would argue that, for myriad reasons, experimental philosophy shouldn’t rightly be called “philosophy.” Knobe responds by arguing that experimental philosophy, in focusing on questions about the internal processes that produce intuitions, in fact “seeks a return to the traditional problems of philosophy, the problems that played such a prominent role in the work of Plato, Aristotle and so many of their successors.”62

Sorrell takes issue with Knobe on three counts. First, as a historian of philosophy, he takes issue with Knobe’s homogenization of the evolution of philosophy. If Knobe’s understanding of the “traditional problems of philosophy” is inaccurate, positioning experimental philosophy as a return to those problems is questionable. Second, Sorrell takes Knobe to be equivocating on the definition of philosophy, and as such, begging the question with regard to the legitimacy of experimental philosophy as philosophy. By beginning with a historic use of the term philosophy, in which philosophy encompasses empirical methodologies or even means science, then all of science would count as particularly legitimate philosophy, which certainly doesn’t reflect how the meaning of the term has changed since Plato, Aristotle, and their successors. One needn’t propose necessary and sufficient conditions for a current use of the term philosophy to find this argument plausible, but instead recognize the error and impracticality in labeling all of physics, biology, chemistry, etc., particularly legitimate philosophy. Third, Sorrell takes issue with Knobe’s characterization of experimental philosophy as particularly interested in the internal psychological processes underlying intuitions. It’s not clear that this is, in fact, what many experimental philosophers are aiming to uncovering or actually achieving. Sorrell allows that certain experimental philosophers might be succeeding in something like uncovering psychological processes underlying intuitions, but in that case, he again questions why experimental philosophy continues to “insist on classifying itself as philosophy, indeed as particularly authentic philosophy?”63 Instead, Sorrell suggests that “the claim of experimental

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61 Sorrell (forthcoming), 264.
63 Sorrell (forthcoming), 271.
philosophy to belong to the future history of brain science might be weaker than its claim to fit into analytic philosophy today.”

Sorrell’s approach to highlighting the scientism of experimental philosophy is historical in nature, in that he appeals to the historical trajectory of philosophy as a profession or distinct field of study to argue that experimental philosophy is guilty of gerrymandering those boundaries in such a way that skews what philosophical issues should (or could) be of central concern, and perhaps distracts from other methods of addressing those issues. This coincides with Sorrell’s conception of scientism as the overvaluing of science as compared to other methods or branches of understanding. However, for the remainder of this chapter, I am mostly unconcerned with a historical analysis of the borders between science and philosophy, or whether experimental philosophy might be manipulating (or barreling through) those borders. The remainder of the chapter attempts to independently establish that experimental philosophy meets the definition of scientism offered in section one.

A useful foil to Sorrell is Massimo Pigliucci, whose recent work in medical ethics has offered an examination of scientism that corroborates the definition I introduced above. Pigliucci is sympathetic to the concern that some accusations of scientism merely function to dismiss, without critical engagement, some particular claim or project that an author does not agree with. As am I. Pigliucci, however, allows that there may also be appropriate instances of the accusation, and defends this view by drawing a comparison between “scientism” and “pseudoscience.” Drawing on case studies from bioethics, Pigliucci defends a claim that scientism is defined “not simply as any injection of the natural (or social) sciences into the humanities but as the unwarranted (or as yet unwarranted) subset of such injections.” Compare this to Pigliucci’s treatment of pseudoscience, such as parapsychology: “it is not that parapsychology is wrong a priori, it is just that parapsychologists insist on making extraordinary claims backed up by proportionally little or no evidence.” On this view, scientism, like pseudoscience, is defined by a flawed application of scientific methods, or, in Pigliucci’s terms - “unwarranted.”

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64 Sorrell (forthcoming), 271.
65 Pigliucci (2015), 571.
66 Pigliucci (2015), 571.
Recall the three-part definition of scientism I offered in the previous section:

(1) the application of particular scientific methods to questions or problems that are unlikely to be uniquely illuminated by those methods (i.e., that we have good reason to believe may be better addressed by other scientific and/or “unscientific” epistemic methods),

(2) the overreaching of claims and conclusions purportedly supported by the results of said methods, and

(3) a rhetorical veneration of science that draws on the lexicon of the physical sciences and/or a denigration of “unscientific” approaches to address the issue at hand.

Features (1) and (2) of this definition support and align with Pigliucci’s comparison between scientism and pseudoscience. However, Pigliucci is open to a critique about normativity regarding what counts as a “warranted” injection of science - a critique that mirrors concerns about the appeal of my condition (1) to scientific methods that “better address” some specific problem. To this, I would reiterate my call to examine the progress to date on the problem at hand, the conventions of the relevant field or realm of inquiry, and the evidence currently available. It’s unnecessary to define the precise boundaries of “warranted,” “unique illumination,” or “better addressed” for the purposes of this chapter, but merely to recognize that such spectrums exist, and in particular cases, recognize that two competing epistemic methods may fall at different ends of such a spectrum.

3: An Example of Scientism

My worries about scientism and experimental philosophy didn’t begin with philosophy at all. They began with Soylent. In 2014 Soylent was introduced as a total meal replacement beverage by former electrical engineer turned food entrepreneur, Rob Rhinehart. The rhetoric surrounding the launch sounds downright revolutionary, including an Atlantic article titled “The Man Who Would Make Food Obsolete,” and a similar New Yorker article titled “The End of Food.” With no training in nutrition, medicine, or food science, Rhinehart’s proprietary formula hit the market and notwithstanding mixed reviews about the taste, developed a cult following, waiting lists, and raised millions in venture capital. Despite subsequent scandals and recalls, including cautionary statements from doctors and
nutritionists, Soylent continues to raise money and develop its product line, currently claiming (according to their website at the time of this writing) that “we solved nutrition.” I contend that Soylent, including its accompanying rhetoric, falls prey to the same variety of scientism as experimental philosophy.

The point of analogy here is to drive home, with a non-philosophical example, the conditions of the definition of scientism offered in this chapter. The Soylent example appears to meet all three of the conditions outlined above. Regarding (1), Soylent began as an experiment in Rhinehart’s kitchen, in which he applied his training in electrical engineering, conducted copious internet research, and “compiled a list of thirty-five nutrients required for survival.” It’s not obvious that Rhinehart’s background in electrical engineering, or his internet-research-driven approach to compiling “nutrients required for survival” is likely to better address the problem of efficient nutrition delivery than, say, the approaches employed by expert nutritionists. Of course, this is not to denigrate innovation in scientific approaches. The Soylent example fits the bill of “scientism” because it also meets features (2) and (3) from above.

Regarding (2), in articles circulating in the early days of Soylent, the product was variously touted as a “famine cure,” “the end of food,” and, alternatively, “the future of food.” Rhinehart himself has been quoted as saying that Soylent is “everything your body needs,” and “an over-all food substitute.” These claims, according to many doctors and nutritionists, are dubious. And at the very least, hyperbolic, and certainly overreaching the support provided by Rhinehart’s methods and minimal scope of product development.

Finally regarding (3), Rhinehart is particularly hostile towards those that would question his hyperbolic claims. In the 2014 Atlantic interview, Rhinehart lauds the improvements that technology has made on modern lives, and bemoans Soylent skeptics: “there’s just an emotional attachment to culture and tradition. People have this belief that just because something is natural it’s good. The natural state of man is ignorant, and starving, and cold. We have technology that makes our lives

68 Widdecombe (2014).
69 Widdecombe (2014).
better.” In the 2014 New Yorker article, the author allows that Rhinehart is open to criticism, with a caveat: “he told me that he relishes criticism, as long as it’s evidence-based, rather than ‘emotional.’” And a quote from Rhinehart in a 2013 Vice article reads: “The main criticism has been the appearance. People are pretty shallow when it comes to food.” A quick skim of any recent interview with Rhinehart reveals many more quotes of this ilk. All of which seem to position his skeptics as nostalgic, emotional technophobes.

Furthermore, when pressed about how to overcome this bias towards natural foods, Rhinehart responds, “with data - lots of data.” This reliance on a purely quantitative analysis, evidenced by Rhinehart’s own comments and discussions about Soylent’s product development, I believe substantiates my hypothesis that the presumed objectivity of quantitative analysis can engender scientism. It’s certainly not as if nutritionists and doctors don’t rely on data, but the added complexity of longitudinal studies, patient-facing praxis, and qualitative feedback, appears, for the advocates of Soylent, to undermine what should be a straightforward, quantitative analysis - simply find the right number of nutrients required for survival, combine in the right proportions, and viola, the end of food.

One might also be struck by the gendered tone of these comments, e.g., the Soylent critic as “emotional” and “shallow.” The revolutionary rhetoric surrounding Soylent, aside from being hyperbolic, may also give us pause when considering the history of human nutrition. If the problem that Soylent is trying to solve is how to efficiently provide nutritious sustenance for human bodies, it seems important to note that this problem is one that homemakers and caregivers, predominantly women, have been solving for centuries. Marxist feminists have labeled this kind of work “reproductive labor,” in that the labor involved with things such as cooking, caretaking, cleaning, etc., has to be reproduced often, with no persisting product. A meal is cooked, eaten, cleaned up after, and the same process must be repeated three times daily. As opposed to productive labor, such as carpentry, in which the end product of a cabinet or chair might last for centuries. Rhinehart himself alludes to this notion in discussing his own switch to Soylent: “I feel liberated from a crushing amount of repetitive drudgery.”

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70 Widdecombe (2014).
71 Merchant (2013).
72 Morin (2014).
73 Merchant (2013).
Tech journalist Nellie Bowles also has an interesting take on the gendering of Soylent, arguing that strikingly similar high-protein meal replacement beverages, such as SlimFast, have been marketed to women as “diet aids” for decades. She notes the juxtaposition of the relatively “low-brow” public image of SlimFast against the disruptive, minimalist, maximally-efficient image of Soylent, marketed primarily to young, white, men in the tech industry.  

When home cooks or dieters around the globe attempt to solve the problem of providing nutritious meals, it’s “repetitive drudgery,” but when a techno-utopian mechanical engineer turns to solving the same problem “with data - lots of data,” it’s “the end of food” as we know it.

4: Scientism and Experimental Philosophy

As discussed in section 1, Buckwalter and Turri propose a reclamation of the term scientism. More specifically, moderate scientism, defined as “the view that science can help answer questions in disciplines typically thought to fall outside of science.” Through a series of case studies, Buckwalter and Turri argue that scientific methods have been particularly useful in responding to philosophical questions by illuminating features of ordinary thought and talk through empirical methods. They first lay out an assumption that much of the work done throughout the history of philosophy relies on explorations of the ordinary usage of central philosophical concepts, and that “patterns in ordinary thought and talk... can be used as evidence for philosophical theories of important categories.”

According to them, experimental philosophy has contributed to this tradition by helping “philosophers accurately represent ordinary thought and talk” through “experimental, observational, and statistical techniques.” As such, based on an exploration of case studies, they conclude that “the case for moderate philosophical scientism is very strong: science has promoted significant progress in philosophy and its further development should be welcomed and encouraged.”

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74 Bowles (2016).
75 Buckwalter and Turri (forthcoming), 2.
76 Buckwalter and Turri (forthcoming), 3.
77 Buckwalter and Turri (forthcoming), 4.
78 Buckwalter and Turri (forthcoming), 4.
There are three primary points I would like to make at the outset: 1) My critique of their work, and of experimental philosophy more generally, does not take issue with the claim that “science has promoted significant progress in philosophy,” nor do I argue that science in philosophy should not “be welcomed and encouraged;” 2) Though I harbor worries that their implicit definition of scientism does not comport with either my own definition, or the recent historical uses of the term, their reclamation of the word “scientism” is not the central issue here; and 3) Rather than their use of the word “scientism,” the primary focus of this section is the case studies they appeal to in order to illustrate the impact of scientific methodologies on philosophical progress. Certainly, my analysis of Buckwalter and Turri’s case studies is not a comprehensive overview of the entire landscape of experimental philosophy. However, precisely because their examples are purportedly exemplars of scientific methodology as applied to philosophy, addressing their case studies directly provides insights into how scientific methodologies are utilized and discussed in experimental philosophy more generally.

Buckwalter and Turri offer six case studies, in a variety of philosophical subfields, in an attempt to illustrate the impact that scientific methodologies have recently had on philosophical progress - all of these case studies are what I have previously described as FCIS (forced choice intuition solicitation) studies. In this section, I briefly summarize each case study and its purported impact, then offer an analysis of the collection of case studies based on the definition of scientism offered in section 1. The case studies are as follows:

4.1: Epistemology: Direct & Indirect Effects

Buckwalter and Turri highlight work in epistemology on the relationship between stakes and knowledge attribution, and describe experimental work that uses a causal path analysis to “ascertain how stakes affected knowledge attribution” by evaluating additional mediating variables (mental state attribution, action judgements, etc.). Concerning two minimally matched scenarios about a fictitious woman named “Jennifer:”

On the best fitting causal model, stakes directly affected judgements about how Jennifer should act, and these judgements in turn directly caused judgements of what she knew.
These results provide evidence that powerfully vindicates certain theoretical hypotheses about the connection between knowledge and action ... with a level of detail and precision unattainable without the tools of empirical science.  

4.2: Ethics: Ought Implies Can

Buckwalter and Turri cite recent experimental work that attempts to evaluate the notion that moral obligations require, or entail, the physical or practical ability to fulfill those obligations, i.e., that the ability to perform the action is a necessary condition for calling it obligatory. In one such FCIS study, “Michael” sees a girl drowning in a pond and suffers from a sudden paralysis which prevents him from saving her. It appears that “Michael’s inability made no difference at all to people’s judgements about moral obligation.” From this, and other similar studies, Buckwalter and Turri conclude “that commonsense moral cognition utterly rejects ought-implies-can.”

4.3: Philosophy of Mind: Mechanisms and Concepts of Belief

Regarding debates around the possibility of whether beliefs are susceptible to voluntarism, or willful control, Buckwalter and Turri cite two possible scientific interventions. First, they suggest that cognitive science may be able to adjudicate this debate, but allow that no applicable studies yet exist. Second, they cite experimental work that suggests belief attributions are susceptible to an agent’s purported volition to believe. That is, study participants are more likely to attribute belief to an agent if that agent purports a choice to believe a proposition. And conversely, study participants are less likely to attribute belief to an agent if that agent purports a choice to disbelieve a proposition. According to Buckwalter and Turri, the results of these MCIS studies “suggest that the ordinary concept of belief fully countenances the possibility of voluntary belief.”

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79 Buckwalter and Turri (forthcoming), 8.  
80 Buckwalter and Turri (forthcoming), 11.  
81 Buckwalter and Turri (forthcoming), 10.  
82 Buckwalter and Turri (forthcoming), 13.
4.4: Action Theory: Representation of Thought Experiments

A number of experimenters have attempted to tackle the question of whether free will and determinism are intuitively compatible. The problem, according to Buckwalter and Turri, is that most of the thought experiments used to test this compatibility are overly complex, leading to the potential worry that “people’s judgements might be due to misunderstood, ignored, or unspecified details that they systematically ‘fill in’ by relying on background assumptions.” One solution proposed by Buckwalter and Turri is to perform additional FCIS studies to determine ancillary commitments of study participants, and “can help estimate whether the key variable of interest is accompanied and informed by other philosophically relevant variables.”

4.5: Philosophy of Language: Assertion

In debates surrounding assertion, some argue for factive accounts, in which one should only make true assertions. This is opposed to non-factive accounts, in which belief is sufficient for assertion. In a recent FCIS study, participants are asked to make normative judgements about whether an agent should or should not assert a proposition, given scenarios with identical evidence available to the agent. In cases where the proposition is in fact true, the majority of participants respond that the agent should make the assertion, and conversely, that the agent should not assert the proposition when it is in fact false - regardless of the evidence available to the agent at the time. Buckwalter and Turri conclude that “science revealed that non-factive accounts do not cohere well with our ordinary social practices.”

4.6: Methodology: Philosophical Judgements, Decision Making, and Behavior

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83 Buckwalter and Turri (forthcoming), 15. Also note, Chapter 5 of this dissertation addresses in further detail the tendency of experimenters to discount unexpected results as misunderstandings on the part of study participants.
84 Buckwalter and Turri (forthcoming), 16.
85 Buckwalter and Turri (forthcoming), 18
Buckwalter and Turri point to a number of FCIS projects evaluating variation in intuition among philosophers across different subfields, between philosophers and non-philosophers, in cross-cultural experiments, and fluctuations of intuitions based on order effects and framing effects. Their discussion of this line of experimentation is intended to be illustrative of work being done to refine our understanding of the factors affecting intuitions, e.g., philosophical training, culture, etc., and the implications this may have for understanding the relationship between intuitions and evidence.

Recall the first feature of scientism as it was previously laid out in this chapter: (1) the application of particular scientific methods to questions or problems that are unlikely to be uniquely illuminated by those methods (i.e., that we have good reason to believe may be better addressed by other scientific and/or “unscientific” epistemic methods). Whether experimental philosophy is uniquely suited to responding to the questions it purports to address is a familiar debate in the experimental philosophy literature. These kinds of debates can arise in multiple ways. Take, for example, Buckwalter and Turri’s initial claims about the way in which science contributes to philosophical progress: (1) philosophers use ordinary usage as evidence for philosophical theories, and (2) experimental philosophy can accurately represent ordinary usage. If both of these claims are true, it does appear that experimental philosophy is in a unique position to shed light on entrenched philosophical debates. For example, following Buckwalter and Turri’s discussion of the experimental work on compatibilism, if (1) debates about compatibilism are based on evidence from the ordinary usage of terms like “free will” and “determinism,” and (2) experimenters have accurately illuminated the ordinary usage of these terms, then experimental philosophy appears to be in a good position to resolve (or contribute to) these debates. However, neither of these claims are uncontroversial.

Debates about what counts as evidence in philosophical theorizing abound in the literature, as demonstrated by the taxonomy of views on intuitions and evidence explored in chapter 2 of this dissertation. While Buckwalter and Turri couch their claims in terms of “ordinary thought and usage,” the examples they highlight throughout their case studies are all FCIS studies - set up to solicit

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86 Order effects refers to variation in judgements based on the order in which the questions or vignettes are presented; framing effects refers to a variation based on the personal perspective from which a vignette is presented (e.g., actor vs. observer).
participant’s judgements about hypothetical vignettes. This is the same manner of intuition solicitation that permeates the literature on intuitions and evidence, so let as allow for purposes of this argument that debates surrounding the nature and usefulness of intuition solicitation equally apply to Buckwalter and Turri’s discussion of ordinary usage. That said, three questions arise regarding the claim that philosophers use intuitions as evidence for philosophical theories - (1) Do philosophers actually appeal to intuitions in their theorizing?; (2) Are these intuitions used as evidence?; (3) Is this a valuable way to go about addressing questions of concern to philosophers? Regarding (1), Herman Capellan, among others, claims that philosophers do not, in fact, appeal to intuitions in philosophical argumentation; regarding (2), my argument in chapter 2 contends that intuitions aren’t rightly categorized as “evidence;” and regarding (3), Timothy Williamson, among others, claims that the psychological facts presented by intuitions couldn’t possibly reveal non-psychological conclusions of use to philosophers. These questions are addressed in detail in chapter 2 of this dissertation, but suffice to say, none of them have undisputed answers.

Should we allow, however, that philosophers are engaged in the activity of building arguments based on evidence from ordinary usage, there remains the question of whether the methods of experimental philosophy uniquely contribute to this endeavor. Whether a particular project or experiment accurately represents the ordinary usage of some term or concept requires a case-by-case evaluation, and that is precisely the kind of critical work that is occurring among experimental philosophers. Two types of concerns arise: first, those that are concerned with experimental methods in a general sense, i.e., regarding sample size, selection bias, etc., and second, critiques concerned with variable isolation, i.e., in even the best experimental scenario, does the experiment adequately isolate and represent ordinary usage (or whatever the experimenters are aiming to isolate) in particular.

There is also a broader question about whether experimental projects exploring issues that are more affectively charged (e.g., most projects in moral theory, perhaps projects examining stakes and knowledge attribution) could ever approximate the “ordinary” conditions under which these kinds of
judgements are made in everyday life. In regards to the attempt to use experimental methods to isolate the most accurate judgements in these cases, Buckwalter and Turri’s entire project appears to be highlighting instances in which the methods for collecting this kind of evidence are purportedly refined, in response to previous flawed attempts at such collection. Take their discussion of experimental methodology in their final case study, in which they highlight examples of cases meant to explore a variety of factors contributing to variations in intuitions—philosophical training, culture, various cognitive biases. The very point of these kinds of studies is to provide a corrective for ways in which previous experimental methods are thought to have failed at accurately representing ordinary usage.

One might argue that these types of refinements are merely a part of the natural progression of a burgeoning scientific field, and I certainly don’t intend to begrudge novel experimental approaches to solving entrenched problems. That said, there also appears to be little consensus in the literature about whether an evaluation of ordinary usage or intuitions is useful to philosophical theorizing, or whether experimental methodologies contribute to this evaluation. I merely aim to highlight a collection of doubts about whether experimental philosophy is uniquely positioned to address the problems it purports to address. Returning to the first feature of scientism, as it is defined in this chapter, I contend that this collection of doubts does, in fact, give us good reason to suspect that there are other methods (both other scientific methods and “unscientific” methods) better suited to making progress on many of the issues that experimental philosophy tackles.

The novelty of experimental philosophy alone is not a definitive indictment—consider the example of Dr. Marshall’s unconventional approach for proving the bacterial origin of ulcers. We may have good reason to be skeptical of novel medical approaches or discoveries, but when reliable results emerge, the skepticism subsides. The reliability of results produced by experimental philosophy has reached no comparable consensus. However, the ultimate goal of this chapter is not to repudiate,

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87 For example, see Rennix and Robinson (2017). This recent article in Current Affairs magazine calls into doubt the usefulness of something like the Trolley Problem more generally, arguing that in a real life Trolley Problem: “We would panic, do something rashly, and then watch in horror as one or more persons died a gruesome death before our eyes. We would probably end up with PTSD. Whatever we had ended up doing in the moment, we would probably feel guilty about for the rest of our lives: even if we had somehow miraculously managed to comply with a consistent set of consequentialist ethics, this would bring us little comfort.”
wholesale the methods and conclusions of experimental philosophy. While the previous paragraphs highlight many such doubts, I do not argue that any of them are indefeasible. For example, it could easily be the case that with further refinement, the best practices for soliciting ordinary usage become more sophisticated, more accurate, and more widely accepted among experimental philosophers and their critics. The goal of this chapter, instead, is to argue that in its current practices and accompanying rhetoric, experimental philosophy meets the criteria for scientism established at the outset. These doubts about current methodologies demonstrate that experimental philosophy meets condition (1), and in the following paragraphs I will further argue that it meets conditions (2) and (3).

Many projects in experimental philosophy also appear to meet condition (2): the overreaching of claims and conclusions purportedly supported by the results of said methods. That is, the methods previously called into doubt. There is a sense in which, of course, suspect methods lead to suspect conclusions. However, it also seems to be the case that one could use novel or as-yet-unverifiable methods to make attenuated conclusions that reflect a proportional amount of reservation. In some of the cases presented by Buckwalter and Turri, and in one additional case I will introduce, I argue that the strength of the conclusions are incommensurate with the scope of the methods. It is important to note that this concern about the cases presented by Buckwalter and Turri addresses both the content and the rhetoric of the conclusions. I do not aim to evaluate the accuracy and reliability of each case under discussion, but rather, to look at the language employed in the discussion of the case studies’ conclusions, as compared to the general methodological doubts under discussion in the field. Consider the following:

a. Concerning experimental work in epistemology on direct and indirect effects of varying stakes on knowledge judgement: “These results provide evidence that powerfully vindicates certain theoretical hypotheses about the connection between knowledge and action.” Do the results provide a powerful vindication, or would it suffice to say that they “suggest” or “corroborate” certain theoretical hypotheses?

b. Concerning experimental work on the “ought-implies-can” assumption in ethics, Buckwalter and Turri conclude “that commonsense moral cognition utterly rejects ought-implies-can.” There remain the first order questions about whether or not
commonsense moral cognition is what should or could provide evidence for ethical theories, and whether the studies in question accurately reflect the whole of commonsense moral cognition, but allowing these, it may be hyperbolic to state that a handful of studies should lead to the utter rejection of some ethical assumption.  

Concerning the possibility of non-factive accounts of assertion (in which belief is sufficient for assertion), Buckwalter and Turri conclude that “science revealed that non-factive accounts do not cohere well with our ordinary social practices.” Again, it may be hyperbolic to discuss the absolute revelation of ordinary social practices based on a handful of experiments likely conducted under conditions that look nothing like an ordinary social milieu, i.e., in a lab, or in a multiple-choice response to a structured online survey.

d. Finally, consider an earlier meta-analysis of experimental work on gender differences in philosophical intuitions, conducted by Buckwalter and Stephen Stitch. While at times Buckwalter and Stich are careful to note the limits of their sample size and population (primarily undergraduates in intro-level philosophy courses), their conclusions are often framed more generally as representations of “gender differences in philosophical intuition.”

One might worry that the language examined in the examples above merely represents a handful of cherry-picked quotes from a very small sample of projects in experimental philosophy. I would contend, however, that if these are cherry-picked, they are cherry-picked on the terms of two prominent experimental philosophers who chose them as exemplars in the discipline and evidence of scientific progress. As such, it’s a fair leap to say that the highlighted language may be more broadly representative of rhetorical mores in the field. And so these examples of overreaching conclusions and

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88 My work in Chapter 3 addresses in more detail the question of whether experimental methods that rely on intuition solicitation can accurately reflect the rational processes (or cognition) of study participants.

89 Buckwalter and Stich (2013), 27. See Chapter 1 of this dissertation for a brief discussion about more general worries regarding experimental philosophy and essentialism.
hyperbolic language, in conjunction with the methodological doubts raised above, suffice to meet criteria (2) of the definition of scientism discussed previously.

Finally, I argue that these examples also meet criteria (3): a rhetorical veneration of science that draws on the lexicon of the physical sciences and/or a denigration of “unscientific” approaches to address the issue at hand. There is a broad sense in which this is obviously true about these cases in particular, given that Buckwalter and Turri’s overarching project aims to demonstrate the ways in which science has contributed to philosophical progress. This also seems evident from the language that appears throughout: “a level of detail and precision unattainable without the tools of empirical science;” “science revealed;” etc..

There is also a more specific way that these case studies position this particular type of experimental philosophy, based entirely on FCIS studies, as paradigmatic of science in a very narrow sense. Why are these types of case studies, and the resulting quantitative analyses, more “scientific” than other ways in which developments in science and technology have promoted progress in philosophy? I imagine that Buckwalter and Turri would allow that many branches of philosophy have benefited greatly from work being done in a variety of other fields: cognitive science, psychology, primatology, behavioral economics, medicine, etc.. They allude to this in their discussion of experiments around voluntary belief formation - they suggest that cognitive science may be able to adjudicate debates about voluntarism, but go on to tout the import of FCIS studies which suggest that our ordinary concept of belief allows for voluntarism regarding belief formation. I find it difficult to reconcile their appeal to cognitive science with their suggestion that uncovering ordinary concepts of belief (if we allow that these studies in fact do so) engenders scientific progress in philosophy. Arguably, there are also functional ways in which science has improved progress in philosophy - if we believe that critical engagement with other philosophers is important to philosophical progress, then advances in communications technologies have certainly expanded the speed and scope of this kind of engagement.

I’d also like to suggest that there is a worrisome way in which the quantitative analyzability of results from FCIS studies, in particular, appears to stand proxy for “science”. The majority of the cases under discussion in Buckwalter and Turri’s examples rely on simple scalar quantifications of FCIS survey
results, in which participants are often choosing between binary options, for example, whether or not to attribute belief to a fictional character in a vignette. Following a simple scientific procedure, experimenters produce a simple, quantifiable result, the questioning of which must imply a rejection of science, a rejection of math, or some ulterior motive. The data is often expected to speak for itself and stand above reproach, unless the criticism is couched in the very same language — that is, a meta-analysis of the statistical methods employed or another experiment with conflicting quantitative results. The appeal of these results are their simplicity, and this apparent simplicity can excuse further explanation. In this way, I argue that the centrality of quantitative analysis and the faith in the results it produces, in light of the methodological doubts sewn throughout this chapter and in other chapters of this dissertation, itself contributes to the rhetorical veneration of science required by condition (3) of the proposed definition of scientism.

5: Conclusion

In this chapter I proposed criteria for a definition of scientism and positioned the definition in the context of historical uses of the term, as well as an example from outside of philosophy. I then argued that experimental philosophy, via an examination of certain exemplary projects and the rhetoric surrounding these projects, met all three criteria of scientism. The cases discussed are based on still disputed methodologies, make overreaching claims, and do so in the name of science and scientific progress. So far, however, I have yet to elucidate why this presents any problem at all. Perhaps there is something unpleasant or boastful about the rhetorical elements evaluated, but this alone is not an absolute indictment of experimental philosophy. There remains the “so what” question. So what if experimental philosophy is scientistic, why is this a problem? In fact, this is precisely the claim that Buckwalter and Turri ultimately aim to defend. In the following chapter, I will argue that this form of scientism, combined with the dualistic interpretation of intuitions discussed in chapter 2, contribute to a kind of epistemic objectification of study participants that undermines certain efforts of experimental philosophers.
Chapter 4: Experimental Philosophy and Epistemic Objectification

This chapter relies on assumptions built out in Chapter 2 (Philosophical Intuitions) and Chapter 3 (Experimental Philosophy and Scientism). Specifically, I begin with the assumptions that 1) contemporary debates about the role of intuitions in philosophical theorizing mistakenly assume a dualism between intuitions and other inferential processes, and 2) experimental philosophy is scientistic in its application of scientific methodologies and accompanying rhetorical veneration of said methodologies. The purpose of this chapter is to argue that these two features are reciprocally reinforcing and contribute to the epistemic objectification of study participants in certain experimental philosophy projects that rely on Forced Choice Intuition Solicitation (FCIS) studies. I begin with an explanation of epistemic objectification, drawing primarily on Miranda Fricker’s work, and then examine how experimental philosophy threatens to objectify study participants, in contrast with seemingly similar types of experimental methods in other fields. I then address the specific epistemic and moral implications of epistemic objectification in the case of experimental philosophy - I argue that while the moral harms are minimal at its current scale, there is cause for concern about the ways in which epistemic objectification could undermine the epistemic aims of experimental philosophy. Finally, I suggest that a movement away from FCIS studies, or a reconsideration of their role in theory building, could alleviate many of the concerns raised about epistemic objectification.

1: Epistemic Objectification and its Harms

A key concern for Miranda Fricker, particularly in her 2007 book *Epistemic Injustice*, is the phenomenon of *testimonial injustice*, in which a speaker “receives a credibility deficit owing to identity prejudice in the hearer.”[^1] Stated simply, some prejudice on the part of the hearer renders the speaker’s testimony as less credible than it otherwise should be. Fricker’s paradigm case focuses on *systematic*, rather than *incidental*, instances of testimonial injustice. For example, a white-collar stock broker may experience an identity prejudicial credibility deficit when relaying vehicle-related

advice to his car mechanic, even if the stock broker is sufficiently competent in the subject. This is an incidental instance of testimonial injustice, as it’s relegated to a particular situation in a very narrow realm. The credibility deficit does not track the stock broker into other subjects or facets of his life. In contrast, one of Fricker’s central cases is Tom Robinson, the black defendant in the fictional court case central to the novel To Kill a Mockingbird. The jury ultimately fails to believe Robinson’s testimony, not because they view him as particularly unreliable in some narrow realm, but because of a generalized identity prejudice that tracks Robinson throughout all other facets of his life and “renders him susceptible to a panoply of injustices beyond the testimonial kind.”91

The harms of testimonial injustice are manifold, though Fricker is explicit in stating that “the harm that concerns us here is not the epistemic harm incurred by the hearer or the epistemic system... but rather the immediate wrong that the hearer does to the speaker who is on the receiving end of testimonial injustice.”92 In the following section, I will argue that in the case of experimental philosophy, the harms to the speaker and to the epistemic system are more intimately connected than in Fricker’s paradigm cases of testimonial injustice, but following Fricker, let us begin with the harms to the speaker that constitute more standard cases of testimonial injustice.

Fricker first makes a principal distinction between primary and secondary harms. The primary, or intrinsic, harm of testimonial injustice is epistemic objectification: when a hearer undermines a speaker in her capacity as a giver of knowledge. Fricker argues that the primary harm of systematic testimonial injustice is a particularly pernicious variety of epistemic objectification, because our capacity as givers of knowledge is an essential component of rationality, and “our rationality is what lends humanity its distinctive value.”93 Undermining a speaker’s capacity as a giver of knowledge, in cases of systematic identity prejudicial testimonial injustice, is a direct assault on the speaker’s humanity.

91 Fricker (2007), 27.
92 Fricker (2007), 44.
93 Fricker (2007), 44.
Secondary harms are comprised of both practical and epistemic harms to the speaker, which often arise as a result of specific instances (either individual instances, or a culmination of multiple instances) of testimonial injustice, and as such, are extrinsic rather than intrinsic harms. Practical secondary harms involve instances of testimonial injustice in which the epistemic attitude, or expected epistemic attitude, of the hearer has tangible effects on the outcome of the situation. If, due to an identity prejudicial credibility deficit, a judge convicts an innocent person of a crime, there is a practical harm done to that person. The epistemic attitude of the hearer creates an outcome that tangibly harms the speaker. Or, consider a case in which an innocent defendant, having been exposed to persistent testimonial injustice throughout his life, expects the same from the judge and so becomes nervous and defensive in the courtroom. Even if the judge exercises no such identity prejudicial credibility deficit, she may perceive the actions of the defendant to be indicative of deceitfulness, and thus guilt. The innocent person is sentenced and suffers a tangible harm due to the expected epistemic attitude of the hearer. Secondary epistemic harms to the individual are iterative, and can be self-fulfilling, in that persistent testimonial injustice may actually compromise either an individual’s capacity as a giver of knowledge, or her ability to fully exercise that capacity. If an individual is consistently undermined in her capacity as a knower, she may come to lose confidence either in specific beliefs she holds, or in her general epistemic capacity. Without what Fricker calls “intellectual courage,” the persistently undermined epistemic agent may forgo opportunities to form new beliefs or improve her epistemic capacity.

For the purposes of this chapter, however, I am less concerned with harms related to specific instances of interpersonal testimonial injustice, and more concerned with the broader phenomenon of epistemic objectification. Drawing on Edward Craig’s work in *Knowledge and the State of Nature*, Fricker adopts a distinction between *informants* and *sources of information*.

Broadly speaking, informants are epistemic agents who convey information, whereas sources of information are states of affairs from which the inquirer may be in a position to glean information. Thus, while objects can only be sources of information, people can be either informants (as when someone tells one something one wants to know) or
sources of information (as when the fact that one’s guest arrives bedraggled and shaking her umbrella may allow one to infer that it has been raining). The key to this distinction is whether or not the individual in question is engaged in the exchange as an epistemic agent, in the case of informants, or as a state of affairs, in the case of sources of information. In cases of testimony, it may also be illuminating to think of this distinction as a matter of content vs. context. When engaged with a speaker as an informant, the inquirer is primarily concerned with the content being relayed. The speaker is taken to be a reliable epistemic agent and the content is taken on face value, without undue scrutiny. However, when the inquirer weighs the content of the testimony against other contextual factors, for example, the speaker’s tone, body language, assumed motivations, past actions, or social identity, the inquirer makes a calculation (likely subconscious) as to what information can be gleaned from the entirety of this state of affairs. The speaker is not assumed to be a reliable epistemic agent, and the content of her testimony counts as just one among many competing contextual factors amidst the totality of evidence.

There are certainly instances in which weighing the content of a speaker’s words against other contextual factors is not only benign, but epistemically advantageous. Should a student tell me that her dog ate her final class assignment, I would be justified in weighing the student’s words against her tone and demeanor, as well as considering our past interactions and her previous efforts in the course. In that moment, it seems not only benign, but prudent to attend to the student and her words as a state of affairs from which I might glean information. And in non-verbal cases like the one Fricker describes, in which your guest arrives wet and carrying an umbrella, it seems perfectly alright to glean information from the state of affairs, in effect treating your guest in that moment, for purposes of a particular judgement about the weather, as a source of information rather than an informant. The point here being that epistemic objectification may be either benign (or potentially epistemically advantageous), as in these cases, or detrimental, as in the case of testimonial injustice.

Fricker draws on a broadly Kantian formulation to illuminate the difference between benign and detrimental cases of epistemic objectification, “in terms of the difference between, on the one hand...”

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94 Fricker (2007), 132.
hand, someone’s being treated as an object in a context or manner that does not deny that they are also a subject and, on the other hand, someone’s being treated as a mere object - where ‘mere’ signifies a more general denial of their subjectivity.”

The corollary for epistemic objectification amounts to the difference between treating someone as a source of information vs. a mere source of information, in which the context and attitude of the hearer denies epistemic agency to the speaker, instead relegating them to “the same epistemic status as a felled tree whose age one might glean from the number of rings.” This notion is not dissimilar to the “native informant” narrative that emerges from post-colonial theory, which critiques certain methods of anthropology and other social sciences that tend to observe and interpret the actions and practices of individuals or groups with a disregard for the ways in which those individuals might articulate or interpret their own practices and experiences.

The difference between benign and detrimental cases of epistemic objectification amount to the difference between treating your wet and bedraggled guest as a source of information about a particular judgement concerning the weather, but seconds later engaging her as an epistemic agent in a conversation about some recent political turmoil (she is a source of information, but not a mere source of information) vs. social science methods which interpret the actions and practices of individuals or groups with disregard for how the individuals under examination might articulate or interpret their own actions and practices (they are mere sources of information). For Fricker’s purposes, insofar as testimonial injustice involves identity-prejudicial attitudes that generally undermine the speaker’s status as a subject of knowledge, testimonial injustice always instantiates the detrimental kind of epistemic objectification.

There is a salient critique of Fricker from Gaile Pohlhaus that can help to further delimit and illuminate the concept of epistemic objectification. Pohlhaus argues that Fricker’s central cases of testimonial injustice are not instances of epistemic objectification, but rather, instances in which a speaker is afforded a kind of mitigated or semi-subjectivity. The primary point, for Pohlhaus, is that in the kinds of subject/object relationships that Fricker examines (counting the rings of a felled tree,
observing a guest with a soaking wet umbrella) the information is presented as straightforward sensory inputs - these sources of information not only take the form of objects, but they are *objective*, in the sense that (barring some other knowledge of extraordinary conditions) it would be irrational for me to fail to believe that the tree has x number of rings or that it is raining outside. The difference in instances of testimonial injustice, according to Pohlhaus, is that the failure to believe the speaker’s testimony evades the charge of irrationality. The perpetrator of testimonial injustice does not fail to believe that the speaker said P, but fails to take the speaker’s say-so as a credible reason to believe that P. The perpetrator does not defer to the speaker regarding the knowledge claim that the speaker purports to make. According to Pohlhaus, “it is precisely because [speakers] are seen as epistemically unreliable *subjects*, with the capacity to deceive or be deceived by a variety of sources, that allows perpetrators to perceive their testimony as not credible.”

Pohlhaus does not contend that objectification simpliciter, or epistemic objectification in particular, fails to exist. She instead relies on a somewhat stricter definition of objectification in which epistemic objectification requires treating an epistemic agent strictly as an objective state of affairs. Testimonial injustice, Pohlhaus claims, fails to meet this stricter definition of epistemic objectification.

Pohlhaus goes on to draw on the work of Ann Cahill, rooted in a subject/other distinction advanced by Simone du Beauvoir, to argue that testimonial injustice is more accurately conceived of as an *othering* of speakers, rather than an objectification. While the speaker is not granted full epistemic subjectivity, her status as subject is nonetheless necessary to relieve the perpetrator from a charge of irrationality. According to Pohlhaus, when a perpetrator of testimonial injustice fails to take a speaker’s testimony as convincing evidence, there is a sense in which the perpetrator must understand the speaker as an epistemic agent who either 1) has flawed epistemic practices and is thus unlikely to be a reliable source, or 2) aims to deceive or mislead her interlocutor. Regardless, the detailed mechanisms by which testimonial injustice functions is beyond the scope of this paper. And whether or not we accept Pohlhaus’ critique and revision of testimonial injustice, she does not contend that there is *no such thing* as epistemic objectification, but merely that testimonial injustice is not an instance of

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98 Pohlhaus (2014), 104.
it. The focus of this chapter is not testimonial injustice, but epistemic objectification, and I argue in section 3 that certain practices of experimental philosophy meet the definition of epistemic objectification. More specifically, if we allow that Pohlhaus’ argument implies a narrower characterization of epistemic objectification, I argue that experimental philosophy may meet her characterization as well.\(^9\)

Specifically, I argue that among Martha Nussbaum’s seven varieties of objectification (instrumentality, denial of autonomy, inertness, fungibility, violability, ownership, and denial of subjectivity), practices in experimental philosophy manifest three of these varieties with regard to the treatment of study participants: instrumentality, fungibility, and denial of subjectivity. Regardless of whether we accept Pohlhaus’ argument that testimonial injustice fails to meet some criteria for objectification, the apparatus offered by Nussbaum offers a more specific account of how something might count as objectifying treatment. I am not necessarily concerned with whether Nussbaum’s account of objectification provides a sound defense against Pohlhaus’ critique of the notion that testimonial injustice is not an instance of epistemic objectification, but rather whether the broader phenomenon of epistemic objectification can be elaborated in terms of Nussbaum’s account, specifically in the case of experimental philosophy. I argue in section 3 that Nussbaum’s criteria for objectification, in conjunction with Fricker’s articulation of objectification of the epistemic sort, are manifest in certain practices of experimental philosophy in such a way that qualifies those practices as epistemic objectification.

Christopher Hookway offers a related concern that is not so much a critique as a proposed expansion of Fricker’s work on testimonial injustice, which may also be useful in framing the harms perpetrated by certain projects in experimental philosophy. Hookway interprets Fricker’s work to be primarily concerned with failed attempts to relay information via assertions, that is, testimonial injustice occurs when a speaker is attempting to relay information via assertion and the hearer affords a credibility deficit to the speaker’s testimony. Hookway additionally suggests adopting a participant

\(^9\) Adjudicating between Fricker’s and Pohlhaus’ accounts of epistemic objectification is beyond the scope of this paper. My overarching claim is that certain methods of experimental philosophy instantiate epistemic objectification regardless of which account we adopt.
perspective, which is focused less on a speaker’s assertions and explicit knowledge claims and more on a speaker’s role as a participant in inquiry. According to Hookway, this perspective illuminates instances of epistemic injustice beyond the testimonial kind. Hookway’s central case is that of a professor in a classroom responding to both the assertions and the questions of students. If the professor asks a question of fact about a particular reading or concept, she may afford fitting credibility to a student’s assertion. And if a student asks a clarifying question about a particular concept, the professor may respond to the question as a request for information. However, if the student asks a question not intended as a request for information, but rather intended as a critique, counterexample, or other contribution to discussion, there may be instances in which the professor “makes a presumption of irrelevance and ignores the question or takes things over and construes the question as a request for information that is loosely related to the question asked.”

Hookway’s proposal that this participant perspective is somehow importantly different than the conceptual apparatus developed by Fricker is not the question at hand. On Hookway’s view, the transgression occurs when the professor views the student as merely a conduit of pre-determined information (either a giver-of uncontroversial information, or an asker-for uncontroversial information), and not as a full epistemic agent capable of being a co-collaborator. In section 3, I argue that this participant perspective is a further way to make salient the harm perpetrated by experimental philosophy.

2: Dualism and Scientism

In this section, I argue that two features of experimental philosophy, a dualism regarding intuitions and a scientistic methodology, are mutually reinforcing. In previous chapters, I have argued that:

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100 Hookway (2010), 155. One striking example that I observed at a recent conference involved a prominent keynote speaker making a number of controversial assumptions in a talk focused on the ethical obligations of women of color, specifically regarding child rearing in underserved communities. In the Q&A, a young woman of color asked the speaker whether he had read or engaged with any black feminist philosophers or theorists in his work on the subject, to which the speaker responded with something along the lines of, “I’d be happy to share my bibliography.”
(1) many discussions surrounding intuitions in experimental philosophy wrongly assume a dualism in
which intuitions are positioned as different in kind from other inferential processes, and thus
mistakenly treated as merely evidentiary inputs to be interpreted by the “black box” of fixed
inferential processes - a view which strictly separates content and process, and neglects
potential reciprocal interactions between intuitions and inference; and

(2) certain experimental philosophy methods, particularly those relying on FCIS studies, meet
three proposed criteria of scientism:
   a. while the reliability of FCIS studies is widely debated, they continue to be applied to
      myriad philosophical issues which we may have good reason to believe could be better
      addressed by other scientific and/or “unscientific” epistemic methods
   b. conclusions drawn from FCIS studies often overreach the available evidential support
   c. conclusions are also often accompanied by a rhetorical veneration of science that
      draws on the lexicon of the physical sciences and/or a denigration of “unscientific”
      approaches to address the issue at hand.

I hesitate to describe the relationship between these two features of experimental philosophy as
causal, in any precise sense, as that might seem to imply that one necessitates or entails the other,
which does not seem to be the case. One can imagine a version of experimental philosophy (and, no
doubt, there are particular projects that this is true of) that maintains an assumption of dualism in
which intuitions are treated as merely evidentiary inputs, but fails to meet one or more criteria for
scientism - perhaps it is so novel an issue that we can’t imagine any other way to address the problem
at hand, or perhaps its conclusions are appropriately measured and do not overreach the evidential
support, or perhaps it avoids a rhetorical veneration of its own methodology and/or fully accounts for
the influence of “unscientific” approaches. Conversely, one can imagine a scientistic methodology that
does not reinforce a dualism between intuitions and other inferential processes, as there are any
number of ways to meet the criteria for scientism discussed above.

However, it seems that each of the above features facilitates the other in a mutually reinforcing
way. The dualism between intuitions and other inferential processes positions intuitions as isolatable
units of study, unconnected from any inferential processes or beliefs of their bearers. In an experimental context, it appears sufficient to take as evidence that participant x holds the intuition that P, with little regard for how the participant came to hold the intuition, what other commitments of x might be related to P, or the relationship between those commitments and how the participant came to hold the intuition.

There are, however, FCIS studies that aim to unravel precisely these kinds of questions about the etiology of intuitions and the interconnectedness of particular intuitions with other commitments. Drawing on research in psychology and cognitive science, these studies aim to uncover correlative and causal relationships among various commitments of study participants. For example, one recent study by Turri et. al. draws on causal, regression, and mediation analyses to evaluate the causal relationship between actionability judgements and knowledge judgements.\footnote{Turri et. al. (2016).} Study participants were separated into two groups and given one of two vignettes regarding a fictional intelligence analyst gathering evidence from an unnamed source, in which the vignette features conditions of either (1) low stakes or (2) high stakes revisability, significance, and accountability. In vignette (1), the analyst is writing a provisional report (low stakes revisability) about whether a foreign operative is on a low-carb diet and jogging regularly (low stakes significance) and she will not be held accountable for decisions based on this report (low stakes accountability). In vignette (2), the analyst is writing a final report (high stakes revisability) about whether a foreign operative is selling arms to terrorists and a threat (high stakes significance) and she will be held accountable for decisions based on this report (high stakes accountability). Participants are then invited to respond, on a 7-point Likert scale, to a series of questions regarding the analyst’s beliefs, the truth of the claims, the strength of the evidence available, a normative actionability judgement \textit{(should the analyst assert in her report that the foreign operative is jogging/selling arms)}, and knowledge claims about the analyst \textit{(does she know that the foreign operative is jogging/selling arms)}. In running a causal model, Turri et. al. conclude that for participants in this study, actionability judgements \textit{caused} knowledge judgements.\footnote{Turri et. al. (2016).}
These kinds of studies at least appear to be grappling with concerns about the context in which particular intuitions arise. A single isolated intuition, it seems, is insufficient to draw conclusions that might adjudicate among competing philosophical theories. The problem remains, however, that the questions and options presented in a forced choice study are delimited by the experimenters and the resources upon which they are drawing. The approach seems to assume that experimenters can further refine their studies to involve more and more variables, and by continuing to examine the best fitting causal models, isolate the inferential processes behind participants’ commitments. However, this seems at odds with the motivation to incorporate the thinking or worldview of non-academic philosophers into our theorizing. We can imagine that the participants themselves might cite any number of “causes” for making a knowledge judgement about the analyst in Turri et. al.’s vignette, for example.

For example, Womack and Mulvaney-Day highlight a similar concern in terms of underdetermination:

Respondents could be reacting to any number of features of some philosopher-designed scenario (including built-in cultural and gender stereotypes). For instance, in the trolley scenario in which the respondent is asked if she would push the fat man onto the tracks to save the five people, her answer might be influenced by her degree of anti-fat bias. The respondent may not even know that she is reacting in this way to the scenario; she may be responding to tacit cues that require an explication of her interpretation of the scenario, the question, and the type of answer required. As a result, her response underdetermines which feature she is reacting to.\footnote{Womack and Mulvaney-Day (2012), 119.}

Womack and Mulvaney-Day specify two ways in which the continued refinement of forced choice studies might forestall certain kinds of progress on philosophical questions. First, the possibility that adding details, complexity, and additional variables to a study merely results in confounding effects, despite experimenters’ best efforts. They cite “examples of ordering, framing, and other confounding effects that distort our judgements about moral, mathematical, medical, and marketing questions, to name but a few.”\footnote{Womack and Mulvaney-Day (2012), 119.} Second, the features of a scenario under investigation cannot but arise from philosopher’s previous theories or the intuitions of the experimenters themselves. As Womack and Mulvaney-Day suggest, “these are not bad reasons for judging a feature salient, but they do limit the
If experimental philosophy purports to address some lacuna in our theorizing created by an exclusive focus on the intuitions of academic philosophers, it would seem imperative to leave open the possibility of unanticipated or novel ways of thinking about philosophical problems. The continued refinement of FCIS studies merely chips away at the issue via an incremental process of elimination without creating the opportunity for respondents to explicate their own interpretation of their responses.

These kinds of studies continue to treat isolated intuitions as evidentiary inputs, and then attempt to reveal the relationship among them via some fixed, mechanical process - in Turri’s case, by applying a causal modeling algorithm. In so separating intuitions as discrete units of study that can be collected and quantified, this approach invites the kind of analysis that comports with the scientistic approach of experimental philosophy. And conversely, in order to fit neatly into this scientistic methodology, there is an impetus to prefer data that comes in the form of discrete, quantifiable units. Intuitions are treated as isolated evidentiary inputs, which facilitates a kind of quantitative analysis consistent with a scientistic methodology, which in turn validates the treatment of intuitions as isolated evidentiary inputs, and so on. So long as this process continues to churn out quantifiable results that are arguably related to questions of philosophical import, the loop is mutually reinforcing.

3: Experimental Philosophy and Epistemic Objectification

The question remains as to how this dualism/scientism loop in experimental philosophy contributes to (1) epistemic objectification, and (2) a particularly detrimental kind of epistemic objectification. Recall that epistemic objectification amounts to undermining a speaker in her capacity as a giver of knowledge, i.e., treating a speaker as a source of information about a state of affairs rather than as an informant with full epistemic agency. This alone can be benign, or even epistemically sensible, as in the case of gleaning information about the state of the weather based on a guest’s wet

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umbrella. Epistemic objectification is detrimental when the speaker is treated as merely a source of information in such a way that also denies her capacity as an informant.

In this section, I argue for three separate but related points that collectively suggest that experimental philosophy perpetrates a unique kind of epistemic objectification. First, insofar as experimental philosophy engages in human subject research, there is a sense in which it perpetrates at least the benign form of epistemic objectification. Human subject research, in general, appears to be consistent with at least two of Nussbaum’s varieties of objectification (instrumentality and fungibility), with some varieties of human subject research additionally manifesting a third variety (denial of subjectivity). I suggest that experimental philosophy more often than not instantiates all three of these varieties. Second, experimental philosophy literature suffers from a general lack of critical engagement with the implications of human subject research, as opposed to certain other fields that engage in such research. I argue that the instantiation of Nussbaum’s varieties of objectification, in combination with the lacuna in critical engagement with the implications of human subject research, makes experimental philosophy potentially more susceptible to the detrimental kind of epistemic objectification than other instances of human subject research. Finally, the questions of import in experimental philosophy would seem to require engagement with study participants qua epistemic agents. I argue that whether the kind of epistemic objectification manifest in experimental philosophy is benign or detrimental, epistemic objectification of any sort presents a particular kind of problem for experimental philosophy. Consistent with concerns expressed in Chapters 2 and 5 about the role of intuitions in experimental philosophy, the denial of participants’ epistemic agency seems to suggest that experimental philosophers are simply collecting the wrong kind of data. In this way, while the moral harms to participants might be minimal, the harms to the epistemic community are uniquely injurious in the case of epistemic objectification in experimental philosophy.

There is a sense in which epistemic objectification occurs in all human subject research. Consider a clinical vaccine trial, in which a participant visits a clinic for routine blood tests to evaluate antibody levels. The experimenters are concerned with gleaning information about a state of affairs. In this particular case, the primary research question that experimenters are attempting to answer, i.e.,
whether participants who received the vaccine show an increase in disease-fighting antibodies, does not seem to lend itself to epistemic participation on the part of the study participants. It does not make sense to ask a participant outright whether they are more immune to some infection. Checking the antibody levels of study participants to glean information about the effectiveness of a vaccine appears to be a more sophisticated version of Fricker’s wet umbrella example - a potentially benign case of engaging with an epistemic agent as a source of information rather than an informant.

In addition to the prima facie analogy between human subject research and Fricker’s examples of sources of information, Nussbaum’s discussion of objectification simpliciter can help to clarify the type of epistemic objectification occurring in human subject research. Nussbaum proposes the following “notions” that are “involved in the idea of treating as an object:”

1. Instrumentality. The objectifier treats the object as a tool of his or her purposes.
2. Denial of autonomy. The objectifier treats the object as lacking in autonomy and self-determination.
3. Inertness. The objectifier treats the object as lacking in agency, and perhaps also in activity.
4. Fungibility. The objectifier treats the object as interchangeable (a) with other objects of the same type and/or (b) with objects of other types.
5. Violability. The objectifier treats the object as lacking in boundary integrity, as something that it is permissible to break up, smash, break into.
6. Ownership. The objectifier treats the object as something that is owned by another, can be bought or sold, etc.
7. Denial of subjectivity. The objectifier treats the object as something whose experience and feelings (if any) need not be taken into account.\textsuperscript{106}

Human subject research in general seems to instantiate at least instrumentality and fungibility, and often denial of subjectivity. I do not plan on defending human subject research against the other four elements of objectification, but merely to suggest that if a particular human subject research project

\textsuperscript{106} Nussbaum (1995), 257.
were to instantiate denial of autonomy, inertness, violability, and/or ownership, epistemic objectification may be the least of our concerns. Regardless, Nussbaum’s definitions are not intended to be collectively necessary conditions, but merely a variety of manners in which to instantiate objectification - meeting just one condition counts as a variety of objectification. Note, however, that I am as yet just concerned with objectification of at least the benign sort, so the application of Nussbaum’s framework here is descriptive rather than normative.

**Instrumentality.** Insofar as the primary aim of a particular human subject research project is to gather information or verify some hypothesis, and not primarily to engage participants in some activity for their own benefit, participants are instrumentalized in regard to the goals of the experimenters. There are certainly borderline cases, for example, in which participants with rare or terminal illnesses are eager to join a promising drug trial. Experimenters may be equally motivated by scientific inquiry and a desire to help participants in the short-term. In the case of experimental philosophy, however, these borderline cases are likely more rare. It would be difficult to imagine any potential benefit to study participants, either as a primary consideration or as a convenient upshot.

**Fungibility.** Fungibility is a necessary part of human subject research. The very goal of making generalizations from a small sample size relies on the assumption that study participants of a certain type are interchangeable. In an ideal scenario, the results from a study with an n=1000 would be identical had a completely different set of 1000 individuals been chosen for the study. Of course, how to “type” participants is a nuanced part of the experimental structure, and the variables under consideration will largely determine the boundaries of participant types. For example, a study of gender differences in moral intuitions will type participants along self-reported gender. Regardless, fungibility still applies within type - ideally we could swap out the entire group of woman-identified participants for a different set and maintain our results.

**Denial of subjectivity.** Denial of subjectivity is perhaps the most variable in human subject research. There are certainly cases, for example in anthropology and psychology, where participants’ experiences and/or feelings are precisely the kinds of things under investigation. While there may be debate as to how successful specific investigations are, I have argued in this chapter and elsewhere
that in the case of FCIS studies in experimental philosophy, the focus on intuitions as isolatable units of study generally precludes the possibility of incorporating participants’ experiences and/or feelings.

As an instance of human subject research more generally, experimental philosophy appears consistent with at least these three notions of objectification offered by Nussbaum. The claim that experimental philosophy instantiates at least a benign form of epistemic objectification is also consistent with the critiques of Fricker offered by Pohlhaus. Recall that Pohlhaus’ main concern was that Fricker’s paradigmatic examples of testimonial injustice do not, in fact, position speakers as objects, but rather as mediated subjects. I don’t plan to address Pohlhaus’ concerns about the subject/object distinction in cases of testimonial injustice, but rather to claim that even if Pohlhaus were correct about the paradigmatic cases of testimonial injustice, what’s going on in experimental philosophy meets her narrower conception of epistemic objectification.

Pohlhaus appears to make two claims: 1) genuine cases of epistemic objectification are objective, in that it would appear irrational to doubt them, as in the case of counting the rings of a fallen tree, and 2) doubting a speaker’s testimony in the case of testimonial injustice is rational precisely because the speaker is seen as a subject that can deceive or be deceived. Concerning the first claim, doubting the outcomes of any particular study in experimental philosophy would appear to be irrational in just the way that Pohlhaus suggests. Concerning Turri et. al.’s study discussed above, for example, I certainly don’t doubt that participants responded to questions in the ways reported, or that the causal modeling analysis was accurate. In none of the examples discussed throughout this dissertation do I contend with the details of any particular study - for example, denying that X% of participants responded in some way, or that the average response to some Likert scale question was Y - as doubting these kinds of results, without further explanation, would certainly appear irrational in the way that Pohlhaus suggests. Regarding her second claim, I would argue that in the case of experimental philosophy, study participants are not even engaged to the extent that would make sense for an experiementor or reader to doubt their responses. What would it mean to doubt that a participant marked option A on some survey, for example? If doubt, according to Pohlhaus, entails treating an interlocutor as a subject, we likely don’t see that indication of subjectivity in the case of experimental
philosophy. Even if Pohlhaus is correct that Fricker’s paradigmatic cases of testimonial injustice don’t constitute genuine epistemic objectification (though adjudicating this debate is beyond the scope of this chapter), it seems that the treatment of participants in human subject research in general, and experimental philosophy in particular, do constitute at least the benign sort of epistemic objectification on Pohlhaus’ account as well. If we allow that human subject research entails some form of epistemic objectification, other safeguards must be in place to ensure that participants aren’t treated merely as sources of information.

Even in a seemingly straightforward case such as a vaccine trial, there are a number of safeguards in place that attempt to ensure that participants aren’t treated merely as objects of study. This includes abundant guidelines on informed consent and human subject research from the FDA and other regulatory bodies, internal review boards at universities and independent research institutions, and robust discussions from the bioethics and medical ethics communities. Consider the following table, reproduced from a recent essay in the AMA Journal of Ethics:

<table>
<thead>
<tr>
<th>Type of epistemic injustice</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Testimonial injustice</td>
<td>Discounting someone’s testimony on the basis of unjustifiable biases</td>
<td>Discounting women’s reports regarding antidepressant side effects on the basis that women are unreliable reporters</td>
</tr>
<tr>
<td>Hermeneutical injustice</td>
<td>Ignoring testimony that cannot be conceptualized or expressed within the prevailing framework for discussion</td>
<td>Ignoring reports that antidepressants affect the formation of nurturing relationships because the framework does not discuss nurturing relationships</td>
</tr>
<tr>
<td>Epistemic objectification</td>
<td>Treating others as passive states of affairs from which information can be gleaned, rather than as agents who convey information</td>
<td>Failing to attend to research participants’ feedback about their experience of antidepressant treatment</td>
</tr>
<tr>
<td>Exclusion</td>
<td>Using methods for collecting information that exclude relevant individuals or relevant information</td>
<td>Excluding relevant research participants from an antidepressant trial or using a trial design that provides no scope for patients to share relevant information they have about their experience of antidepressant efficacy and side effects</td>
</tr>
</tbody>
</table>

I do not intend to address each of these examples in turn, but merely to illustrate the depth of engagement and consideration around the treatment of study participants in the medical ethics literature. Great care is taken to avoid treating participants as merely objects of study, and the success and refinement of these efforts is precisely what is under discussion in the article from which this table was excerpted. Of course, the treatment of study participants provides fodder for ongoing conversation in the bioethics literature, and individual studies may yet come under scrutiny in this ongoing conversation. The point, however, is not that other forms of human subject research have managed to completely evade the threat of detrimental epistemic objectification, but merely that the concern carries weight in fields that are critically engaged with the ethics of human subject research. No such discussion appears to be happening in the experimental philosophy literature.  

I am not suggesting that experimental philosophy, by default, always manifests the detrimental kind of epistemic objectification. However, the instantiation of instrumentality, fungibility, and denial of subjectivity, combined with a general lacuna in critical engagement with the implications of human subject research, suggests that individual projects in experimental philosophy may be at a higher risk for instantiating the detrimental kind of epistemic objectification. For example, compare FCIS studies in experimental philosophy to qualitative projects in psychological research - qualitative psychological research appears more likely to be specifically interested in examining the subjectivity of study participants, and is bolstered by a breadth of critical engagement in psychological research ethics. However, the possibility of detrimental epistemic objectification in the case of experimental philosophy is a minor point. The remainder of this chapter focuses on the epistemic harms that result from epistemic objectification in experimental philosophy, which appear to uniquely undermine the aims of certain experimental philosophy research.  

Following Fricker, the primary ethical harm of epistemic objectification is the undermining of the speaker’s capacity as an epistemic agent. The epistemic harms are twofold: harms to the speaker and harms to the epistemic community. While Fricker is largely concerned with the harms to the

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108 One of the primary goals of this project is to promote and contribute to exactly this kind of conversation in experimental philosophy.
speaker, as discussed in the first section of this chapter, it is also easy to see the potential harms to the epistemic community in the examples from Table 1 above. For example, “discounting women’s reports regarding antidepressant side effects on the basis that women are unreliable reporters” is likely to leave experimenters with a genuine gap in their knowledge about the side effects of the antidepressant under investigation.

I certainly don’t intend to minimize the harms that can result, particularly in medical or psychiatric research, if participants are afforded no agency in the experimental process - history has shown us the dangers of dubious experimental practices, for example, the atrocity of the “Tuskegee Study of Untreated Syphilis in the Negro Male.”109 The issues of concern for medical ethicists expand far beyond epistemic objectification, and the stakes are decidedly higher than in experimental philosophy. This chapter remains mostly silent on the severity of harms imposed on participants in experimental philosophy studies. My primary concern moving forward is more narrowly focused on the implications of unchecked epistemic objectification for the epistemic community, and how experimental philosophy differs significantly from something like a clinical drug trial in this regard.

In “An Experimental Philosophy Manifesto,” the opening chapter of the first anthology of experimental philosophy literature published in 2008, Joshua Knobe and Shaun Nichols repeatedly assert a lofty goal for experimental philosophy - to figure out “how human beings think.”110 Aside from the general lack of discussion about epistemic objectification in the experimental philosophy literature, the primary difference between something like a clinical drug trial and much of the work in experimental philosophy that appeals to FCIS studies, is that experimental philosophers, in attempting to uncover how human beings think, would seem to be interested in study participants precisely as epistemic agents.

Take a less severe case of testimonial injustice in a clinical drug trial, in which a handful of female participants report a minor side effect, but their testimony is discounted by experimenters. This may result in an epistemic lacuna around a particular set of facts that may be more or less integral to the

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110 Knobe and Nichols (2008), 3.
central research question. Researchers may miss some information about a particular subset of side effects, but the results of the trial may well be sufficient to advance their research. On the contrary, FCIS studies in experimental philosophy that aim to study intuitions as divorced from other processes, beliefs, or commitments appear to completely evade the question of how these participants are thinking. The data collected in many of the studies discussed throughout this dissertation quantifies the responses of individual participants, with little consideration of how participants arrived at or might justify those responses - these studies appear concerned with outputs, not processes. Even those studies that recognize this error and aim to amend it, such as Turri et. al.’s analyses that rely on causal modeling, function in such a way that they cannot admit of novel ways of thinking not already modeled in the experimental or data analytic infrastructure. If we allow that insofar as experimental philosophy relies on human subject research and instantiates at least the benign form of epistemic objectification, it seems that even this benign form of epistemic objectification is particularly damning for the epistemic community of experimental philosophers, as the very questions they aim to answer about how human beings think cannot be addressed in a context that fails to engage with participants as epistemic agents.

Turning briefly to Hookway’s critique, recall that he offered the participant perspective as a way in which to frame instances of epistemic injustice in which there is no explicit testimony. Hookway is concerned not with cases in which a speaker is purporting to testify or make a particular claim, but cases in which a speaker’s statements or questions are interpreted in relation to pre-determined content and not as participation in advancing epistemic inquiry. In the case of experimental philosophy, this participant perspective appears generally applicable. It seems rather clear that study participants (despite the label) are not being asked to participate in an epistemic endeavor. Perhaps another way to state my critique that the intuitions of study participants are appealed to merely as evidentiary inputs, as I’ve argued in this chapter and elsewhere, is to point out that subjects of study are not invited to participate in an epistemic endeavor that purports to be concerned with addressing a lacuna created by their lack of participation in academic philosophy.
To summarize, insofar as human subject research generally instantiates at least the benign form of epistemic objectification, experimental philosophy meets this criteria. And I’ve argued throughout this section that a lack of effort to otherwise prevent participants from being treated merely as objects of study (e.g., through critical engagement with the implications of human subject research, such as work that appears in medical ethics journals, etc.), puts experimental philosophy at an increased risk of instantiating the detrimental kind of epistemic objectification. Moreover, whether the epistemic objectification manifest in any particular project in experimental philosophy is benign or detrimental, epistemic objectification simpliciter appears to uniquely undermine the purported goal of examining how human beings think, which would require engaging with participants as epistemic agents.

4: Conclusion

There are two recommendations implicit in the discussion of epistemic objectification above, one more general and one more specific. Generally, following the medical ethics literature, there is a need for experimental philosophers to take seriously the ethical implications of human subject research and to critically engage with the potential ramifications of epistemic objectification for both study participants and for epistemic inquiry. This chapter, I believe, could be considered a contribution to such a conversation. More specifically, as I’ve argued throughout this chapter and extensively in chapter 2, the problem of epistemic objectification in experimental philosophy primarily arises in the context of FCIS studies which rely on a dualism about intuitions. In the following chapter, I propose a revisionary view of intuitions, drawing on feminist epistemology, which eschews the dualism that contributes to epistemic objectification.
Chapter 5: Intuitional Holism

There is much contemporary debate about the role that intuitions should or could play in philosophical theorizing, particularly as related to projects in experimental philosophy. However, given the recent surge of interest in philosophical intuitions, little has been discussed regarding the history of feminist epistemology’s engagement with claims about “female intuition,” or intuition more generally. In Chapter 2, I argued that contemporary debates about intuitions assume a mistaken dualism between intuitions and other inferential processes. This dualism mirrors a long-standing concern in feminist epistemology about the folk psychological distinction between intuition and reason. Because of the particular historical and often oppressive alignment of women with “intuitive” ways of knowing, presented as less concrete and less reliable than the masculinized ideal of pure reason, feminist epistemologists have long been concerned with the epistemic relevance of intuitions. In this chapter I propose instead an “intuitional holism” - a model of intuition stemming from feminist epistemology, primarily in the work of Gaile Pohlhaus and Miranda Fricker. I also draw on the work of Michael Devitt and David Chalmers to contextualize intuitional holism within the landscape of contemporary debates about intuitions. I argue that a more holistic interpretation of the relationship between intuition and theory-building provides a more accurate representation of the interplay between intuitions and other inferential processes involved in theory-building, while side-stepping many of the debates in contemporary work on intuitions. Ultimately, I argue that intuitional holism actually provides quite robust support for a revised version experimental philosophy.

1: Against Dualism

Gaile Pohlhaus writes directly in response to some contemporary work in experimental philosophy, arguing that despite purported motivations to explore differences in philosophical perspectives by engaging with non-philosophers, experimental philosophers are merely gathering and

111 For an excellent exploration of the masculinization of reason in the history of philosophy, see Genevieve Lloyd’s book The Man of Reason: “Male” and “Female” in Western Philosophy.
wielding intuitions as evidence in their dialectic, rather than attempting any meaningful engagement with these views. She offers the following anecdote to illustrate her concerns:

Given the buzz surrounding the “different voices” hypothesis, I was curious and wondered if anyone had done more qualitatively oriented research to see what people had to say about why they judged Gettier examples one way as opposed to another. As it happens, I subsequently found myself at another conference with a number of experimental philosophers, so I thought I would ask the experts to see if they could point me to a qualitative study. Interestingly, I found it nearly impossible to get an answer from anyone and one particularly vocal advocate of experimental philosophy simply replied by saying, “Are you serious? Do we really want to ask Grandma what she thinks?”

I take Pohlhaus’ broader point here to be that the purported diversity motivation for experimental philosophy seems at odds with the ways in which intuitions are actually solicited and utilized in the methodology, particularly in studies that rely on Forced-Choice Intuition Solicitation (FCIS). Charitably, if the ultimate goal of experimental philosophy is to uncover and examine alternate (non-philosopher) modes of thinking about the world, in order to address some presumed lacuna in academic philosophy, this seems at odds with the resistance to qualitative exploration, the very idea of which is apparently laughable to certain experimental philosophers. I take Pohlhaus to be echoing my concerns about the dualistic, black box view of intuitions underpinning certain varieties of experimental philosophy. Once the intuitions have been solicited from non-philosophers, there appears to be no further need to explore the inferential processes or commitments of study participants and the ways that the interpretation of their own intuitions might bear out - that’s a job reserved for philosophers.

Pohlhaus draws on the work of philosopher Sara Ahmed to explore one particular approach to address this view of intuitions. To begin, she highlights a distinction between “orientating work” and “procedural work” in theorizing. Orienting work is “the work of helping others to attend to what one would like to investigate” whereas procedural work is “what knowers do when we are already on the same page and need to fill in acknowledged gaps in our knowing.” While Pohlhaus offers no necessary and sufficient conditions for intuitions as a particular kind of mental state, akin to the theories explored in Chapter 2, she offers a functional examination of the role that intuitions play in
theory-building. She offers a picture of intuitions as beliefs that one finds obvious, and further argues that they play a role in the orienting work of guiding interlocutors toward salient features of a situation, novel complications, or new philosophical problems. They play the functional role of a starting point, rather than a data point.

Experimental philosophy, she argues, instead appears to utilize the intuitions of non-philosophers as evidence in the procedural work of deciding among theories, with the assumption that the parameters of the debate are relatively fixed and (at least some of) the viable options are already on the table. Here she highlights a difference between the way in which experimental philosophers wield the intuitions of non-philosophers as evidence, and how philosophers engage in dialectic with the intuitions of other philosophers: “But does any philosopher really expect that a simple, but proper input, will lead to another philosopher automatically agreeing with them? And when someone finds obvious what another does not, is the only option really simply to throw one’s hands in the air?”

Similarly, if an experimental philosopher presents a data set suggesting some convergence of intuitions in a Gettier case, for example, should the response of the philosophical community be to throw our hands in the air? If one of the aims of experimental philosophers is to examine or incorporate the intuitions of non-philosophers into theorizing, there appears to be a significant inconsistency between the way in which experimental philosophers take the intuitions of non-philosophers as evidence, and the prima facie role that intuitions play in the orienting work of philosophical dialectic.

Pohlhaus’ concerns about experimental philosophy methodologies do not entail a particular view on what kind of mental states intuitions are. In general, a functional definition of a phenomenon need not entail any information about what kind of thing the phenomenon is (e.g., necessary and sufficient conditions). That is to say, Pohlhaus’ picture doesn’t necessarily refute the problematic dualism that I outlined in Chapter 2. I expressed a concern that contemporary debates position intuitions and other inferential processes as different in kind. Although Pohlhaus’ view does not come down one way or the other on this particular question, her functional discussion of the role of intuitions in theory building positions intuitions, however we may define them, as uniquely useful in

\[115\] Pohlhaus (2015), 11.
the orienting work of theorizing - and not merely as a kind of evidence for a purely procedural picture. Drawing on the work of Miranda Fricker, I offer a more specific picture of intuitions that acknowledges this role while positioning intuitions as similar in kind to other inferential processes, contra the dualism discussed in Chapter 2.

Drawing on work in philosophy of science, particularly Thomas Kuhn, Miranda Fricker’s work on intuition and reason echoes Pohlhaus’ concerns. Fricker begins by highlighting a “tendency in everyday thinking about knowledge, what one might call ‘folk epistemology,’ to regard reason and intuition as sharply contrasted and even as opposed methods of thought.”\(^\text{116}\) The dualism underlying certain discussions of intuitions in philosophical theorizing mirrors this dualistic folk view. Fricker goes on to suggest “first, that intuition is not well understood if it is sharply contrasted with reason; and second, that a conception of reason which is sharply contrasted with intuition is an unduly technical or ‘thin’ conception.”\(^\text{117}\) Drawing on the work of Kuhn and his discussion of intuitions as catalysts in scientific paradigm shifts, crucially dependent on past experience, Fricker proposes a more robust articulation of what intuitions are and their role in theory-building, while generalizing Kuhn’s view to account for the role of intuitions in more mundane (i.e., not paradigm-shifting) enquiry:

“Intuition has emerged as a non-inferential, typically subconscious mode of hypothesis formation. It constitutes a sub-personal level of cognitive operation that is crucial to rational enquiry, since it is primarily the intuitive mode which enables us to solve new problems in light of old - a skill which is necessary in most, if not all, kinds of enquiry. As Kuhn points out, it is intuition which enables us to recognize a new question as being like one we have encountered in the past, and this is so even though we cannot pinpoint the respect in which they are alike, or say why or how we recognize the likeness.”\(^\text{118}\)

Given Fricker’s more robust conception of intuition as crucial for most kinds of enquiry, a problem for the dualism between intuition and reason emerges. If intuition occupies a central position in the hypotheses formation aspect of theory-building, or enquiry more generally, what role is left for reason? By insisting that reason remain sharply contrasted with intuition, we are left with a definition of reason.

\(^{117}\) Fricker (1995), 181.
\(^{118}\) Fricker (1995), 184.
as mechanical, procedural, and non-generative, an unsatisfying and weak picture of reason that Fricker characterizes as “thin.”

To further illustrate her point, borrowing terminology from Daniel Dennett’s work in artificial intelligence programming, Fricker proposes (and subsequently complicates) a view on the roles of intuition and reason - a “generate and test,” or more pointedly, an “intuit and justify” model: “The generate-and-test model... illustrates in the broader context of the philosophy of mind, rather than in scientific reasoning only, the necessary partnership of two distinct elements, one generative (intuition) and one selective (thin reason).”119 This maps rather neatly onto Pohlhaus’ orienting vs. procedural distinction, and provides insight into the mechanisms underlying Pohlhaus’ functional account. The generative element, intuition, functions to form hypotheses based on past experience, orienting the researcher (and her audience) by grounding novel problems in more familiar or manageable contexts. The selective element, reason, uses set rules and procedures to test hypotheses.

According to Fricker, a complication seems to arise for a strict division between intuition and reason, as the boundary between them is, in fact, unclear - the intuitive mode is more selective and the rational mode more generative than a strict dualism would predict. Fricker argues that “if intuition, as the ‘generate’ component, merely threw up new hypotheses randomly over an unrestricted field, then it could not possibly be of any use.” The selective element of intuition seems obvious, even in mundane enquiry. It would be anomalous, for example, to encounter anybody with the intuition that a bowling ball dropped from an 8 story building will fly upwards. Or to use a philosophical example, it would be surprising, to say the least, to encounter an intuition in a trolley problem case that the most moral option available would be to allow the trolley to kill the four people tied to the left track and to additionally murder the individual tied to the right track. Conversely, a thin, procedural view of reason does not account for the ways in which set procedures can “transport one, step by step, to unforeseen destinations,” and further “illuminate our thinking.”120 A dualism between intuition and reason entails distorted views of both intuition and reason - this dualism 1) positions

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120 Fricker (1995), 188.
intuition as indiscriminate, untethered from the experiences that give rise to its generative powers, and 2) portrays reason as mechanical and thin, incapable of giving rise to novel discoveries.

Pohlhaus’ functional examination of intuition and reason, and Fricker’s discussion of the processes underlying each, suggests a more holistic picture of the relationship between reason and intuition. If the two can play similar functional roles in theorizing, and share similar cognitive features, it’s likely that a theory of intuitions that positions them as wholly different in kind from reason is misguided. I argued in Chapter 2 that much of the contemporary literature surrounding the use of intuitions in theorizing commits just this error by appearing to presuppose a “black box” picture of intuitions as input and reason as the purely procedural mechanism that manipulates this input to produce conclusions. A more holistic view of intuitions avoids the problems raised by Pohlhaus and Fricker, and comports with empirical work on the effects of confirmation bias and other psychological phenomenon that suggest a more reciprocal relationship between intuitions and reason.

2: Chalmers and Devitt on Intuitional Holism

Interestingly, the holistic picture suggested by Pohlhaus and Fricker is entirely consistent with some of the views on intuitions that arise in the contemporary metaphilosophical debates. Specifically, I argue that this holistic picture is supported by David Chalmers’ “minimal defense” of intuitions, and a certain reading of Michael Devitt’s “expertise defense” of intuitions. Chalmer’s minimal defense of intuitions attempts to “articulate a minimal (not heavily theoretical) notion of intuition that captures something of the core everyday philosophical usage of the term.”121 In doing so, he makes an important distinction between “epistemic justification, or what supports a subject’s belief, and dialectical justification, or how a subject supports a claim to someone else.”122 These two types of justification can come apart. That is to say, a speaker’s claim may play a role in dialectical justification with or

121 Chalmers (2014), 1. Chalmers’ work on intuitions is a direct response to Herman Cappelen’s argument against the centrality of intuitions in philosophical theorizing. I do not attempt to flesh out the details of Chalmers’ critique of Cappelen here.
without supplementation by epistemic justification - a speaker may legitimately appeal to a claim as dialectically justified even if he is not able to articulate any epistemic justification for that claim, which is not to say that no epistemic justification exists. An expert economist’s claim that some tax policy will be detrimental for international trade may be dialectically justified, based on her experience and reliability in making such claims, even if in the moment of assertion she can provide no immediate epistemic justification for it. However, upon further reflection and analysis, it’s likely that she could provide a quite thorough analysis and collection of evidence supporting her intuition.

Intuitions, according to Chalmers, are those claims that are dialectically justified without immediate access to epistemic justification. Features of epistemic justification are broadly inferential, i.e. “inferential, perceptual, introspective, memorial, or testimonial” whereas the dialectical justification of intuitions is broadly non-inferential. Chalmers takes this to be a minimal, but sufficient, negative definition of intuitions that supports their role in philosophical theorizing and in other more general types of inquiry.

However, a purely negative definition of intuitions may prove unsatisfying to some, so I would like to suggest that the relationship between intuition and experience discussed by Fricker makes Chalmer’s view somewhat more digestible. Intuitions, then, derive their dialectical justificatory status from the experiences of the bearer, though the connection between experience and intuition need not have an articulable inferential story. I suggest that if a speaker is likely to have reasonably relevant experiences regarding a specific subject matter, her intuitions on that subject are dialectically justified (i.e., they can serve as premises for her interlocutor in a reasonable dialectic) even if a broadly inferential epistemic justification is not immediately provided or not available.

According to Chalmers, “a claim may simultaneously have both broadly noninferential justification and inferential justification. So the presence of the latter does not entail the nonexistence of the former. It does not even tend to support the nonexistence of the former: it is to be expected that the two will often occur together in philosophical discussion.”123 This is merely to say that if a

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speaker makes some intuitive claim that \( x \), and \( x \) is dialectically justified by her experience, there is also likely a broadly inferential justification for that same claim, whether or not the speaker has access to it in the moment. For example, an art dealer may be able to spot a forgery without being able to articulate an inferential epistemic justification for his claim, though the claim is nonetheless dialectically justified, and further examination may reveal the nuanced variations in brushstroke that provide an additional epistemic justification for his claim.

Michael Devitt articulates what appears to be a somewhat similar view in his “modest theory” of intuitions, which defines intuitions as judgements, like any other judgements, different only with regard to their apparent readiness-at-hand and the speed at which one can express them.\(^\text{124}\) Intuitions are a type of empirical judgement, and as such they are made against a background of previous experience, predispositions, and training. This view mirrors the Fricker/Kuhn/Chalmers position on intuitions as derived from experience, whether or not the exact mechanism of derivation is obvious or articulable.

Devitt is interested particularly in the intuitions of “experts,” as his work is a direct response to certain projects in experimental philosophy that appeal to “folk” intuitions about semantics, in which Devitt argues that the intuitions of expert semanticists are likely more reliable (and fruitful to examine) than folk intuitions. I generalize his claims about expertise for the purposes of my discussion. If intuitions are based on experience (including formal training, as well as social position and lived experience), Devitt’s view on expertise seems plausible. Pinpointing the precise kind of expertise relevant in particular philosophical debates, however, is a more complicated question.

A favorite analogy of Devitt’s is that of the archeologist. As she is working at an excavation site, she sees what appears to be a small stone jutting from the dirt. She makes the unreflective, intuitive judgment that the stone is actually a pig’s jawbone. Due to her training and experience in the narrow task of examining the remains of various animals, we have reason to afford credence to the intuition of the archeologist. Her intuitions (regarding animal bones) are more reliable than those of

\(^{124}\text{Devitt (2012), “The Role of Intuitions,” 7.}\)
non-archeologists.\(^{125}\) This picture both stands in contrast to the “black box” picture of intuitions and the dualism it suggests, and appears to comport with intuitional holism. The archeologist’s intuition is not a sudden, arbitrary mental state, processed as a mere input by some separate rational mechanism. It appears that the intuition, in this case, 1) plays a crucial orienting role in inquiry, 2) derives from and is justified by the archeologist’s past experiences, and 3) is likely to be supported by additional broadly inferential justifications, despite a lack of immediate availability.

3: Etiology and Justification of Intuitional Holism

So, to use the taxonomy of intuitions presented in Chapter 2, intuitional holism is defined by a broadly inferential etiology and a broadly non-inferential dialectical justification. The etiology, on this picture, is broadly inferential as it arises from real experiences, and (contingently or necessarily) unidentified processes which provide the intuition a mediated connection to the non-psychological world through the experiences of the bearer. The dialectical justification, however, is non-inferential. The bearer, or some observer, either has not or cannot pinpoint the inferential processes that gave rise to the intuition, and yet, the intuition is justified by the reasonably relevant experiences of the bearer.

In some cases, an articulable inferential justification is available, though separate from the broadly non-inferential dialectical justification. In these cases, the intuition is merely the first step, the telltale that such an inferential justification already exists, and the interesting philosophical work happens when the bearer reflects (alone, or with the assistance of an interlocutor) on possible sources of the intuition, possible connections to past experiences or other beliefs, and is ultimately able to articulate an inferential justification for the content of the intuition. Consider someone attempting to navigate a car to a new destination, and upon arriving at the correct street, does not know whether the destination is to the right or the left. The driver has the intuition that her destination is to the right, and makes the turn. Surprising even herself, she arrives at her destination minutes later. Reflecting upon this as she exits the car, she realizes that she can recall the map, and that her

destination was generally east of her starting point. It’s also roughly 5pm, and the sun is setting toward the west. She concludes that the right-turn intuition she had at the intersection is additionally justified by her recollection of the map and her knowledge of the time and rotation of the earth. These factors may have been unacknowledged by the driver at the moment of the decision, but regardless, they are conceptually available and work together to provide additional justification for the content of her intuition - and this would be true regardless of whether she actually took the moment to reflect on them.

However, there are other more interesting cases in which an articulable inferential justification is conceptually unavailable - either to the bearer, or more generally. That is, the concepts necessary to articulate an inferential justification are unavailable to the bearer of the intuition, or are nonexistent. The first case is what we often observe in introductory philosophy courses. Novice undergraduate philosophers are asked to consider some thought experiment, arrive at some intuition about the case, and then work through their intuition with the assistance of an experienced professor, in order to learn the conceptual vocabulary and articulate an inferential justification for the content of the intuition. This is not to say that the student is merely reciting an inferential justification back to the professor - it can certainly be the case that, given her new conceptual vocabulary, the student might also uncover novel inferential justifications for her intuition.

However, perhaps even more interesting are cases where an intuition seems to be plainly obvious to an individual, and the relevant conceptual apparatuses don’t (yet) exist to articulate an inferential justification for the content of the intuition. Take, for example, the work that feminist theorists have done around the concept of “sexual harassment.” Before the concept was conceptually available, women likely harbored nascent intuitions that something was “off” about certain interactions in the workplace. Taking the intuition as dialectically justified by the experiences of these women allowed feminist philosophers and lawyers, in conjunction with the bearers of these intuitions, through conversation and consciousness raising groups, to develop the conceptual apparatus to provide supplemental inferential justification for the content of the initial intuitions. Work in many areas of philosophy may function in just this way - some intuition seems plainly obvious to its bearer, for
example, an intuition that a Gettier case is not a genuine instance of knowledge, and the interesting work happens in attempting to find or refine or articulate the concepts that would provide inferential support for the initial intuition.

4: Conclusion and Relevance for Experimental Philosophy

There remains the question of what constitutes the relevant experience to justify intuition claims for the purpose of experimental philosophy methodologies. Recall Devitt’s analogy of the archeologist and the pig’s jaw bone jutting from the dirt. It is her training and familiarity with animal bones that dialectically justifies her intuition, and that prompts her audience to take her claim as more reliable than the average person’s. Consider, instead, a rare coin collector walking down the street. He has the relevant training, familiarity, and expertise with regard to numismatics. He sees a shining bronze-colored coin lying on the sidewalk and thinks, “a penny.” In this circumstance, it is difficult to see why we should regard his intuition as any more reliable than the intuitions of the average American who encounters pennies daily. The question is whether the philosophical questions about which we are eliciting intuitions are as specialized as pigs’ jaw bones or as ubiquitous as pennies. I suggest that for epistemic and moral thought experiments, in particular, the relevant experience to justify intuitions in these cases is satisfied by simply living in the world and navigating knowledge claims and moral judgements. That is to say, if anybody’s intuitions in these cases are dialectically justified, then everybody’s intuitions are.

So, if epistemic and moral intuitions are dialectically justified by the experiences of their bearers, this seems to be a prima facie reason to continue appealing to intuitions in philosophical practice. And if 1) one of the motivations of experimental philosophy is to diversify the landscape of philosophical discussion, 2) the “folk” generally have the relevant experience to dialectically justify their epistemic and moral intuitions, and 3) academic philosophers tend to represent a small subset of

126 Here I set aside Devitt’s primary point that semantic intuitions require a particular kind of expertise.
127 Though, conceivably, to varying degrees.
lived experiences (traditionally, the experiences of white, upper-class, men), then soliciting intuitions from individuals with diverse lived experiences seems to be a worthwhile endeavor.

That said, intuitional holism does not support certain experimental philosophy methodologies that employ FCIS studies based on the dualistic, “black box” picture of intuitions, in which intuitions are merely collected as data points to be processed by academic philosophers. Rather, it suggests that the interesting philosophical work happens in fleshing out potential inferential justifications for intuitions - where this first requires assuming that intuitions are justified by relevant experiences and that the interesting philosophical project is examining how those intuitions are related to the specific experiences of their bearers. This suggests that a successful experimental methodology would require something beyond the mere collection of intuitions - potentially involving further probing, conversation, and qualitative study. In the concluding chapter of this dissertation, I suggest some preliminary methodological recommendations, and further examine how a revised version of experimental philosophy could evade concerns about scientism and epistemic objectification, as discussed in Chapters 3 and 4, respectively.
Chapter 6: Recommendations for the Experimental Philosopher

The culminating goal of this dissertation is to provide a set of recommendations for experimental philosophers that takes into account work in feminist epistemology in the preceding decades - in an effort to both improve the methods of experimental philosophy, and to position experimental philosophy as a potentially useful tool for feminist epistemologists, with the ultimate aim of contributing to more truth-conducive philosophical methodologies in general. This chapter primarily explores how the intuitional holism discussed in Chapter 5 may resolve many of the concerns raised in Chapters 1 through 4. Then, I provide more moderate and speculative suggestions as to how influences from both standpoint theory and feminist empiricism may inform experimental philosophy. Finally, I briefly suggest some additional minor methodological recommendations that may be conducive to the goals laid out in this dissertation.

1: The Upside of Intuitional Holism

In Chapter 4, I argued that projects in experimental philosophy which rely on Forced-Choice Intuition Solicitation (FCIS) studies reinforce a reciprocal loop between dualism about intuitions and methodological scientism in the field of experimental philosophy. Further, I argued that this approach often instantiates a type of malicious epistemic objectification in which study participants are denied epistemic agency and treated as mere sources of information. This is particularly counterproductive if one of the goals of experimental philosophy is to explore how people think. The very object of study in many experimental philosophy projects would appear to be the epistemic approach or activity of study participants - it’s difficult to see how an experiment of this type could succeed if it fails to engage with participants as full epistemic agents.

The intuitional holism laid out in Chapter 5, in addition to being a more accurate account of intuitions as argued throughout the chapter, offers an intervention for experimental philosophy in two ways: 1) by directly disrupting the dualism/scientism loop and 2) by allowing for a more nuanced
appreciation of the ways in which study participants’ responses are connected to other commitments and beliefs - that is, by treating them as full epistemic agents, and thus avoiding epistemic objectification.

As I argued in Chapter 4, in treating intuitions as isolatable units of study divorced from participants’ other commitments and beliefs, dualism about intuitions contributes to scientism in experimental philosophy by providing quantifiable data sets that neatly facilitate a scientististic approach overly reliant on quantitative analysis. One benefit of intuitional holism is its resistance to quantitative analysis. The claim that resistance to quantitative analysis can be advantageous is perhaps controversial, but it is not wrong a priori - quantitative analysis is not, by fiat, obviously preferable or superior in every area of inquiry. In the scientististic context discussed in Chapter 3, and given the trajectory of experimental philosophy thus far, there is a real danger of data collection and manipulation for data’s sake, in a way that runs counter to the purported aims of experimental philosophy. Chapter 3 also discusses, at length, the perils of uncritical confidence in the objectivity and fairness of quantitative analysis. This is a functional upshot of intuitional holism. There are likely other ways to avoid scientism and epistemic objectification, and instances in which scientism and epistemic objectification can occur without quantitative analysis - but it is also true that the connection between dualism and scientism discussed throughout this dissertation, and its contribution to epistemic objectification, are significantly undercut if we deprioritize quantitative analysis.

The second, more pertinent, benefit of intuitional holism is more directly related to concerns about epistemic objectification. The problem of epistemic objectification in experimental philosophy, as discussed in Chapter 4, arises precisely because study participants are treated merely as sources of information. More specifically, as sources of intuition data points that are viewed as isolatable from participants’ other commitments and beliefs. Intuitional holism rejects the notion that intuitions are neatly divisible from other inferential processes, commitments, beliefs, and experiences and instead insists that the interesting philosophical work is in the exploration of how these pieces are interconnected. If we maintain that one of the purported motivations of experimental philosophy is the impetus to diversify the perspectives that contribute to philosophical theorizing, then engaging non-
philosopher participants is likely a useful endeavor, but only insofar as our methods examine the
connections between intuitions and other features of how people think - that is, only insofar as
experimental methods embrace intuitional holism. As I argued in Chapter 5, this requires treating
interlocutors as full epistemic agents, and appears to necessitate a more nuanced methodology than
multiple-choice questionnaires.

2: A Qualitative Approach

I contend that experimental philosophy must adopt a supplementary qualitative approach to
examining the intuitions of study participants. FCIS studies may still provide an entry point, or a
temperature check, that can be useful in orientating and guiding research. But as I’ve argued
throughout, they do not appear to provide the appropriate kind of evidence for making the types of
conclusive pronouncements that they’re often used to make. If, as I’ve argued, the interesting
philosophical work happens in the exploration of how intuitions connect to other inferential processes,
beliefs, and commitments, experimental philosophy would do well to adopt (no less scientific)
qualitative approaches from fields such as anthropology and psychology.

Catherine Womack and Norah Mulvaney-Day also advocate for the incorporation of a qualitative
approach, for many of the same reasons, though not couched in a particular account of intuitions:

What we argue is that philosophers could (and in many cases should) go further into the
realm of empirical investigation, incorporating information not just through quantitative
fixed-answer surveys about standard philosopher-designed thought experiments, but also through gathering qualitative information about real-life embedded experiences that use the philosophical concepts in question. In this way, by allowing people the power to frame scenarios themselves and identify which features are salient for their particular judgments, philosophy genuinely incorporates the experiences of individuals into a coherent, complex, and multifaceted account of important philosophical concepts.\footnote{Womack and Mulvaney-Day (2012), 114.}

I have little to say to expand upon their recommendation. The contribution of this dissertation
project has been to examine the features of experimental philosophy that underpin its current over-
reliance on FCIS studies (a flawed, dualistic conception of intuitions and a scientistic methodology) and
to offer a revised account of intuitions that substantiates a turn to qualitative methods. In Chapter 4, I argued that the use of FCIS studies perpetuates at least a benign kind of epistemic objectification (and in many cases, a detrimental kind of epistemic objectification). In the context of experimental philosophy, even a benign kind of epistemic objectification that fails to treat participants as full epistemic agents seems to forestall progress on the very question that experimental philosophers are aiming to explore - namely, *how people think*. The incorporation of qualitative methods would allow for a more nuanced examination of study participants' experiences, beliefs, and commitments in a way that facilitates a more “coherent, complex, and multifaceted account of important philosophical concepts.”

Womack and Mulvaney-Day’s argument may stand alone without a discussion of intuitions or scientism, but once we are clear about the limitations of a dualistic conception of intuitions and the compounding ramifications of a scientistic methodology, the appeal of a qualitative approach becomes even more apparent.

There remains the question of how to adopt a qualitative approach, practically speaking. For that, I turn to an extended excerpt from Womack and Mulvaney-Day, outlining a potential questionnaire for a hypothetical trolley problem experiment in which participants are presented with a choice between allowing the train to stay on course (killing five people) or to push a fat man off a bridge in order to derail the train.

Here, the scenario itself is still predetermined a priori by the philosopher/researcher. But for the purposes of allowing the reasoning of the respondent to emerge, we might ask the following follow-up questions:

- Why or why not?
- Tell me what you thought about before you said your answer? Walk me through what you were thinking and feeling as you made your decision.
- Do you think most people would answer the way you did? Why or why not?

The philosopher/researcher might want to structure the responses according to themes of interest. In such cases, the interview guide could be structured to elicit particular areas of interest:

*Family and other relationships*
- Would you feel the same way if the person standing near the tracks was an immediate family member? Why or why not?
- What about if the person was a close friend? Why or why not?

*Patterns for attributing blame and responsibility*

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• (If yes, to pushing fat man) Do you consider yourself responsible for causing the fat man’s death? Why or why not?
• What if you were a family member of the fat man? Would you blame the bystander for causing his death? Why or why not? How would you feel about the bystander’s action?

**Discrimination**
• What if the person who could stop the train was trim rather than fat?
• What if the person who could stop the train was a woman rather than a man?
• Would any of these scenarios change your original answer? Why or why not?

Lastly, we may decide to abandon the scenario altogether and ask the informant to tell us a story that illustrates a dilemma similar to the trolley story. This type of approach will elicit data that are “closest” to the informant, and hence may have the possibility of uncovering the most surprising information. Using a narrative approach, the trolley story would be shared with the respondent, but the respondent would not be asked to answer it. Instead, the respondent would be asked to tell a story using the following probes:
• Can you think of a time when you were faced with a decision similar to the trolley story? (PROBE: a time when you had to hurt somebody in order to help somebody else)
• Please tell me about that experience? What happened? What did you decide to do? Why?
• Did you decide quickly or was it hard to make the decision? Walk me through your thinking process as you were making that decision.130

The questionnaire developed by Womack and Mulvaney-Day is designed precisely to examine the connections between participants’ intuitions and their other commitments, beliefs, and experiences. The questionnaire elicits introspection, critical thinking, and makes room for novel contributions to the discussion - in just the way that philosophers might engage with each other about a complex, multi-faceted moral dilemma.

There is a potential critique of qualitative methods concerning the expediency of such an approach. Certainly designing and implementing qualitative, interview-based studies is more time and resource intensive than corresponding FCIS studies. I have two responses to this kind of concern. First, as I’ve argued throughout this dissertation, FCIS studies often appear to be collecting data that isn’t useful in addressing the kinds of questions under consideration. If this is true, it’s simply irrelevant how much faster and more efficient it is to collect the wrong data.

130 Womack and Mulvaney-Day (2014), 123.
Second, even if one were to argue that multiple, iterative FCIS studies could address some of the concerns raised throughout this dissertation, it’s not obvious that an ongoing series of FCIS studies would be more efficient than a handful of well-constructed qualitative studies. For example, there are certain projects in experimental philosophy, such as the Turri et al. study discussed at length in Chapter 4, that aim to uncover correlative and causal relationships among various commitments and beliefs of study participants. Projects like these acknowledge that simple, first order FCIS studies seem to be missing something important about how study participants are responding to thought experiments. Turri et al.’s project introduces a number of additional variables and employs advanced causal modeling in an attempt to isolate the relationship between the actionability judgements and knowledge judgements of study participants. This approach, still reliant on FCIS studies, endeavors to probe on connections among participants’ intuitions and other commitments by something like a process of elimination - by running multiple iterations of related experiments that introduce and isolate more and more variables. First, I would reiterate my argument that forced choice studies, insofar as they are constructed and interpreted by the experimenters, leave no room for truly novel ways of thinking about the questions under consideration. Second, even if a critic takes issue with my substantive arguments against FCIS studies, the efficiency and expediency critique of a qualitative approach fails to hold water if dozens of quantitative studies are required to probe on the kinds of connections that a single qualitative study might uncover.

My ultimate methodological recommendation for experimental philosophers is fairly modest. I am not calling for a wholesale rejection of experimental philosophy, or even a rejection of FCIS studies, but rather for the incorporation and prioritization of qualitative methods. The remainder of this concluding chapter offers suggestions for some potentially fruitful areas for further exploration.

3: Experimental Philosophy and Standpoint Theory

Nancy Hartsock’s 1983 “The Feminist Standpoint: Developing the Ground for a Specifically Feminist Historical Materialism” is often thought of as the genesis of feminist standpoint theory. In it,
Hartsock calls for an analysis of the sexual division of labor as an epistemological and liberatory tool for uncovering and altering mechanisms of oppression. Hartsock argues that Karl Marx’s historical materialism offers a way of analyzing how women’s relationships to production and reproduction can result in a uniquely privileged epistemic position, particularly with regard to social phenomenon. Hartsock’s use of the Marxist model set the stage for the development of further feminist standpoint theories. While standpoint theory has evolved in recent decades, the unifying thread of contemporary standpoint theories relies on the idea that the social location of epistemic agents can provide or facilitate the development of uniquely advantageous epistemic perspectives on certain phenomenon.  

In Chapter 5, in my elucidation of Intuitional Holism, I appealed to David Chalmers and Miranda Fricker to argue that the reasonably relevant experiences of a speaker can dialectically justify her intuitions on some specific subject matter. Following David Chalmers, *dialectical justification* is “how a subject supports a claim to someone else,” as opposed to *epistemic justification*, which is “what supports a subject’s belief.” The point here being that relevant experience can be pointed to as dialectical justification to support certain intuitive claims, even if no epistemic justification is immediately available. The example I offered involved an expert economist’s intuition that some tax policy will be detrimental for international trade - there may well exist epistemic justification for the economist’s claim, but it is her experience and expertise that makes the claim dialectically justified even if no such epistemic justification is immediately available. We might take standpoint theory to reflect a similar notion with regard to social location. A subject’s experience of her social location might substantiate certain intuitive claims about social phenomenon relevant to her experience.

How might this be relevant to the methodological approach of experimental philosophy, aside from general support for Intuitional Holism? If my argument in favor of incorporating qualitative methods has been convincing, we might consider turning to standpoint theory to guide how participants for targeted, qualitative research projects are recruited. Instead of engaging in expansive FCIS studies that aim to make universalizable claims about how people, in general, think, we might find value in conducting more focused research with participants who have lived experiences or social locations that

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131 Anderson (2017).
are uniquely relevant to the research questions under consideration. For example, we might think that judges or police officers have relevant experience in making knowledge claims about other speakers, that doctors or military personnel have relevant experience in grappling with high-stakes utilitarian decision-making, or that oppressed or marginalized groups have relevant experience in disambiguating the specific moral harms of various social phenomenon.

However, developments in standpoint theory have proliferated since Hartsock’s seminal work in 1983. My suggestion here is only a starting point for experimental philosophy, as there are a variety of perspectives on what constitutes social location, what constitutes relevant experience, what kind of epistemic advantage these might lend, etc. For example, Elizabeth Anderson states that:

A complete standpoint theory must specify (i) the social location of the privileged perspective, (ii) the scope of its privilege: what questions or subject matters it can claim a privilege over, (iii) the aspect of the social location that generates superior knowledge: for example, social role, or subjective identity; (iv) the ground of its privilege: what it is about that aspect that justifies a claim to privilege; (v) the type of epistemic superiority it claims: for example, greater accuracy, or greater ability to represent fundamental truths; (vi) the other perspectives relative to which it claims epistemic superiority and (vii) modes of access to that perspective: is occupying the social location necessary or sufficient for getting access to the perspective?  

Standpoint theorists differ on many of these points, and different research questions in experimental philosophy might benefit from consideration of different varieties of standpoint theory. This project does not aim to provide a full extrapolation of an experimental philosophy informed by standpoint theory, or a standpoint theory to support experimental philosophy. My point here is merely that these appear to be precisely the kinds of features that experimental philosophers might consider in thinking about the relevant experience or social location of study participants, and that further engagement with standpoint theory might be generally fruitful for experimental philosophers.

4: Experimental Philosophy and Feminist Empiricism

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While disagreements emerge among feminist empiricists, as they emerge among mainstream empiricists of various stripes, the unifying commitment setting feminist empiricists apart from other feminist epistemologists is that “empirical success is held to be a necessary condition for accepting scientific theories, models, or auxiliary hypotheses as justified.”\textsuperscript{133} What sets feminist empiricism apart from other varieties of empiricism is not merely the feminist commitments of its practitioners, but specific methodological commitments shaped by feminist considerations, such as a heightened scrutiny of the roles that power, gender, and social structures play in empirical investigation, motivated in part by the goal of improving our theories. One might sketch these commitments not as an investigation of how empiricism can be used in the service of feminism, but rather how feminist considerations can improve scientific theories.

Earlier chapters of this dissertation call into question the efficacy of experimental philosophy as an adequate or appropriate method for counteracting bias and increasing diversity in philosophical theorizing. Feminist empiricism has long been grappling with exactly these issues with regard to empirical methodologies, and various approaches and feminist empiricist methodologies have emerged. I have assumed throughout this project that experimental philosophy is broadly interested in mitigating potential theoretical and social biases in our theorizing that have occurred as a result of our reliance on a limited pool of intuitions - those of philosophers who are primarily white, Western, middle-class, men. The respective motivations of experimental philosophy and feminist empiricism seem to roughly overlap, united by the impetus to develop methodologies for mitigating biases that forestall progress on questions of import. While feminist empiricists offer a variety of different views on the nature of bias, its harms and/or benefits, and perspectives on objectivity, the point of this section is merely to suggest that feminist empiricism provides yet another robust body of literature that would appear directly relevant to experimental philosophy. Even if the collection of critiques introduced throughout this dissertation (around the nature and role of intuitions, the scientism manifest in experimental philosophy, the threat of epistemic objectification, etc.) remain unconvincing, I would argue that

\textsuperscript{133} Intemann (2010), 780.
insofar as experimental philosophy is an empirical method motivated by concerns about bias in theorizing, the incorporation of principles and methods from feminist empiricism may prove useful.

As just one illustration of a potentially fruitful overlap between feminist empiricism and experimental philosophy, this section introduces Helen Longino’s notion of science as subjective interaction, her insistence that an appeal to scientific methodology alone does not eliminate bias, and her guidance for cultivating the objectivity of scientific communities. Longino does not explicitly engage with experimental philosophy, and while I don’t rehearse all of the details of her arguments, I suggest that her framework provides an example of how feminist empiricism may facilitate and support the efforts of experimental philosophers to mitigate bias and diversify the perspectives that contribute to our philosophical theorizing.

Much of Longino’s work focuses on defending the claim that “critical interactions among scientists of different points of view [are] required to mitigate the influences of subjective preferences or background assumptions and hence theory choice.” Longino advocates for a view of objectivity as a (potential) characteristic of scientific communities, rather than individual practitioners, and critiques discussions of scientific method that focus on the actions of individuals rather than the social structures of scientific communities that facilitate and encourage critical conversation. Longino’s critique implicitly entails a notion relevant to experimental philosophy: that individual theorists, in a vacuum, are incapable of developing objective theories. This directly relates to the concern that a limited pool of intuitions in philosophical theorizing cannot facilitate the development of universalizable claims. Experimental Philosophy attempts to ameliorate this issue by expanding the pool of intuitions, primarily through FCIS studies. Longino instead looks at the functional and social structures of scientific communities. She suggests that scientific communities will be objective to the degree that they satisfy four criteria: 1) there must be recognized avenues for the criticism of evidence, of methods, and of assumptions and reasoning; 2) there must exist shared standards that...

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134 Longino (1996), 40.
critics can invoke; 3) the community as a whole must be responsive to such criticism; 4) intellectual authority must be shared equally among qualified practitioners.

Experimental philosophy is motivated in part by the impetus to counteract the theory leadenness and homogeneity of philosophers’ intuitions with regard to thought experiments. Longino provides a useful complement by arguing that a functioning intellectual community that allows for critical interaction will “reduce the likelihood that the idiosyncratic preferences of individuals will be incorporated in the public body of scientific knowledge,” and mitigate the effects of “subjective preferences on background assumptions.”135 If the worry for experimental philosophy is that a particular kind of persons with particular theoretical commitments might dominate philosophical discourse via a reliance on their own intuitions, I suggest that Longino’s prescriptive advice seems to address just this kind of concern.

Note that the scope of “subjective preferences” seems to be rather open-ended. I suggest that we should not take subjective here to mean an opinion influenced exclusively by whims and emotions, but rather any kind of commitment, belief, preference, or judgment particular to an individual that they hold prior to engaging in discourse surrounding some specific problem, theory, or phenomenon. This can range from implicit theoretical commitments to socio-cultural influences. Further, I believe that this looseness in accommodating a range of subjective preferences is actually an advantage of Longino’s framework. Some purported motivations for experimental philosophy are to mitigate the negative influences of 1) prior theoretical commitments of philosophers, and 2) socio-cultural influences that the majority of academic philosophers might share in light of the homogeneity of the field. If we allow that both of these potential influences can be captured under the umbrella of subjective preferences (along with various other preferences, beliefs, and commitments), we might think that Longino’s framework has a good chance of mitigating their effects as well. Primarily in her third and fourth criteria, a responsive community and the sharing of intellectual authority, Longino

135 Longino (1996), 40.
advocates for an intellectual community in which the social dominance of some practitioners does not inevitably guarantee that their theories become the most widely accepted.

Whether or not Longino’s framework might adequately address the concerns of experimental philosophers would likely require a more nuanced examination of how her framework would apply to specific philosophical debates. For example, would adopting her recommendations in theorizing about knowledge judgements be more or less useful than the continued iteration of FCIS studies? That is, could structural and social adjustments to the philosophical subfield of epistemology (recognized avenues for criticism, shared standards of evaluation, responsiveness to criticism, and the sharing of intellectual authority) help to address concerns of experimental philosophers about over-reliance on a limited pool of intuitions? These specific questions are beyond the scope of this dissertation, but are exactly the kind of potentially worthwhile explorations that exist at the intersection of experimental philosophy and feminist empiricism. There are certainly other feminist empiricists whose work might be relevant for specific projects in experimental philosophy; the exploration of Longino presented here is merely intended as an illustration of just one way in which the fertile intersection might be mined for useful recommendations, and is to be considered as an appeal for more research in this area.

5: Conclusion and Areas for Future Consideration

Insofar as one of the aims of experimental philosophy is to diversify the pool of perspectives that contribute to our philosophical theorizing, in an attempt to develop better and more accurate theories, the impetus to examine the perspectives and intuitions of non-philosophers, and more generally how people think, appears to be a worthwhile endeavor. The ultimate aim of this dissertation project has been to examine the ways in which particular methodologies may be undermining some of the very goals that experimental philosophy purports to pursue. As the motivation to incorporate diverse perspectives into theorizing has long been central to many positions in feminist epistemology, and of concern to feminist theorists more generally, exploring the intersection between experimental
philosophy and feminist epistemology has been a fruitful framing for the articulation of some potential methodological problems, and potential methods to address them.

Specifically, incorporating qualitative methodologies can help in addressing three of the most significant problems discussed throughout this dissertation. First, qualitative methods appear to sidestep many of the debates about the nature and role of intuitions, as study participants are allowed time and space to provide more reflective responses in addition to (or in lieu of) intuitions. This is consistent with the intuitional holism discussed in Chapter 5, which recognizes the importance of examining connections among intuitions, experience, and other commitments and beliefs. Second, qualitative methodologies appear to avoid the potential threat of uncritical confidence in the objectivity and fairness of quantitative analysis, and thus are less likely to meet the conditions for scientism outlined in Chapter 3. Finally, qualitative methods, in inviting participants to reflect, draw connections, and articulate justifications (among other things), appear to allow participants to exercise a more robust epistemic agency than FCIS studies, thus avoiding the threat of the potentially detrimental epistemic objectification discussed in Chapter 4.

In this concluding chapter, I also recommended further exploration of both standpoint theory and feminist empiricism as potentially fruitful areas for further research. Furthermore, I would like to briefly suggest that that experimental philosophers also consider exploring other interdisciplinary research methods that might contribute to their approach. Of course, there is already a fair amount of overlap and conversation among experimental philosophy and fields such as psychology and cognitive science. However, if experimental philosophers embrace qualitative methods to the extent which I’ve suggested, there might also be value in a further exploration of ongoing work in fields such as anthropology and sociology. And, if the goal of incorporating diverse perspective into theorizing remains an important consideration, I would recommend that experimental philosophers look even further afield, particularly in the process of experimental design and participant recruitment - for example, drawing ideas from non-western philosophy, political science, literary criticism, and public philosophy events and forums. Many of the questions of import to experimental philosophers have appeal beyond the scope of professional philosophy, and novel ways of articulating questions and
concerns might well appear in places where we least expect them. For example, codifying and
analyzing an online message board debating the merits of some utilitarian policy recommendation
might provide just as much insight into how people think about utilitarian decision making as a limited
scope FCIS study - and it may suggest ideas as to how to refine or reframe the FCIS studies that
experimental philosophers do choose to run.

Ultimately, the central recommendation of this project is rather measured - I am not suggesting we
abandon experimental philosophy, or even abandon FCIS studies, but merely that experimental
philosophers prioritize (or at the very least, more significantly incorporate) qualitative research into
their portfolio of methodological options, while remaining open to other methods of soliciting input
from non-philosophers.
Bibliography


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