Armchair-friendly Experimental Philosophy

Kaija Mortensen & Jennifer Nagel

Introduction

The difference between traditional philosophy and experimental philosophy is a difference of methods. But to say that methods are different is not necessarily to say that they are incompatible, or that one must be pursued at the expense of the other. Although early work in experimental philosophy may have generated the impression that experimental methods must be hostile to traditional (or 'armchair') methods, much recent work has shifted towards reconciling experimental and traditional ways of tackling philosophical problems. This chapter examines ways in which experimental methods can complement and strengthen armchair-style philosophy.

The first section sketches the early history of experimental philosophy. Particular attention is given to the reasons why experimental methods were thought to undercut traditional philosophical practice. The second section takes a closer look at traditional philosophical practice, and in particular, at the role of intuitive judgments within armchair philosophy. The third section reviews armchair-friendly experimental work in a variety of domains in philosophy.

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1. Looking back: the history of the experimentalist challenge

The expression 'experimental philosophy' dates back at least to 1666, figuring in the title of pioneering philosophical naturalist Margaret Cavendish's *Observations upon Experimental Philosophy,* published that year. Many philosophers over the centuries have made efforts to integrate empirical and traditional philosophical methods. However, the first experimental philosopher in the contemporary sense was Arne Naess, who in 1938 published an empirical study aimed at challenging the philosophical methods of his contemporaries. Naess observed that many philosophers theorizing about truth appealed to the "common sense" theory of truth without empirical backing. Naess conducted a series of quantitative surveys designed to map what subjects with no philosophical training said about truth. He found that participants asked to define truth did not converge on any shared theory, raising a challenge about exactly what philosophers were referring to when they spoke of "the common sense theory of truth".

Critics of Naess were swift to point out that ordinary people could have a common sense theory guiding their understanding of truth and their use of the word 'true' even if they could not state that theory explicitly. According to traditional philosophers such as Frank Jackson, common sense theories or 'ordinary conceptions' of free action, knowledge and other philosophical targets are not necessarily available to direct introspection but are revealed by our use of words and our judgments of particular cases (Jackson 1998). However, empirical evidence is also useful in showing how ordinary people use words or handle particular examples, especially where they are doing so intuitively, or without appeal to an explicit theory. Inspired by the rise of

naturalism and a new willingness of engage with cognitive psychology, the next wave of critics set their sights on traditional philosophy's reliance on intuitions about particular examples.

In 1998, a volume titled *Rethinking Intuition* anthologized the proceedings of a conference held at the University of Notre Dame in April of 1996, a conference whose aim was to provide "a setting where psychologists and philosophers had an opportunity to explore and debate the nature of intuitions and their significance for contemporary philosophy" (DePaul and Ramsey 1998, x). In one of this anthology's most-cited chapters, "Reflection on Reflective Equilibrium", Robert Cummins argues that traditional philosophers are wrong to assume that intuitions support philosophical theories in the way that observations support scientific theories. Within science, when conflicting observations arise, one or both must be dismissed, or in Cummins's vocabulary, identified as an "artifact", where an artifact is "an observation that carries information about the observational apparatus or process rather than about the target" (1998, 116). When an observation is not easily explained by one's best working theory, the scientist must either update the theory to accommodate the observation or "explain away" the errant observation as a mere artifact. Cummins argues that intuitions never entitle us to update our philosophical theories; rather, "at bottom, *all* philosophical intuition can be explained away" (1998, 116). Cummins maintains that philosophical intuitions do not replicate reliably, and that intuitions invariably tell us about our subjective processes rather than their objective target domain.

Cummins contends that in order to provide objective evidence, any observational technique must be calibrated. Such calibration requires some independent access to the target of inquiry. For

example, in order to calibrate a new kind of microscope, one must have independent access to the domain one is investigating so one can make sure that the microscope is correctly representing that domain. In philosophy, Cummins argues, we use the method of intuitions only when we have no independent access to the target domain: as soon as we have a better than intuitive method of probing—for example, when we can use the methods of physics to examine the structure of space and time—we stop relying on mere intuition. In his view, "philosophical intuition (…) can be calibrated only when it is not needed" (1998, 118). Cummins's concerns about reliability and calibration are taken seriously by experimental philosophers who use survey methodology to try to show that key intuitions in some philosophical debates, rather than being universally shared, are mere artifacts of some specific interaction between the survey and the psychology of the survey takers.

Stephen Stich and Jonathan Weinberg have championed this approach, conducting some of the earliest experimental philosophy studies to put specific empirical data behind Cummins's worries. They launched a two-pronged attack on traditional methods of conceptual analysis, starting in their 2001 review of Jackson's book *From Ethics to Metaphysics*. There Stich and Weinberg observe that "Jackson seems to making some empirical assumptions about people's intuitions and the psychological mechanisms that give rise to them" (2001, 637). Their brand of experimental philosophy uses empirical methods to challenge these assumptions.

Challenge #1: Content. Taking Frank Jackson's defense of the traditional method of conceptual analysis as their target, Stich and Weinberg criticize traditional philosophers for assuming the

content of their intuitions is typical: how can philosophers be so sure what "our" intuitions might be on any given question? Stich and Weinberg aim to demonstrate empirically that what philosophers assume on the basis of their own intuitions may not hold true of the general population.

Arguing on behalf of traditional methods, Jackson claims that "often we know that our own case is typical and so can generalize from it to others" (1998, 37); Jackson also claims that there is little point in analyzing concepts that differ from those in common use. The criticism Stich and Weinberg launch is especially damning because if Jackson's own intuitions aren't representative of the intuitions of the folk, then his analysis is by his own admission pointless. The strategy of suggesting that a philosopher's intuitions may be atypical has been taken up in several different forms by experimental philosophers.

Trailblazing studies of this type fall into two categories. One set of studies seeks to assess what the "folk theory" is in certain key debates. The point of this investigation is to assess burden-of-proof claims made about which position is "intuitive" or "commonly held". Such studies aim to arbitrate, for example, disputes between moral objectivists and moral relativists, indeterminists and determinists, funtionalists and physicalists (Nahmias, Morris et al. 2004, Nichols 2004, Nahmias, Morris et al. 2005, 2006, Knobe and Prinz 2008). Another set of studies aims to challenge the philosophical practice of treating intuitions as evidence by showing that our intuitions about this or that case are influenced by epistemologically irrelevant factors such as demographic diversity (ethnic, socioeconomic, etc.), and instability (framing effects, context

effects, order effects and materials effects) (Petrinovich and O'Neill 1996, Weinberg, Nichols et al. 2001, Nichols, Stich et al. 2003, Machery, Mallon et al. 2004, Swain, Alexander et al. 2008). Some of the armchair-friendly experimental philosophy we survey in section 3 below aims to show that these claims about diversity and variability are overstated: in many important cases intuitions are widely shared and appropriately robust.

Challenge #2: Mechanisms. Stich and Weinberg also challenge Jackson's assumption that "these intuitions derive from something that can plausibly be described as a theory" (2001, 638). Stich and Weinberg write "the rich empirical literature on concepts" indicates "there is a wide range of hypotheses about non-theory-like structures that might guide our classificatory intuitions" (ibid.). For example, Stich and Weinberg propose "investigating whether intuitions about knowledge, free action, causation and other philosophically important concepts might be subserved by an exemplar-like mechanism" (2001, 639). It remains an open empirical question how many philosophically significant concepts are applied in a theory-based way; it is also an open question how much this matters to the viability of traditional philosophical methods. While Jackson himself may be committed to the existence of a theory-driven way of classifying intuitive examples, it is unclear that traditional philosophers are obliged to follow Jackson in that commitment.

Stich and Weinberg criticize traditional philosophical methods for misunderstanding both the evidential basis of their intuition-driven arguments and the mechanisms behind these intuitions. Their attack on traditional philosophical methods sets the stage for positive experimental

philosophy projects that seek to better understand the structure of philosophically important concepts as well as the cognitive mechanisms behind the judgments we make using these concepts. Joshua Knobe and Shaun Nichols set this agenda, both in their early experimental work and their "Experimental Philosophy Manifesto"(2008). They write, "Like philosophers of centuries past, we are concerned with questions about how human beings actually happen to be....Unlike the philosophers of centuries past, we think that a critical method for figuring out how human beings think is to go out and actually run systematic empirical studies" (2008, 3). Early in the history of experimental philosophy, Knobe (2003) conducted a study that revealed that evaluative judgments we make about agents (for example, whether they are morally good) can affect our non-evaluative judgments about them (for example, whether they are acting intentionally). The "Knobe Effect", also called "the side-effect effect", has since been replicated in many other domains and sparked an ongoing search for the mechanisms behind such interaction effects. In a similar vein, Nichols (2004) has explored the specific ways in which ordinary people are (or are not) committed to objective moral truth.

In both strands of experimental philosophy (content and mechanisms), we see both a critique of traditional methods and a method of empirically expanding the reach of traditional methods. On the negative side, sorting out the intuitions that do not replicate well could leave us with a firmer set of intuitive judgments to serve as evidence for our theories. Also, empirical data may well show that philosophers have been making false assumptions about the structures of the concepts they seek to elucidate. On the positive side, using empirical methods to collect intuitions in a systematic way could enable us to construct and support more fine-grained theories, responsive to subtle patterns of intuition that are only evident through extensive and controlled testing.

These more fine-grained theories could help elucidate both the structures underlying our intuitive judgments and the nature of philosophically interesting topics such as knowledge, free will, and moral responsibility.

Experimental Philosophy emerged on the scene as a movement that used the techniques and findings of cognitive psychology to raise critical questions of traditional philosophical methods. However, as Experimental Philosophy has matured, these negative projects have been increasingly overshadowed by positive ones. According to a recent statistical analysis of over 400 experimental philosophy articles published between 2009 and 2013, less than 1% argued for some version of the conclusion that intuitions are unreliable as a source of evidence in philosophical research; over 99% aimed to make some positive contribution to first-order philosophical debates through the use of experimental methods (Knobe 2013). To assess the extent to which this positive work complements traditional methods rather than threatening them, we need to take a closer look at those methods: this is the task of the next section.

2. What is the armchair, anyway?

To see how traditional philosophical methods might be supported, rather than just challenged, by empirical work, it is helpful to examine the nature of traditional philosophical methods. A great variety of different methods have some claim to count as traditional, from Plato's dialectical method to Descartes's introspective examination of his ideas in the *Meditations*, to Locke's 'plain, historical method' of reviewing the ways in which knowledge is acquired and words are used. Formal methods, whether the syllogistic logic of the medievals or more contemporary

forms of logic, decision theory, and semantics, should certainly count as traditional in virtue of their now well-entrenched place in philosophy. However, there is one traditional method, in use since the time of Plato, that has stood out as the main target of experimentalists: the method of consulting intuitions about particular cases. This traditional method will be our main focus here.

We take intuitions to be non-perceptual judgments that are produced without explicit reasoning. This way of characterizing the intuitive lines up with the ordinary English sense of 'intuitive' identified by the Oxford English dictionary as dating back to 1645: "Of knowledge or mental perception: That consists in immediate apprehension, without the intervention of any reasoning process." There is a long tradition of understanding the intuitive along these lines in philosophy. For example, Locke (1689) contrasts intuitive with demonstrative reason, where demonstrative reason runs through a series of consciously accessible stages, in contrast to the immediacy of the intuitive. Edmund Burke (1790) characterizes the intuitive as proceeding "without any elaborate process of reasoning." The noun 'intuition' has several obsolete senses dating back to the 15th century, but the current sense, 'the immediate apprehension of an object by the mind without the intervention of any reasoning process' has been in use for centuries. For example, intuition is described as that which enables the intellect to grasp truths "that need not any process of ratiocination to evidence or evince them" (Hale 1677). This understanding of 'intuition' also lines up with the dominant contemporary model of intuition within psychology, the dual process theory (DPT) view of the contrast between intuitive and reflective cognition (e.g. Evans and Stanovich 2013). Reflective judgments are made by reasoning through a series of consciously accessible stages held in working memory, for example when doing a complex arithmetical problem; intuitive judgments are made without the presentation of consciously available contents

in sequential reasoning. Although intuitive judgments do not require explicit sequential thinking, they can still integrate a variety of subtle information, as for example in face recognition. In intuitive judgments about philosophical cases, such subtle information might include the perceived evidential positions, interests and perspectives of the agents we are called upon to evaluate.

The intuitive judgments at issue in the case method are categorization judgments: is this an instance of knowledge? Is this act morally acceptable? Categorizations are not always intuitive: they can be performed reflectively, when we hold a template for the category itself in working memory. For example, if it is explained that a misdemeanor is defined as any crime that carries a maximum sentence of one year or less, and then noted that the crime of reckless endangerment of property carries a maximum sentence of 180 days, one's subsequent categorization of reckless endangerment of property as a misdemeanor will (presumably) be reflective. This proposition is not necessarily judged reflectively by everyone: it could be judged intuitively by a paralegal familiar enough with the defining characteristics of the category not to need to call to mind any explicit definition of a misdemeanor. When it is not performed on the basis of a consciously available template for a category, categorization is intuitive. We still hold relevant features of the case in mind, in working memory, as input to our introspectively inaccessible processing, but the crucial processing stage is intuitive: we do not perform our categorization itself by matching those features to a consciously presented template for the category. One of the main reasons why philosophers employ the case method is as part of the search for a consciously available template, or elements in such a template, or as part of the effort to rule out unsatisfactory candidates for that template: as philosophers, we can raise the question of what it is to be the same person, or to

have knowledge, and search for some explicit answer, or components of an answer. If we already had an evidently acceptable definition available to consciousness, we would have much less use for the case method.

Traditional philosophy is not strictly enslaved to intuition. Traditional philosophers can resist certain intuitions and uphold a counter-intuitive theory on grounds of simplicity or elegance, for example. However, it is noteworthy that the best-known defense of this path—Brian Weatherson's (2003) paper on the attractions of the Justified True Belief (JTB) theory of knowledge—the hypothetical possibility of rejecting the Gettier intuition is motivated by a desire to better accommodate a larger body of other intuitions about knowledge.

What is the difference between a traditional philosopher reaching an intuitive judgment on a case in the armchair and an experimental philosopher polling some population about this case? This is a matter of some controversy. Some regard the traditional philosopher as doing something very similar in kind to the pollster, essentially running a small experiment (e.g. Nagel 2012); others argue that the traditional philosopher's thinking will naturally differ from that of the untrained population (e.g. Pinillos, Smith et al. 2011). Still others seem open to the idea that for some cases but not others our private responses can be known in advance to align with those of the folk (e.g. Neta 2012). Considering the question of whether traditional philosophers should run opinion polls, Frank Jackson responds, "My answer is that I do—when it is necessary. Everyone who presents the Gettier cases to a class of students is doing their own bit of fieldwork, and we all know the answer they get in the vast majority of cases" (1998, 17). The idea here seems to be

that more subtle and controversial cases might demand checking (with classes or colleagues), where clear cases will not: Jackson goes on to say that we can often tell that others will agree, adding, "It was surely not a surprise to Gettier that so many people agreed about his cases." The suggestion that we have some access to the likelihood that others will share our intuitions is congruent with psychological work on the relationship between confidence and consensuality in intuitive judgment (where by 'consensuality' we mean the extent to which an intuition is shared in the general population). Asher Koriat and colleagues have argued that across a range of perceptual and intuitive forms of judgment, higher individual confidence in a judgment correlates well with the extent to which that judgment is stable across time and likely to be made by others (Koriat 2011, Koriat and Adiv 2011, Koriat 2012). Studies showing that confidence serves as an effective armchair guide to intuitional stability have been conducted by Jennifer Cole Wright, (2010), focusing specifically on intuitions about thought experiments in epistemology.

The notion that an individual's intuitive judgment is likely to reflect the judgment of others is defended by some staunchly traditional advocates of the case method, the defenders of Ordinary Language Philosophy. In his "Plea for Excuses", J. L. Austin maintains that the wisdom of the crowd is reflected in the verbal distinctions we naturally find ourselves making: "our common stock of words embodies all the distinctions men have found worth drawing, and the connexions they have found worth marking, in the lifetimes of many generations: these surely are likely to be more numerous, more sound, since they have stood up to the long test of the survival of the fittest, and more subtle, at least in all ordinary and reasonably practical matters, than any that you or I are likely to think up in our armchairs of an afternoon—the most favoured alternative

method." (Austin 1956, 8). Austin disdains 'armchair philosophy' as an isolated endeavor, where checking what we would naturally say draws in the public resources of our shared language.

Within the experimental philosophy movement, it is Austin's method of asking himself what we would naturally say that is identified as the armchair approach. If traditional philosophers like Austin are on the whole mistaken in assuming that their own usage embodies the distinctions made by others, then Austin's method is indeed challenged. However, we'll argue in the next section that the experiments that were supposed to establish large discrepancies between philosophers and laypeople have not proven to be robust.

The view that a single individual can be a good reporter of the patterns of the populace has been supported in disciplines neighboring philosophy. Within linguistics, for example, some critics of 'armchair linguistics' had raised concerns that minimal pairs of contrasting sentences are typically evaluated by a single linguist writing an article (or by the small group of peers and editors who check it) rather than by empirical testing of a larger population (e.g. Gibson and Fedorenko 2010). The danger, it was suggested, is that linguists' intuitions about questions of syntax might be atypical, or biased in the direction of their own theories. However, it is an empirical question how well linguists' syntactic intuitions match those of the general population, and in recent research comparing a very large range of linguist and lay judgments, it seems that the empirical challenge to 'armchair linguistics' is hard to sustain, at least in the case of syntax

(Sprouse and Almeida 2012, Sprouse, Schütze et al. 2013). Linguists' armchair judgments are an excellent match to those of the general population.

It is not universally granted that the traditional philosopher is reporting what the masses would say. Some have argued that the traditional philosopher is likely to have thought harder about the questions than the layperson, and will give a superior answer for this reason (e.g. Sosa 2007). In support of this hypothesis, Angel Pinillos and colleagues have conducted research showing that individuals who are highly reflective and better informed are less likely to generate the problematic pattern of intuitions characteristic of the Knobe effect (Pinillos, Smith et al. 2011). They argue that the philosopher's judgment about cases is more reflective, although it need not be reflective in our strong sense of involving the deliberate consultation of an explicit theory of the key concept ('intentional', in the Knobe cases). It may simply be more reflective in the sense of being produced by a closer reading of the case and a resistance to irrelevant distraction. Experiments that show less problematic patterns of response by more attentive and better informed individuals can easily be characterized as armchair-friendly because they give us further reason to believe (and better understand) the claims philosophers are making from the armchair. The next section probes in more detail the question of the extent to which philosophers' judgments resemble those of the larger population, and the broader question of the extent to which empirical investigation supports traditional philosophical methods.

3. Armchair-friendly empirical work: a review

If we understand the armchair practice of appealing to intuitions about cases roughly as Austin and Jackson do, empirical work is most friendly to the armchair when it strengthens the assumption that a philosopher's intuitive judgment about a case is representative of the intuitive judgments of the larger population. Such studies are often formulated in response to armchair-critical experimental philosophy projects. For example, Gettier (1963) proposed two influential counterexamples to the justified true belief theory of knowledge, assuming his readers would share his intuition about these cases. On the basis of literature in psychology, Weinberg, Nichols and Stich (2001) hypothesized that the intuitions Gettier assumed were universal might vary by culture and socio-economic status. Problematically for the armchair, their studies found such variation. However, in attempts to replicate the results of Weinberg, Nichols and Stich's (2001) paper on Gettier cases and other epistemic scenarios, subsequent studies have failed to show statistically significant differences cross-culturally or by gender (Nagel, San Juan et al. 2013, Turri 2013, Seyedsayamdost forthcoming, Seyedsayamdost submitted). To our knowledge, the results on socio-economic status have not been replicated either, and there are methodological concerns about the differences in methods Weinberg, Nichols and Stich originally used in polling the higher and lower-status individuals, differences that may explain why the lower-status individuals answered in patterns closer to randomness on harder cases. These studies suggest that, contrary to the claims of Weinberg, Nichols and Stich (2001), Gettier's intuitive judgment did accurately represent the knowledge judgments of the larger population. Meanwhile, empirical work has also confirmed the stability of intuition in the moral domain, with one recent large-scale study showing relatively little variation by gender, politics, religion and level of education (Banerjee, Huebner et al. 2010).

Empirical work can also be friendly to the armchair when it reveals that claims made from the armchair about "the folk view of x" are correct, regardless of the role that folk view is playing in philosophical theorizing about x. Research in experimental philosophy has often promised to show surprising and counterintuitive patterns in folk views, patterns that are said to be inaccessible from the armchair. However, in one recent study of philosophers' capacity to predict folk judgments about a series of 'surprising' cases involving causation, morality and determinism—including the celebrated Knobe effect cases—philosophers did a superb job of predicting which way folk judgments would go (Dunaway, Edmonds et al. 2013). As further evidence of the predictability of folk judgments from the armchair, Joseph Ulatowski (unpublished) notes that in a rarely cited and often overlooked lecture, "Good and Bad Human Action," G.E.M. Anscombe (2006) seems to anticipate the results of the Knobe effect on the judgments of ordinary people.

Intuitions about other cases remain contested, however, both from the armchair and in empirical testing. Compatabilists and incompatibilists about free will appeal to the folk view of free will to establish which side of the debate has the burden of proof. If the folk are naturally incomptabilists, then it is the compatibilists who must offer stronger arguments for the virtues of their theory, to overcome the downside of being unintuitive to the folk. Eddy Nahmias and colleagues (2006) put the intuitiveness of incompatibilism to the empirical test and found, in their early work, that, contrary to assumptions made from the armchair, the folk seem to be compatibilists. However, the empirical investigation didn't stop there. Nichols and Knobe

(2007) ran another study that suggested that the incompatibilism of the folk was only an illusion created by a performance error produced by using concrete scenarios rather than abstract scenarios. When given survey prompts that eliminated the misunderstanding, the majority of participants corroborated the intuitiveness of incompatibilism predicted from the armchair. However, Murray and Nahmias (2014) report the results of two new studies supporting the original conclusion that the folk are compatibilists. These studies show that incompatibilist intuitions are generated when the participants do not understand "determinism" in the same way as philosophers do. When the survey prompts are improved to ensure that the subjects are understanding the right concept, they again judge free will to be compatible with determinism.

This exchange of experiments closely resembles the exchange of thought experiments that happens in the armchair. Intuitions that don't corroborate our preferred view are explained away as artifacts of pragmatics rather than semantics, for example. This similarity both supports our thesis that empirical work can be armchair-friendly and causes trouble for it. Empirical work is armchair-friendly in that it carries forward the same type of investigations as are carried out in the armchair. However, the fact that the empirical results on this topic (and others) are so mixed suggest that empirical work can't (or at least hasn't yet) decisively ruled for or against positions defended in the armchair. One might interpret this as meaning that whether or not a given empirical study is "armchair friendly" is a matter of luck, if all we mean by "armchair friendly" is "endorses judgments made from the armchair", and if there is no systematic correlation between those judgments and subsequent empirical investigation. However, empirical work can also be thought of as armchair-friendly when it gives us the resources to continue the research initiated in the armchair in a more nuanced way.

Empirical work can also resolve a type of impasse sometimes encountered in armchair theorizing. For example, some metaphysicians struggle to reconcile their reflective, expert views about mereological composition with folk metaphysical views to which they think their theories need to be beholden. David Rose and Jonathan Schaffer (unpublished) argue that folk mereology is teleological. But they don't stop there. They then argue that teleological views are false, therefore giving us reasons to believe that folk mereology need not act as a constraint on our philosophical theories of mereology. This empirical work is armchair-friendly because it furthers armchair inquiry by empirically identifying and removing potential roadblocks to that theorizing.

Richard Holton (2010) provides another model for effective incorporation of empirical results into armchair methodology. Reflecting on a series of studies and follow-up studies on the Knobe effect, Holton offers an explanation and justification of the effect that takes into consideration all of the survey findings but argues, from the armchair, that the Knobe Effect is a not a quirk of human psychology, but rather reveals meaningful facts about intentionality. Holton effectively models a way in which armchair theorizing can accommodate experimental data just as it would accommodate data gathered from thought experiments conducted in the armchair.

As seen in the examples above, when philosophers take themselves to be representatives of the larger population, work is armchair-friendly when it endorses that assumption. However, when philosophers take themselves to have intuitions superior to those of the folk, empirical work is also armchair-friendly when it endorses *that* assumption (e.g. Pinillos, Smith et al. 2011). This latter type of armchair-friendly work positions itself as a response to armchair-critical work that argues that philosophers are do *not* have better intuitions than the folk (e.g. Weinberg, Gonnerman et al. 2010, Tobia, Buckwalter et al. 2013). A crucial task for armchair-friendly experimentalists would be to understand the legitimate authority of the armchair philosopher, figuring out the scope of cases in which the philosopher's judgment is either typical or superior to that of the layperson.

Much armchair-friendly experimental philosophy has focused on testing content claims about the intuitions individuals actually have. Experimental philosophy that focuses on better understanding the mechanisms behind our intuitive judgments works somewhat differently. These projects are not necessarily further iterations of and responses to projects begun in the armchair, but may aim instead to understand the mechanisms behind these judgments for their own sake. According to Knobe and Nichols (2008), "the aim [of this type of experimental philosophy] is to provide an account of the factors that influence applications of a concept, and in particular, the internal psychological processes that underlie such applications. Progress here is measured not in terms of the precision with which one can characterize the actual patterns of people's intuitions but in terms of the degree to which one can achieve explanatory depth." These projects acknowledge inspiration from the history of philosophy, and can be seen as an extension of Marx, Nietzshe, and Feurbach's work on the sources of our religious beliefs as well as an

extension of Hume's project as laid out in the first section of the Enquiry: "But may we not hope that philosophy, if cultivated with care and encouraged by the attention of the public, may carry its researches still further and discover, at least in some degree, the secret springs and principles by which the human mind is actuated in its operations?" (Hume 1975, 14).

For example, while empirical work on the folk concept of intentionality began with Malle and Knobe (1998) empirically modeling what the folk concept of intentionality *is*, that work led Knobe (2003) to produce evidence in support of the claim that moral evaluations can influence ascriptions of intentional action (the side-effect effect). Continued empirical work on the side-effect effect has driven various researchers to inquire further into the cognitive mechanisms that drive our intuitive judgments of intentionality. These studies help explain not only *what* we think from the armchair but, more importantly, *how* our natural armchair thinking works. Kevin Uttich and Tania Lombrozo (2010) report data that serves multiple purposes. First, it challenges Knobe's interpretation of his own data by favoring the Rational Scientist view of the mechanisms driving our judgments of intentionality rather than the Intuitive Moralist view; second, it supports the more general conclusion (shared by Knobe) that "sensitivity to norms is central to the ability to predict and explain behavior." Notice that this ultimate conclusion concerns not the content of our intuitive judgments but the psychological features that drive those judgments. Work on the mechanisms behind our intuitive judgments is also developing in philosophy of mind as philosophers strive to explain the factors that drive our attributions of consciousness (e.g. Arico 2010, Arico, Fiala et al. 2011).

Of course, some work being done on mechanisms is being done in the service of projects started in the armchair. The goal of understanding the mechanisms that produce our intuitive judgments can be pursued in ways that may be either friendly and hostile to armchair theorizing. Knobe and Nichols observe that in some cases background psychological theories can help us evaluate intuitions: "First we use the experimental results to develop a theory about the underlying psychological processes that generate people's intuitions; then we use our theory about psychological processes to determine whether or not those intuitions are warranted" (Knobe and Nichols 2008, 8). It's not obvious that psychological theories can always tell us whether philosophical intuitions are warranted, but to the extent that they can, this type of work could be armchair-friendly. In some cases, it could be helpful to the traditional philosopher to discover that certain intuitions are defective, as well. If we encounter paradoxes—patterns of judgment that seem individually acceptable but jointly contradictory—it would be good to know if some of these judgments are likely to be the products of known limitations or biases within our intuitive mechanisms. For example, it has been argued that certain problematic patterns of epistemic intuition that have motivated contextualism and skepticism in epistemology could be better explained as the products of the bias of epistemic egocentrism (Nagel 2010, Alexander, Gonnerman et al. forthcoming). If this theory about the mechanisms producing those problematic intuitions proves correct, the armchair theorist of knowledge will have a less complex field of intuitive judgments to explain.

The bottom line is this: both armchair-friendly and armchair-critical projects extend inquiries started in the armchair that rely on intuitions as evidence. Armchair-friendly projects seek to validate armchair claims and develop more subtle theories that account of the patterns in the data.

Those who pursue these projects are optimistic that they will find a stable set of intuitions that provide evidence for our armchair theories. Armchair-critical projects approach the tradition more pessimistically, seeking to formulate studies that will reveal unfavorable variation in our intuitions, casting doubt on certain claims made and methods used by armchair philosophers.

The productive contributions made to first-order debates by experimental philosophers over the past decade give us reason to believe that the constructive value of experimental philosophy is greater than its value as a movement critical of traditional theorizing. However, the critical origins of the movement remind us that progress in philosophy is as dependent on the judgments we weed out as irrelevant as it is on the judgments we endorse as good evidence. We must also remind ourselves that that experimental philosophy proceeds most productively when it sees itself as a move in an ongoing conversation with both the armchair tradition and other empirical studies rather than a method unto itself. In addition to engaging in the same kind of case-based dialectic as traditional philosophy, experimental philosophy can be friendly to the armchair when it seeks to deepen our understanding of the cognitive mechanisms driving our intuitive judgments. These insights can help us assess the evidential value of our intuitions and better understand the nature of philosophical thought.

References:

Alexander, J., C. Gonnerman and J. Waterman (forthcoming). Salience and Epistemic Egocentrism: An Empirical Study. Advances in Experimental Epistemology. J. R. Beebe. New York, Continuum.
Anscombe, G. E. M. (2006). Good and Bad Human Action. Human Life, Action and Ethics. M. Geach and L. Gormally. Exeter, Imprint**:** 195-206.
Arico, A. (2010). "Folk psychology, consciousness, and context effects." Review of Philosophy and Psychology **1**(3): 371-393.

Arico, A., B. Fiala, R. F. Goldberg and S. Nichols (2011). "The Folk Psychology of Consciousness." <u>Mind & Language</u> **26**(3): 327-352.

Austin, J. L. (1956). "A Plea for Excuses." <u>Proceedings of the Aristotelian Society</u> **57**: 1-30.

Banerjee, K., B. Huebner and M. Hauser (2010). "Intuitive Moral Judgments are Robust across Variation in Gender, Education, Politics and Religion: A Large-Scale Web-Based Study." <u>Journal of Cognition and Culture, 10</u> **3**(4): 253-281.

Burke, E. (1790). <u>Reflections on the Revolution in France</u>. London, J. Dodsley.

Cavendish, M. (1666/2001). <u>Observations Upon Experimental Philosophy</u>. Cambridge, Cambridge University Press.

Cummins, R. (1998). Reflection on Reflective Equilibrium. <u>Rethinking intuition: The psychology of intuition and its role in philosophical inquiry</u>. M. DePaul and W. Ramsey. Lanham, MD, Rowman & Littlefield**:** 113-127.

DePaul, M. R. and W. Ramsey (1998). <u>Rethinking intuition : the psychology of intuition and its role in philosophical inquiry</u>. Lanham, MD, Rowman & Littlefield.

Dunaway, B., A. Edmonds and D. Manley (2013). "The Folk Probably do Think What you Think They Think." <u>Australasian Journal of Philosophy</u> **91**(3): 421-441.

Evans, J. and K. Stanovich (2013). "Dual-Process Theories of Higher Cognition Advancing the Debate." <u>Perspectives on Psychological Science</u> **8**(3): 223-241.

Gibson, E. and E. Fedorenko (2010). "Weak quantitative standards in linguistics research." <u>Trends in cognitive sciences</u> **14**(6): 233-234.

Hale, M. (1677). <u>The Primitive Origination of Mankind</u>. London, William Godbid.

Holton, R. (2010). "Norms and the Knobe effect." <u>Analysis</u> **70**(3): 417-424.

Hume, D. (1975). Enquiries, ed. LA Selby-Bigge and PH Nidditch, Oxford: Clarendon Press.

Jackson, F. (1998). <u>From Metaphysics to Ethics: A Defense of Conceptual Analysis</u>. Oxford, Clarendon Press.

Knobe, J. (2003). "Intentional action and side effects in ordinary language." <u>Analysis</u> **63**(279): 190-194.

Knobe, J. (2013). Comments on Ludwig and Neta. <u>American Philosophical Association</u>. Baltimore.

Knobe, J. and S. Nichols (2008). An Experimental Philosophy Manifesto. <u>Experimental Philosophy</u>. J. Knobe and S. Nichols. New York, Oxford**:** 3-14.

Knobe, J. and J. Prinz (2008). "Intuitions about consciousness: Experimental studies." <u>Phenomenology and the cognitive sciences</u> **7**(1): 67-83.

Koriat, A. (2011). "Subjective Confidence in Perceptual Judgments: A Test of the Self-Consistency Model." <u>Journal of Experimental Psychology: General</u> **140**(1): 117-139.

Koriat, A. (2012). "The self-consistency model of subjective confidence." <u>Psychological Review</u> **119**(1): 80-113.

Koriat, A. and S. Adiv (2011). "The construction of attitudinal judgments: Evidence from attitude certainty and response latency." <u>Social Cognition</u> **29**(5): 577-611.

Locke, J. (1689). <u>An Essay Concerning Human Understanding</u>. London.

Machery, E., R. Mallon, S. Nichols and S. P. Stich (2004). "Semantics, cross-cultural style." <u>Cognition</u> **92**(3): B1-B12.

Murray, D. and E. Nahmias (2014). "Explaining away incompatibilist intuitions." <u>Philosophy and Phenomenological Research</u> **88**(2): 434-467.

Naess, A. (1938). "Common-Sense and Truth." <u>Theoria</u> **4**(1): 39-58.

Naess, A. and E. Molland (1938). <u>" Truth" as conceived by those who are not professional philosophers</u>. Oslo, Jacob Dybwad.

Nagel, J. (2010). "Knowledge ascriptions and the psychological consequences of thinking about error." <u>Philosophical Quarterly</u> **60**(239): 286-306.

Nagel, J. (2012). "Intuitions and Experiments: A defense of the case method." <u>Philosophy and Phenomenological Research</u> **85**(3): 495-527.

Nagel, J., V. San Juan and R. Mar (2013). "Lay Denial of Knowledge for Justified True Beliefs." <u>Cognition</u> **129**(3): 652-661.

Nahmias, E., S. Morris and T. Nadelhoffer (2004). "The phenomenology of free will." <u>Journal of Consciousness Studies</u> **11**(7-8): 7-8.

Nahmias, E., S. Morris, T. Nadelhoffer and J. Turner 1 (2005). "Surveying freedom: Folk intuitions about free will and moral responsibility." <u>Philosophical Psychology</u> **18**(5): 561-584.

Nahmias, E., S. G. Morris, T. Nadelhoffer and J. Turner (2006). "Is incompatibilism intuitive?" <u>Philosophy and Phenomenological Research</u> **73**(1): 28-53.

Neta, R. (2012). "Knowing from the armchair that our intuitions are reliable." <u>The Monist</u> **95**(2): 329-351.

Nichols, S. (2004). "After objectivity: An empirical study of moral judgment." <u>Philosophical Psychology</u> **17**(1): 3-26.

Nichols, S. and J. Knobe (2007). "Moral responsibility and determinism: The cognitive science of folk intuitions." Nous **41**(4): 663-685.

Nichols, S., S. Stich and J. Weinberg (2003). Metaskepticism: Meditations in ethno-epistemology. The Skeptics: Contemporary Essays. S. Luper. Aldershot, Ashgate**:** 227-247.

Petrinovich, L. and P. O'Neill (1996). "Influence of wording and framing effects on moral intuitions." Ethology and Sociobiology **17**(3): 145-171.

Pinillos, N. Á., N. Smith, G. S. Nair, P. Marchetto and C. Mun (2011). "Philosophy's new challenge: Experiments and intentional action." Mind & Language **26**(1): 115-139.

Rose, D. and J. Schaffer (unpublished). Folk Mereology is Teleological.

Seyedsayamdost, H. (forthcoming). "On Gender and Philosophical Intuition: Failure of Replication and Other Negative results." Review of Philosophy and Psychology.

Seyedsayamdost, H. (submitted). "On Normativity and Epistemic Intuitions: Failure to Detect Differences between Ethnic Groups." MS.

Sosa, E. (2007). "Experimental philosophy and philosophical intuition." Philosophical Studies **132**(1): 99-107.

Sprouse, J. and D. Almeida (2012). "Assessing the reliability of textbook data in syntax: Adger's Core Syntax." Journal of Linguistics **48**: 609-652.

Sprouse, J., C. T. Schütze and D. Almeida (2013). "A comparison of informal and formal acceptability judgments using a random sample from Linguistic Inquiry 2001–2010." Lingua **134**: 219-248.

Stich, S. and J. M. Weinberg (2001). "Jackson's Empirical Assumptions." Philosophy and Phenomenological Research **62**(3): 637-643.

Swain, S., J. Alexander and J. M. Weinberg (2008). "The instability of philosophical intuitions: Running hot and cold on Truetemp." Philosophy and Phenomenological Research **76**(1): 138-155.

Tobia, K., W. Buckwalter and S. Stich (2013). "Moral intuitions: Are philosophers experts?" Philosophical Psychology **26**(5): 629-638.

Turri, J. (2013). "A conspicuous art: putting Gettier to the test." Philosophers' Imprint **13**(10): 1-16.

Ulatowski, J. (unpublished). Defending Positive Experimental Philosophy, University of Texas at El Paso**:** 17.

Uttich, K. and T. Lombrozo (2010). "Norms inform mental state ascriptions: A rational explanation for the side-effect effect." Cognition **116**(1): 87-100.

Weatherson, B. (2003). "What good are counterexamples?" Philosophical Studies **115**(1): 1-31.

Weinberg, J. M., C. Gonnerman, C. Buckner and J. Alexander (2010). "Are philosophers expert intuiters?" Philosophical Psychology **23**(3): 331-355.

Weinberg, J. S., S. Nichols and S. Stich (2001). "Normativity and Epistemic Intuitions." Philosophical Topics **29**(1): 429-460.

Wright, J. C. (2010). "On intuitional stability: The clear, the strong, and the paradigmatic." Cognition **115**(3): 491-503.