ORIGINAL RESEARCH



The epistemology of thought experiments without exceptionalist ingredients

Paul O. Irikefe¹

Received: 2 November 2021 / Accepted: 5 April 2022 © The Author(s) 2022

Abstract

This paper argues for two interrelated claims. The first is that the most innovative contribution of Timothy Williamson, Herman Cappelen, and Max Deutsch (a.k.a., the intuition deniers) in the debate about the epistemology of thought experiments is not the denial of intuition and the claim of the irrelevance of experimental philosophy but the claim of epistemological continuity and the rejection of philosophical exceptionalism. The second is that a better way of implementing the claim of epistemological continuity is not Deutsch and Cappelen's argument view or Williamson's folk psychological view (i.e., off-line simulation). This is so because while the argument view makes the basis of the relevant classificational judgement evidentially too demanding; the folk psychological view makes it too weak and error-prone to count as an adequate explanation. Drawing from a certain reading of Aristotle's Nichomachean Ethics that flowers in Miranda Fricker and John McDowell, I argue for the reason-responsiveness view. Like the extant views, the reason-responsiveness view vindicates the claim of epistemological continuity. But unlike the extant views, it does not share those problematic features. Further, I show that the reason-responsiveness view offers a way for champions of the claim of epistemological continuity to resist Avner Baz's objection to the claim of epistemological continuity and his objection to the philosophical use of thought experiments while taking on board some attractive elements of his view.

Keywords Metaphilosophy \cdot Virtue epistemology \cdot Epistemology of thought experiments \cdot Epistemology of philosophy \cdot Social epistemology \cdot Avner Baz

[☑] Paul O. Irikefe IrikefePO@cardiff.ac.uk

¹ Cardiff University, Cardiff CF10 3AT, UK

1 Introduction

Williamson (2004, 2007) defends the claim of epistemological continuity,¹ roughly the idea that the basis by which we classify philosophical cases is the same basis by which we classify people around us as knowing various truths or as ignorant of them. This means that our evidence in philosophical thought experiments is not remarkably different from our evidence in ordinary human situations. However, the claim is not unique to Williamson; the claim resonates strongly in Cappelen (2012) and Deutsch (2015). This is unsurprising given that all three share some common metaphilosophical outlook. For example, they are intuition deniers.²

In this paper, I argue for two interrelated claims. The first is that the most innovative contribution of the intuition deniers is not the denial of intuition and the claim of the irrelevance of experimental philosophy but the claim of epistemological continuity and the rejection of philosophical exceptionalism. The second is that a better way of implementing the claim of epistemological continuity is not Deutsch and Cappelen's argument view or Williamson's folk psychological view (off-line simulation). This is so because while the argument view makes the basis of the relevant judgement evidentially too demanding; the folk psychological view makes it too weak and error-prone to count as an adequate explanation. Drawing from a certain reading of Aristotle's Nichomachean Ethics that flowers in Fricker (2003, 2007) and McDowell (1993, 1994, 1998), I present and defend the reason-responsiveness view. While vindicating the claim of epistemological continuity, the view avoids the drawbacks of the extant accounts. Further, I show that the reason-responsiveness view offers a way for defenders of the claim of epistemological continuity to resist Avner Baz's objection to the claim of epistemological continuity and his objection to the use of thought experiments in philosophy while taking on board some attractive elements of his view.

The paper proceeds as follows. In Sect. 2, I argue that what is most innovative about the agenda of the intuition deniers is the rejection of philosophical exceptionalism and the claim of epistemological continuity. More specifically, I present the distinct epistemological framework of the intuition deniers and I explain why it is both liberating and fruitful. In Sect. 3, I argue that in the context of the nature of our evidence in thought experiments, a better way of implementing the claim of epistemological continuity is not Cappelen and Deutsch's argument view or Williamson's folk psychological model but the application of a general notion of virtue understood as second nature that grows

¹ Avner Baz is chiefly responsible for highlighting the centrality of the continuity thesis in recent metaphilosophical discussions (see Baz, 2016, 2017). But note that Baz's concern with this thesis is mainly the linguistic version of it. That would not be my interest in the first section of this paper. According to this thesis, which Baz presents as a troubling claim or assumption, it is the view that what we are invited to do in the evaluation of thought experiments in philosophy is not significantly different from "something that we routinely do in the course of everyday experience, and which underlies our ordinary and normal employment of our words" (see Baz, 2017, p. 32). My interest here is the epistemological version of the thesis, the positive view that our way of knowing in thought experiments is an application of social epistemology. I will present the way in which this epistemological thesis can be read in Deutsch and Cappelen and the ways in which as a metaphilosophical orientation, it marks a break from the epistemology of philosophy as traditionally conceived.

 $^{^2}$ The description comes from Egler (2020) and Nado (2016).

out of McDowell and Fricker's reading of Aristotle's *Nichomachean Ethics*. And in Sect. 4, I use the reason-responsiveness view to deal with Baz's objections to the claim of epistemological continuity and to the use of thought experiments in philosophy.

In the next section, I argue specifically that the substantive achievement of the intuition deniers lies not in the denial of intuition and the claim of the irrelevance of experimental philosophy but in the claim of continuity and the rejection of philosophical exceptionalism. As I would show, this has three important consequences for the understanding of the epistemology of thought experiments.

2 The intuition deniers and contemporary analytic philosophy

Williamson (2004, 2007), Cappelen (2012, 2014), and Deutsch (2015) argue that intuitive evidence or justification³ is less central to analytic philosophy than normally assumed. Cappelen, for example, argues for this claim by noting that the use of the term "intuitive" and its cognates in everyday English does not pick out any unique kind of mental state and the relevant terms do not denote any distinctive evidential source. He also examines the technical sense of the term "intuitive" and its cognates and argues that it does not secure any clear and uncontroversial interpretation that would lend support to the idea that analytic philosophy relies centrally on intuitive evidence or justification. And lastly, he considers paradigm cases of philosophical thought experiments and shows that the central claims in those texts are not backed up with anything that meaningfully bears the hallmark of the intuitive.

Similarly, Deutsch argues that "the idea that philosophy relies on intuitions as evidence is a *myth*, an enduring and fairly widely held, yet entirely false belief about the methods of philosophy" (Deutsch, 2015, p. xiii). Like Cappelen, Deutsch argues that paradigm cases of philosophical thought experiments like Gettier cases show the myth of the intuitive to be false. And like both, Williamson argues that paradigm cases of thought experiments in philosophy like Gettier cases are deductively valid arguments and the basis of our acceptance of the counterfactual conditional premise of the relevant argument does not lend support to a knowledge generating faculty of rational intuition exclusive to philosophy.

There are two direct consequences of this metaphilosophical outlook. The first is that it supports the claim of the philosophical irrelevance of the challenge from experimental philosophy, particularly, the more aggressive or negative strand of that movement. Deutsch and Cappelen are closely associated with this move. For example, Cappelen argues that since philosophers don't rely on intuitions, it means that both negative and positive experimental philosophy are mistaken. They are attacking (in the case of the former) or supporting (in the case of the latter) a practice that does not exist (Cappelen, 2012, p. 222).⁴

However, I don't think there is much promise to this argumentative strategy and this dimension to the approach of the intuition deniers. And this is so because the

³ As is sometimes common in this debate, I use both interchangeably, ignoring important philosophical nuances.

⁴ Note that unlike Cappelen, Deutsch does not go as far as rejecting positive experimental philosophy; only negative experimental philosophy is rejected.

fact that we reformulate what we do in terms other than intuition does not mean that the challenges offered by negative experimental philosophy magically disappear. To see this, notice that Cappelen (2012) and to a lesser extent Deutsch (2015), admit that intuition might play some role in our classificational judgements. For example, Cappelen acknowledges that it is quite plausible that intuition might play some role in the context of discovery. But it is argument that plays the crucial role in the context of justification. But this is deeply problematic since it opens the possibility that the only reason philosophers are investing a great deal of energy in defending a particular claim in the context of justification arises from contingent features of their cultural background or environmental context at work in the context of discovery (Nado, 2016, see also Egler, 2020). If so, the worries negative experimental philosophers have been drawing attention to (for summary of the worries, see Machery, 2017) have not disappeared but reasserted itself in the context of justification.

The second consequence of the outlook is that it serves as a rejection of philosophical exceptionalism, which sees in rational intuition an explanation of the uniqueness of philosophy as a discipline. Taken in this sense, the agenda of the intuition deniers is to offer a rethinking of philosophical methodology within mainstream analytic philosophy. And here, philosophers linked to the rationalist tradition in philosophy are the primary target.⁵

On the rationalist tradition, that intuition can serve as evidence in philosophy is part of the premise of the argument that secures the autonomy of philosophy as a distinct discipline, and so part of a broader metaphilosophical commitment to rationalism itself. For example, Lawrence Bonjour takes it that skeptical views on a priori intuition as a source of justification or evidence "are at war with the very existence of philosophy as a rational discipline, and only a successful defense of rationalism can hope to resolve this problem" (BonJour, 1998, p. xi). And he traces the notion of the a *priori* justification he defends to Plato and Leibniz. In the same vein, Ernest Sosa (1998, 2011) takes the question of the viability of a priori reflection embodied in intuition as part of the question of the very future of philosophy itself.And traces his commitment to the rationalist foundation of philosophy to Descartes. However, unlike Descartes, Sosa has a fallibilistic claim to intuition as a source of knowledge or justification.

For most thinkers in this tradition, the class of judgements that can be categorised as rational intuition has certain exceptionalist features. For example, the content of the judgement should express modally strong truths such as the necessarily true or false (Bealer, 2000; BonJour, 1998; Plantinga, 1993; Sosa, 2007a, 2007b).⁶ It should also be the deliverances of one's conceptual competence (Bealer, 1996, 2000; Ludwig, 2007; Sosa, 2007a, 2007b) and the judgement should be accompanied by a distinct

⁵ Although Cappelen thinks that champions of experimental philosophers are also guilty of philosophical exceptionalism. However, it is fair to say that the tendency to exceptionalism is more entrenched within mainstream analytic philosophy. To see this, note that some champions of experimental philosophy (Nagel, 2012b, 2012c) see the dialectically useful intuition in philosophy as an application of the same intuition in everyday cognition.

⁶ In the case of Ernest Sosa, he says, the content is explicitly or implicitly modal, in the sense that it attributes possibility or necessity.

phenomenology (Bealer, 2000; Plantinga, 1993; Pollock, 1974; Pust, 2000). And so on.⁷

Williamson argues against philosophical exceptionalism by defending the claim of epistemological continuity, roughly the idea that the basis by which we classify philosophical cases is the same basis by which we classify people around us as knowing various truths or as ignorant of them, having nothing distinctively philosophical about it. On his view, that basis is folk psychological capacity (i.e., off-line simulation model), underlying much of human social cognition. So conceived, this means therefore that classificatory judgements in thought experiments and everyday judgements belong to the same ballpark: there is nothing distinctive or exceptional about them.⁸ In particular, those classificatory judgements do not belong to any special category of the a priori because experience can play some positive role in tipping the judgement one way or the other, and "which way one goes depends on what one finds normal or natural, which partly depends on the past course of one's sense experience"⁹ (Williamson, 2007, p.190). On the other hand, they do not belong strictly to the category of the a posteriori since past experience plays no strictly evidential role in our assent to such judgements. They belong to an intermediate category, armchair judgement or knowledge.

Similarly, both Cappelen and Deutsch reject philosophical exceptionalism. Like Williamson, they think that philosophy should not be in the business of positing any distinct evidential source of knowledge or beliefs in philosophical inquiry. On the contrary, what philosophers rely on as an evidential source is hardly unique to philosophy: argumentation, which is the practice of giving reasons for one's claims (Cappelen, 2012, 2014; Deutsch, 2015).

Moreover, just like Williamson, Cappelen argues that classificational judgements in philosophy do not belong to any special category. In fact, he thinks that unlike Williamson we should not place the judgement in an intermediate position, namely, between the a priori and the a posteriori. We should place the judgements in the ballpark of the latter class of judgements "since experience plays a clear evidential role in our assessments of thought experiments" (Cappelen, 2012, p. 110).¹⁰

Let me highlight three reasons why as a framework in the epistemology of thought experiments, the claim of epistemological continuity and the rejection of philosophical exceptionalism is both innovative and fruitful. First, it connects the epistemology of thought experiments to social epistemology. It does that by subsuming the epistemology of thought experiments under the epistemology of everyday reasoning. And by so doing, it helps us to see the connection between knowledge from thought experiments and knowledge of our social world. For example, Williamson's folk psychological

⁷ In rough terms, philosophical exceptionalism is the assumption that the source of philosophical knowledge arises from a special source of cognition found distinctively in a priori disciplines. This source of cognition is rational intuition or a priori intuition. Further, it is the claim that the relevant judgements not only belong to a special ballpark of judgements but have some special distinguishing features too.

⁸ Williamson also notes that Gettier cases, for example, have everyday counterparts.

⁹ Part of Williamson's argument for this claim is the rejection of the idea that the subject matter of philosophy is conceptual in nature (see Williamson 2007, pp. 48–123).

¹⁰ Like Williamson, both Cappelen (2012) and Deutsch (2015) reject the idea that philosophy seeks a domain of conceptual truths.

capacity on some views in philosophy of mind underlies much of human social cognition and our ability to navigate the social world itself. On this thinking, we are able to explain and predict the actions of people by first thinking of them as loci of mental life (Goldman, 2009; Gordon, 1986). On this thinking too, the practice of attributing mental states to people allows us to predict their actions and regulate ours in social activities and coordination (Borg, 2018). Note though that the folk psychological model can be applied to the non-mental as well. (More on this in the next section).

The same is true of the argument view. In fact, in an illuminating passage, Cappelen says that: "Surely everyone, be they philosophers, dancers, sushi chefs, or dog walkers, think that, *in general*, it is a bad idea to rely on spontaneous judgments you're not in a position to provide arguments for when you engage in theorizing (as opposed to practical reasoning)" (Cappelen, 2012, p. 82). On this suggestion, the practice of giving and asking for reasons is not only bound up with our social life; it reflects an ideal of rationality worth respecting; an ideal that flows from how ordinary people engage with one another: dancers, sushi chefs, and dog walkers. Cappelen is hardly alone here. Catarina Novaes has recently argued for the social epistemology of argumentation. In particular, she thinks that trust is fundamentally implicated in the practice of argumentation than normally presupposed (Novaes, 2020). In the same vein, Alvin Goldman has argued that argumentation or good argumentation is a branch of social epistemology, where social epistemology indicates social and interpersonal practices that promote true or false beliefs (Goldman, 1994, p. 28). If this is so, then it follows that we no longer have to think of the epistemology of thought experiments as any different from social epistemology, say the epistemology of testimony. Further, I argue that this way of thinking is fruitful for explaining the epistemic aim of thought experiments, which is to know or understand the world we collectively live in and share with one another and the basis by which that knowledge or understanding is achieved. What is more, it enables us to see how philosophical knowledge is unmysterious since it is made to belong to a general kind of knowledge we have about the world.¹¹

Second, it allows us to move beyond the individualistic epistemological framework characteristic of much of twentieth century analytic philosophy, as seen especially in the rationalist tradition. It does that by enabling us to shift our focus from the subject brooding over grasp of concepts to the subject embedded in a larger social network of knowledge and justification. Indeed, as we shall see in the next section, part of Williamson's argument for the rejection of the centrality of conceptual competence is that the imaginative exercises involved in off-line simulation is not merely an exercise in conceptual competence of agents. Again, this is valuable because it allows us to see how our effectiveness as inquirers is not an isolated achievement but a collective one.

Third and finally, it offers a more promising way to defend the method of philosophical thought experiments from the sceptical arguments of champions of negative

¹¹ In the philosophy of science, there is also a concern with continuity. I believe this reflects an ambition to show that knowledge from thought experiments in science is equally unmysterious. To this extent, there is a shared interest here but not necessarily a shared framework. For example, T. S. Gendler (1998) argues that the epistemology of scientific thought experiments is a special case of techniques in linguistics and moral reasoning. Similarly, Nancy Nersessian (2007) argues that thought experiments utilizes mental modelling, a mundane form of reasoning. Engaging seriously with these views would take me outside the scope of this paper, which is concerned mainly with thought experiment as a philosophical methodology. I would like to thank an anonymous reviewer of this journal for pointing out this shared concern to me.

experimental philosophy. To see this, notice that if something like the claim of epistemological continuity is true, and the basis of our acceptance or rejection of classificational judgements in the method of thought experiments is grounded in everyday cognitive capacities, then sceptical arguments against the former would easily overgeneralise and engulf much of everyday knowledge claims. And that would amount to an untenable form of scepticism. This is so because folk psychology or mindreading, at least on the view of some theorists in philosophy of mind, ground much of everyday cognition. The same would be true of Deutsch and Cappelen's view that the relevant claims in philosophical thought experiments are accepted or rejected on the basis of arguments; for the practice of relying on arguments or reasons for one's claim is an everyday ideal of rationality and a ubiquitous basis of knowledge claims. Note however, that this is not how Cappelen and Deutsch have read their position(s); it is, I claim, how it could be read, and perhaps should be read. They have read it in terms of the denial of intuition and the irrelevance of experimental philosophy, which as earlier noted seems not promising enough. Moreover, given how divergent and rich the research programme of experimental philosophy has become, this argumentative strategy also allows us to target only the aggressive form of that movement: negative experimental philosophy.

To this, however, champions of negative experimental philosophy have replied by saying that their arguments do not overgeneralise in the way just specified and that they do not lead to an untenable form of scepticism. On the contrary, they argue, they are targeting not all cases but only philosophical cases. For example, Jonathan Weinberg says that the targets are philosophical cases that are esoteric, unusual, far-fetched or generally outlandish (Weinberg, 2007, p., 321). Similarly, Edouard Machery says the targets are those cases that describe unusual situations, must pull apart properties that normally go together in more ordinary situations and have vivid narrative details (Machery, 2017, p. 120). Excellent arguments have been given in reply to these claims and the thrust of this paper would not be to rehearse those arguments (see Cappelen, 2012; Nado, 2020). Indeed, as Jennifer Nado pointed out, "[M]any of the judgments non-philosophers make in ordinary contexts possess at least some measure of the disturbing characteristics, and many philosophical case-judgments-even ones explicitly within Machery's sights—are no more disturbing than these" (Nado, 2020, p. 5). As I see it, the burden is on the critics of the use of thought experiments in philosophy to formulate a set of features that are defining of the cases philosophers *must* use in doing philosophy but are not defining of the cases that ordinarily features in everyday situations. This burden is not easily met in my view. To see this, notice that it is not enough for the critics to claim that some cases that philosophers use currently are just the wrong kind because they have some features that more ordinary cases do not typically have; for example, that they are so outlandish we might not know what to say about them using our normal human form of cognition. Even mainstream philosophers say that much in their practice.¹² To show that analytic philosophy is in

¹² Brian Weatherson says for example: "Many people accept that the more obscure or fantastic a counterexample is, the less damaging it is to a theory" (Weatherson, 2003, p. 8). And well before the recent metaphilosophical debate, John Rawls wrote that competent moral judges should be expected to demonstrate competence only in a certain class of cases. Such a case, he noted, should not be "especially difficult and be one that is likely to arise in ordinary life" (Rawls, 1951, p. 182).

some worrisome predicament or that analytic philosophers should abandon the use of thought experiments in philosophy (a.k.a. radical restrictionism) the critic must show that outlandish cases must be the only sort of cases that analytic philosophers can use. And that seems hard to say. As Williamson following the continuity argument repeatedly observed, Gettier cases have everyday counterparts (Williamson, 2007). Besides, many of the cases that have featured in contemporary analytic philosophy are just these types of everyday cases. For example, John Perry's Tardy professor case (Perry, 1979), Tyler Burge's arthritis case (Burge, 1979) and even the trolley cases popularised by Philippa Foot (1967).¹³ And note the dialectical relevance of those cases. Burge used the arthritis case to argue against the internalistic model of mental content in favour of social (externalistic) model of mental content and Perry used the case of the tardy professor to argue against the doctrine of proposition due to Gottlob Frege.¹⁴ (I will return back to this issue in the final section of this paper where I show that Avner Baz's recent attempt to undercut the claim of epistemological continuity in the context of language does not succeed either).

At this point, let me state a general working assumption of the framework of epistemological continuity. Williamson (2007), Cappelen (2012), and Deutsch (2015) are committed to a descriptive metaphilosophy as opposed to a revisionary metaphilosophy. The critical difference here is that a revisionary metaphilosophy works from first principles and seeks to account for how philosophy should be done; whereas a descriptive metaphilosophy seeks to *model* the actual practice of philosophy. In other words, it takes the goal of the epistemology of thought experiments as making sense of actual philosophical practice, where what is actual is measured by what goes on in paradigm work in a philosophical domain or sub-domains (see Williamson, 2007, p. 6; Cappelen, 2012, p. 97; Deutsch, 2015). Following this cue, my goal in this paper is to do descriptive metaphilosophy. As a result, questions such as whether philosophers are right or wrong in how they practice philosophy would not form part of the target of discussions. Further, it is against this descriptive framework that the various accounts would be assessed for adequacy.

To recapitulate: the most innovative contribution of the intuition denial is the claim of epistemological continuity and the rejection of philosophical exceptionalism. And it is innovative because it connects the epistemology of thought experiments to social epistemology, it allows us to move beyond the individualistic epistemological framework characteristic of much of twentieth century analytic philosophy and it offers a more promising way to defend the philosophical method of cases or thought experiments.

¹³ As Foot (1967) claimed the contrasting cases (push vs switched cases) were modelled to bring out people's verdict already noticed or observed in medical practice involving the operations of hysterectomy (the operation to remove a woman's uterus—the push case variant) and the operation of craniotomy (the operation by which the head of a child is crushed to save the mother's life—the switch case variant).

¹⁴ It is noteworthy that decades after the publication of the first set of experimental findings that champions of negative experimental philosophy rely on to press their sceptical arguments, further empirical studies continue to show surprising outcomes. For example, one of the earliest studies that reported the instability of epistemic judgements in the Truetemp case have recently failed replication (Ziółkowski, 2021). A similar fate is true of the earlier study by Weinberg, Nichols, and Stich (2001). For the replication worry on this, see Seyedsayamdost (2015) and Nagel, San Juan, and Mar (2013).

In the next section, I evaluate the extant ways of vindicating the claim of epistemological continuity, viz., the argument view and the folk psychological view. I would argue that these extant ways of vindicating the claim of epistemological continuity are unsatisfactory. The overall aim is to motivate my alternative view, the reasonresponsiveness view.

3 The epistemology of thought experiments within a non-exceptionalist framework

3.1 The argument view

Both Cappelen (2012) and Deutsch (2015) hold the argument view. On this view, we know facts that obtain in thought experiments by arguments rather than by intuition.¹⁵ To keep the discussion focussed, I will stay with Deutsch's presentation of the view. On his way of thinking of thought experiments like Gettier cases and the Gödel case, they are counterexamples to some standard view of knowledge and reference respectively. Consider the 10-coin case as originally presented by Edmund Gettier himself (Gettier, 1963), which forms a central thrust of Deutsch's discussion. Smith and Jones are job applicants. Smith forms the belief (e): the man who will get the job has ten coins in his pocket. Smith's evidence for (e) is based on the fact that the president of the company has told him that Jones will get the job and he Smith has counted the coins in Jones' pocket. But imagine further, Gettier says, that he (Smith) not Jones would get the Job and that Smith himself has ten coins in his pocket unbeknown to him. Gettier concludes the thought experiment by saying that although Smith under this circumstance has justified true belief with respect to (e), he does not know (e).

On Deutsch's view, we accept Gettier's verdict that Smith does not know on the basis of accepting the reason or ground he provides in that same text, namely, that Smith does not know (e) "for (e) is true in virtue of the number of coins in Smith's pocket, while Smith does not know how many coins are in Smith's pocket and bases his belief in (e) on a count of the coins in Jones' pocket, whom he falsely believes to be the man who will get the job" (Gettier, 1963, p. 122). This, in a nutshell, is the argument view: Gettier argued for his claim. And it has this general structure: we know verdict V about the case because we accept reason R. And reason R is always what is explicitly stated in the relevant text. For example, Deutsch says: "In general, our *knowledge* (italics, mine) of whether a philosophical theory has been refuted by a counterexample depends on arguments, not intuitions" (Deutsch, 2015, p. 74). Similarly and more specifically with respect to the 10-coin case he says: "Gettier offers a clear argument for his judgment about his thought experiment. He *gives reasons* for

¹⁵ It is very hard to pin down what intuition is, even among the methodological rationalists. For example, Bealer says it is a *sui generis* mental state (2000). For Sosa, it is an attraction to assent to a given proposition that is explained by one's competence with "no reliance on introspection, perception, memory, testimony, or inferencee (no further reliance, anyhow, than any required for so much as understanding the given propositional content)" (Sosa 2007b, p. 58, see also Joel Pust 2000). However, since the paper is set up against the backdrop of philosophical exceptionalism among methodological rationalists, we can take the exceptionalist features mentioned in the previous section as reliable indicators of the kind of judgements that would be classified as "intuitive.".

thinking that his Smith character does not know that the man who will get the job has ten coins in his pocket" (Deutsch, 2015, p. xvi).

This cannot be right. For one, if Gettier's thought experiment has this structure, that is, if knowing the verdict about the case depends on our accepting the stated reason, we would be unable to explain the decisive impact the introduction of the cases had against the orthodox view of knowledge.¹⁶ Consider first-hand reports about the success of the Gettier case(s). Williamson says for example, that Gettier's "refutation of the justified true belief analysis was accepted almost overnight by the community of analytic epistemologists. His thought experiments were found intrinsically compelling" (Williamson, 2007, p.180). Similarly, Frank Jackson notes that "[s]upport for the true justified belief analysis of knowledge dropped like a stone consequent on the publication of Gettier, 1963" (Jackson, 2011, p., 468; Pritchard, 2012; Weatherson, 2003). For present purposes, I urge that we should treat these reports as we treat evewitness reports in general: they are not about how people felt about the obtaining of certain events; they are reports about the objective world worth respecting. If so, here is the question: is it conceivable that the 10-coin case was successful or decisive because of what Deutsch is offering as the relevant argument? I argue that it is not; the view is not plausible at all. The situation becomes even more problematic if we realise philosophers' penchant for arguments and the fact that rarely does the following of our argumentative noses ever leads to agreement about any issue at all. Note that this is not a demand to account for the *reaction* people had about the Gettier cases. On the contrary, that Gettier cases decisively undermined the orthodox view of knowledge is empirical evidence we have about the cases worth accounting for in a satisfactory descriptive metaphilosophy.

Moreover, the view has the unintended consequence of attributing massive ignorance or unjustified beliefs on all those members of the epistemological community who accepted the relevant verdict without understanding reason R. To see this, notice that since reason R is crucial to knowing the relevant verdict to be true, it would require at least understanding reason R. Consider for example an analogous situation: knowing the truth of a mathematical theorem on the basis of accepting the proof given for it. By hypothesis, you only know the mathematical truth because of the given proof. Now imagine further an agent who claims to know the relevant truth but does not understand the proof. On Deutsch's view, this is how we should describe members of the epistemological community since they initially thought the relevant passage in the 10-coin case was the claim that one cannot know from falsehood (Armstrong, 1973; Clark, 1963). Indeed, both verdict V and reason R have run an independent history in the analysis of knowing. While it was *generally* taken that verdict V is true, what reason R really amounts to remained for a long time a hotly debated matter. And that shows that knowing verdict V does not depend on reason R or even understanding

¹⁶ However, Cappelen argues that the consensus in Gettier cases makes them something like an anomaly. But Gettier cases are not alone in expressing this phenomenon. The Gödel case in semantic theory also expresses it: many contemporary defenders of descriptive theory of reference accepted that the Gödel case was an effective counterexample to the descriptive theory of reference and adjusted the theory to accommodate the lesson of the counterexample (Evans, 1973; Jackson, 1998). In general, it does not help to reject a feature of philosophical practice just because it does not fit one's theory. Further, consensus is not a bug in philosophical practice. It is a feature. Indeed, the very possibility and practice of disagreement only makes sense against the background of consensus on a wide range of issues.

it. In fact, it seems more likely that reason R is an *idle and uneffective* reason. For example, if one were to charitably read Gettier as intending the relevant passage as mere summary of the case rather than as an independent argument and ignores or removes the relevant passage for brevity or clarity nothing in the paper or about the case changes. The case still shows the intended verdict, and the verdict still retains its decisiveness. Thus, it seems as if we are making what is a marginal feature in the thought experiment to become central; and that looks very revisionary as opposed to a descriptive project.

I take these to show that the argument view imposes an unduly demanding constraint on the rationality of verdicts on thought experiments. As I will show, we do not need to resort to any capacity distinctive of philosophy to avoid the charge of irrationality when no independent argument is given or discerned in the text.¹⁷

3.2 The moderate reliability of folk psychological capacities

The folk psychological view is defended by Williamson; for he subsumes the epistemology of thought experiments, more specifically those of Gettier cases under folk psychology, which is a general basis of social cognition. Williamson begins his account of the epistemology of thought experiments with the epistemology of counterfactuals and asks how we evaluate counterfactuals such as if the bush had not been there, the rock would have ended in the lake. He suggests that the capacity to evaluate the counterfactual recruits our capacity to evaluate the antecedent and the consequent individually and this involves on his view not a merely linguistic understanding of the counterfactual statement itself since it involves ways of evaluating its application that are not built into its meaning. Spelling this out in more details he says: "The best developed simulation theories concern our ability to simulate the mental processes of other agents (or ourselves in other circumstances), putting ourselves in their shoes, as if thinking and deciding on the basis of their beliefs and desires (see for example Davies and Stone (1995), Nichols and Stich (2003)" (Williamson, 2007, p. 148). Williamson then moves on to discussing how this can be extended to non-mental phenomena, then to prediction/expectation-forming capacities more generally, eventually arriving at the conclusion that although imaginative simulation has a complex relationship to the evaluation of counterfactual conditionals, it is "the most distinctive cognitive feature of the process of evaluating them" (Williamson, 2007, p. 152).

¹⁷ Here is another interesting relation between discussions about philosophical thought experiments and discussions about scientific thought experiments. In the debate about the nature of scientific thought experiments, there is also the argument view, the thought that thought experiments in science are reducible to arguments and that their rational or justificatory force can be explained by a non-thought experiment argument (Norton, 1991, 1996, 2004) and the constructivists who think that thought experiments have an irreducibly imaginative elements (T. S. Gendler, 1998; Tamar S. Gendler, 2004). Clearly, I have sided with the constructivists against the argument view in showing that the argument view is implausible in understanding philosophical thought experiments. Again, for the reason stated earlier, I would not explore the import of my account for the broader debate about the epistemology of scientific thought experiments (Brown, 1991, 1992, 2004; Clatterbuck, 2013; T. S. Gendler, 1998; Norton, 1991, 1996, 2004; Sorensen, 1992). Doing so would take me outside the scope of this paper.

This then is applied to the epistemology of thought experiments since in thought experiments, for example, in the Gettier cases, we use our imagination to run the situation of the fictional character by asking ourselves whether if there were an instance of the Gettier case, it would be an instance of justified true belief without knowledge.¹⁸ And this is just an instance of how we evaluate ordinary counterfactual judgements such as when we imagine whether if the bush had not been there, the rock would have ended in the lake. On this view therefore, the epistemology of thought experiments involving mental phenomena such as those of Gettier cases¹⁹ falls under the epistemology of counterfactual conditionals and that in turn falls under the simulation model of folk psychology.²⁰ Finally, Williamson thinks that: "Our use of the imagination in evaluating counterfactuals is moderately reliable and practically indispensable. Rather than cave in to skepticism, we should admit that our methods sometimes yield knowledge of counterfactuals" (Williamson, 2007, p. 155).²¹

To start with, in philosophy of mind, there are serious empirically informed objections to the folk psychological model of social cognition (see Bermúdez, 2003; Hutto, 2004; Lakoff & Johnson, 1999). These objections rest on the basic idea that we should think of the default basis of social cognition not as depending on some Cartesian picture of the mind and the model of others as loci of mental states by means of which we understand them but as depending on human embodiments. Hence the term "embodied social cognition," use to designate this bourgeoning field of research in philosophy of mind and cognitive science (for an excellent discussion, see Spaulding, 2012).

But those objections can be set aside for present purposes. The more relevant question is whether the model offers an adequate anchor for the epistemology of thought experiments. I argue that this is not the case. The first problem involves those cases, indeed the paradigmatic cases where this model ought to apply: Gettier cases. Since Gettier cases invite us to attribute knowledge to subjects whether fictional or otherwise, there is a big worry here given that on Williamson's account simulation is

¹⁸ Part of Williamson's motivation for this move is the problem of deviant realisation of Gettier cases; the idea roughly that there are ways of interpreting the description of Gettier cases that are incompatible with the standard classificatory judgement. This in turn has generated a great deal of dispute and discussion in the literature (For review see Chudnoff, 2011).

¹⁹ Since Williamson talks about the extension of off-line simulation to include the non-mental, we can suppose he intends the framework to be more expansive. But he does not make this further commitment. And it is better read that way.

²⁰ In philosophy of mind, folk psychology or mindreading refers to theories or models that seek to explain social understanding and coordination. The two dominant ones are simulation (Goldman, 2006; Nichols & Stich, 2003).and theory-theory. According to theory-theory, social understanding and coordination depend on tacit network of principles linking mental states to each other and to behaviours. These principles are either acquired (Gopnik & Meltzoff, 1997) or innate (Scholl & Leslie, 1999). There has been recent attempts to model folk psychology or mindreading without theory-theory or simulation (see Apperly, 2010).

²¹ Jennifer Nagel also defends a related view, excellently captured in the title of her paper: "Mindreading in Gettier cases and Sceptical pressures." In particular, she says "ascribing knowledge is like recognizing a friend's face or seeing that she looks sad" (Nagel, 2012a, p. 171). In her case, she is ambivalent about the correct model of folk psychology or mindreading, whether it is simulation or theory-theory (see Nagel 2012a, 2012b). I will not engage with her view for two reasons. First, the prospect of the view depends on whether folk psychology or mindreading can anchor the relevant epistemology even when restricted to those of Gettier cases. And using Williamson, I will show why that is doubtful. In particular, depending on how the story is told, the first objection to Williamson's view applies to hers as well. Further, the second objection to Williamson's view would apply to her view as well.

the most *distinctive* feature involved in evaluating counterfactuals and in classifying cases. And this is so because simulation is intimately connected with ego-centric bias, an error-prone process where we project our detached mental situations on the mental situations of the agents we are attributing those mental states to (for the empirical support of this, see Birch & Bloom, 2004; Nickerson, 1999). This problem remains a constant worry in Williamson's account no matter how we seek to unpack the details of the story given the distinctive place of simulation in it.²² And this makes Williamson's way of modelling thought experiments very worrisome since at the very least instead of inspiring confidence in the method; it raises doubts as to why analytic philosophers who engaged with the method in epistemology should have depended a great deal in their philosophising on such an error-prone process as off-line simulation as often as they have done.

The second worry is this. The view assumes that just because the predictive and explanatory capacities of folk psychology are reliable for everyday practical purposes and contexts; *ipso facto*, they should be reliable in the context of philosophy. But that transition is not easily available for folk psychology because a capacity can be reliable for everyday practical purposes without being sufficiently reliable in the demanding tasks of philosophy such as theory-building. Jennifer Nado makes this excellent point when she argues that "theory-building generally, and philosophical theory-building in particular, tends to be demanding" epistemically speaking" such that a capacity can be good enough for practical purposes without being good enough for the more demanding contexts of philosophy (Nado, 2015, p. 212). For example, folk physics, a counterpart of folk psychology is generally suitable for everyday practical purposes but not for the task of generating physical theories of the world. If this is the case; a similar worry arises for Williamson's folk psychological view. Of course, we expect that philosophical verdicts can be used to generate theories. The problem is that folk psychological explanation is hard-pressed to explain why we should be able to do that.

At this point, there is temptation to resort to some special expertise that philosophers might have in application practices, a claim Williamson actually makes (Williamson, 2007). But if introduced at this stage, it threatens to undercut the claim of epistemological continuity as doing the relevant explanatory work and of meeting the challenge from negative experimental philosophy. Worse still, it is not clear that the putative claim of general reliability can stand empirical scrutiny (Schwitzgebel & Cushman, 2015; Tobia et al., 2013).²³

Note that I do not take these objections to either the argument view or the folk psychological view as knock-down arguments. On the contrary, I take them as being enough to motivate looking for a different model for vindicating the claim of epistemological continuity.

²² Note that both Williamson and Nagel take knowledge as a distinct mental state (Nagel, 2013; Williamson, 2000).

²³ For discussion of these empirical studies, see Irikefe (2020).

3.3 The reason responsiveness view

We are looking for a source of knowledge or justification that is broadly social in the sense that it underlies much of human social cognition, and one that avoids the drawbacks of the extant views. I suggest we turn to virtue ethics, in particular, to a certain reading of Aristotle's *Nichomachean Ethics* that flowers in McDowell and Fricker. Indeed, one can hardly fail to see how the situation in the epistemology of testimony for which the framework of virtue ethics was called for by both thinkers mirrors the present situation in the epistemology of thought experiments. To see this, notice that in the debate on testimonial justification and knowledge, both McDowell and Fricker argue for a framework that can thread a fine line between an intellectualist tradition of argumentation on the one hand and an evidentially lax tradition on the other hand.

For example, McDowell argues that it cannot be the case that one acquires knowledge in a testimonial exchange only because one is equipped with the rational force of an argument. The problem with that option is that the premises of the argument that one must equip the receiver in order for the receiver to count as knowing the conclusion might be unknown to the receiver. If on the other hand, one weakens the evidential requirement too drastically, it makes it highly doubtful how testimonial exchange can transmit knowledge given that the kind of mistakes and deception that one might suspect in testimony are not far-fetched possibilities like brain in a vat. Following his usual Sellarsian formulation, McDowell argues that if we take the standing in the space of reason as knowing that p in testimonial exchange then an agent can be credited with knowing that p when that agent has exercised a certain sensitivity to the requirement of reason for or against taking it that p (McDowell, 1994).

Fricker (2003, 2007) takes this move as promising for the epistemology of testimony but argues that the ability to resonate with reason for or against particular judgements in testimonial exchange ought to be seated in a capacity she identifies as the Aristotelian virtue of sensibility, spelled out along the following lines:

An ethical sensibility yields genuine *judgements* – interpretative judgements, such as "That was cowardly," or immediately practical judgements, such as "I ought to confess" – yet these judgements are not conclusions to arguments... The central place of virtue explains how a sensibility issues in non-inferential judgements. The virtuous person does not have to *work out* that an act was cowardly, or that the culprit should own up; he just sees that this is the case; he just knows. Continuing in this broadly Aristotelian vein, we might add that the virtuous person is able to perceive the moral colourations of things spontaneously in this way in virtue of his sensibility being formed by a proper ethical training or upbringing (Fricker, 2003, pp. 159–160).

I find this framework both plausible and appropriate. And what I suggest is that we think of the epistemology of thought experiments as an application of this basic notion.²⁴ However, unlike Fricker, we do not need to think of the virtue of sensibility as something different or more basic than McDowell's initial idea of responsiveness to reason.

²⁴ Fricker uses the idea to flesh out an account of *testimonial* sensibility.

This is so because in Aristotle, at least on McDowell's reading, a virtue like sensibility is a habit of rational response, an ability to resonate to the structure of the space of reason (McDowell, 1994, p. 109). It is noteworthy here that virtue epistemology in the way just characterised places human embodiment in the form of habits, both cognitive and affective at the core of social cognition. It thus shares a distinctive vision with embodied social cognition.²⁵

To make clear, on this way of thinking, sensibility or virtue in general is a way of knowing, a form of cognition, a capacity to discern the distinctive demand of reason in a situation, whether real or fictional and on the basis of which we are able to judge that certain facts obtain or fail to obtain in a case. For example, our ethical sensibility is the ability by which we make classificational judgements, that is classify an action as cowardly, kind, morally permissible, right or wrong in real situations but also in the sort of situations that interest us in moral philosophy such as the trolley cases (Foot, 1967; Thomson, 1985), the violinist case (Thomson, 1971), the pond case (Singer, 1972), and so on.²⁶

If we accept this notion, which enjoys prior plausibility, I suggest we can extend the picture to include "epistemic sensibility"²⁷: our trained habits of rational response to the presence or absence of knowledge around us and by which we are able to classify people as knowing certain truths, whether in real situations or in hypothetical situations like Gettier cases. Put more generally, the view I defend is the following:

The Reason Responsiveness view One knows that p with respect to a classificational judgement if one's judgement that p is a manifestation of the virtue of sensibility.

I will argue for three main features of this sensibility with respect to our classificational judgements or practices, which serve to illuminate its source, nature and operation. The first concerns its origin, which is deeply social. For example, our ethical sensibility comes from our moral training as *ordinary* members of a community. As McDowell notes, human beings are born animals, and they grow to become full rational and intentional agents by a process of ethical training (*bildung*). And a core part of this training is the introduction into a language, which is a repository of traditions, and a store of historically accumulated wisdom, in particular of what is a reason for what. Of course, each generation or individual has an obligation to critically improve this tradition. However, that improvement can only happen if they accept that tradition as it stands (McDowell, 1994). The story applies too to our epistemic sensibility. How so? Here is the suggestion. Like the acquisition of ethical sensibility which depends on learning from others, including models in our community and learning to become competent speakers of human language in the community, the acquisition of epistemic sensibility also depends on learning from others and being part of a shared evaluative practice in using the word "knows" and its cognates. This acquisition of epistemic sensibility is unmysterious given that the word "knows" and its cognates are lexical

²⁵ For lack of space, I cannot fully engage with this idea here.

²⁶ Note that sensibility has a motivational component. For example, for ethical judgements, the motivational component of our trained sensibility guides us in attaining the right judgement appropriate to the situation.

²⁷ This is not a claim that McDowell makes; this is a claim I make based on what McDowell says about ethical sensibility.

universals, with the rare quality of being in the core vocabulary of all known languages (Haspelmath & Tadmor, 2009), and having one-word equivalent in all natural languages (Goddard, 2010).

The second feature is that our sensibility is a recognitional ability to know in the following two senses. In the first sense, although our sensibility gives us the ability to classify situations and resonate with rational considerations for or against a given classificational judgement, it does not equip us with a reflective ability to fully articulate those reasons.²⁸ And in the second sense, our sensibility is not *strictly* rule governed.

Ethical sensibility is clearly recognitional in these two senses. For example, when we judge that it is morally impermissible to push the fat man in the trolley problem, we can make this judgement in full confidence; plausibly because there are features of the situation that engage our moral outlook without our having the reflective ability to adequately express the reasons we are rationally responding to in that outlook.²⁹ Also, our ethical sensibility is not strictly rule governed. As Aristotle argued in the *Nichomachean Ethics*, if we try to spell out what the moral outlook of a *virtuous person* amounts to in terms of moral principles, and then try to use those moral principles to classify actions as right or wrong, kind or cruel, and so forth, we shall invariably come to a situation where rigidly following the classificatory rule leads us to moral conclusions that would strike us as wrong in the sense of being something a virtuous person would not choose in that situation. Thus, he consistently maintained that moral rules and generalisations only hold for the most part (*NE*1103b34–1104a10).

The case of epistemic sensibility is even clearer on this matter. Our epistemic sensibility is clearly recognitional in the first sense. When we classify the 10-coin case as a case of justified true belief that does not amount to knowledge, we are confident of this judgement plausibly because we are attentive to the rational features of the situation. And yet we are not equipped with the reflective ability to fully spell out the reasons. Indeed, it took the community of epistemologists some time to come to the realisation that something like epistemic luck is involved in cases like that and that this luck is such that it is incompatible with knowledge (Pritchard, 2005; Zagzebski, 1994). It is also recognitional in the second sense. In fact, the attempt to tell a short and simple story of the guiding principle underlying our epistemic evaluative practice or classification in terms of some necessary and sufficient conditions was highly unsuccessful as every principle or theory was invariably met by a counterexample (Horwich, 2011; Shope, 2017).

²⁸ Gilbert Ryle makes the same point when he notes that "a well-trained sailor boy can both tie complex knots and discern whether someone else is tying them correctly or incorrectly, deftly or clumsily. But he is probably incapable of the difficult task of describing in words how the knots should be tied" (Ryle, 2009, p. 43).

²⁹ I explain sensibility as the capacity to know the demand of reason or to be responsive to reason in judgement. It might be demanded that one explains responsiveness to reason without reference to the capacity to know reason. But that demand relies on a certain view of analysis, what Peter F. Strawson calls dismantling view of analysis in which complex phenomenona or notions must be broken down into simpler phenomena or notions, which are independently understood. But there is a different model, he calls network analysis in which a notion or a phenomenon is understood only by grasping its connections with other notions or its function or role in the system of analysis (Strawson, 1992).

The third and final feature is that our sensibilities allow us to project across various contexts, both real and fictional.³⁰ For example, someone who has the ethical sensibility of kindness can be counted upon to be able to classify different situations as requiring kindness or not requiring it. And the person can do so not only in the type of cases in which the ethical sensibility was inculcated, but in similar cases to those actual ones, where what is similar cannot be demarcated in any rigid way. Similarly, someone with a suitable epistemic sensibility can be counted upon to classify different people as knowing this or that proposition. And the person can do so not only in the type of real cases by which he or she cottoned on to the practice but also in situations similar to those actual ones, where what is similar cannot be demarcated in any rigid way. The important question here is, where does this faith in our ability to project onto new instances come from? Certainly not from the ability of the subject to grasp concepts or to have certain mental episodes or phenomenology or grasp universals or to have mastery of the application conditions of rules. And certainly, not because philosophers belong to some exclusive club or enjoy a certain superior access to concepts or philosophically interesting phenomena not available to ordinary people. On the contrary, as Stanley Cavell puts it following Wittgenstein, that "on the whole we do is a matter of our sharing routes of interest and feeling, mode of response, senses of humour and of significance, of what is outrageous, of what is similar to what else, what a rebuke, what forgiveness, of when an utterance is an assertion, when an appeal, when an explanation-all the while of organism Wittgenstein calls "forms of life" (Cavell, 1969, p. 52).³¹

How does the reason-responsiveness view avoid the drawbacks of the extant views and how does it vindicate the claim of epistemological continuity? Take the argument view. Since sensibility is recognitional in the sense that it allows us to discern reason spontaneously in the situations of our fictional characters; there is no need to seek for an independent rational ground of the verdict or judgement that must be available to us or the thought experimenter. In other words, the judgement already reflects a distinctive rational ground. Taken in this way, we are then able to avoid the unintended consequence of attributing massive ignorance or unjustified beliefs on all those members of the epistemological community who accepted the relevant verdict without understanding or knowing the relevant reason since that is exactly what we should expect on this view. Moreover, we can also account for the decisiveness and consensus that accompanied the introduction of the Gettier cases. Indeed, on this view, the epistemological community was not under some spell nor was it beholden to some irrational or a-rational attraction to assent to the relevant judgement. On the contrary,

 $^{^{30}}$ Of course, the more outlandish the case is, the harder it is to effectively project or classify the case.

³¹ The suggestion following Wittgenstein that our capacity to project into new instances depends on our sharing in forms of life can seem like appealing to authority. So let me explain the suggestion. The thought is that there are no *complete* explanation that can be had or given about the working of human language. And this is a more general phenomenon that includes explaining the rules of a game or what it is to obey a rule or to make request. But it also means that one cannot use words as we do unless one is an initiate into the activities "which give those words the point and shape they have in our lives" (Cavell, 1979, p. 184). Consider how one might try to explain to someone the notion of "checkmate." How can one explain that to someone who does not already understand the game of chess itself, of what a "king" is, of what "inescapable capture" is, including the network of concepts and rules and practices that give the idea of checkmate its point and purpose.

members of the community took their verdicts about the Gettier cases as rationally warranted and rightly so. 32

Next take the folk psychological view. The reason-responsiveness view presents a different model of thought experiments; one in which simulation does not play any role at all. On the contrary, our access to the facts that obtain or fail to obtain in the cases is always a direct one. This is what the recognitional feature of sensibility is meant to signal. It is a kind of direct perception or recognition and it involves the exercise of our social perceptual skills. Given this, we can avoid the worry of egocentric bias that necessarily arises when we adopt the folk psychological model. In the same vein, we can explain why even though the provenance and sphere of sensibility is everyday social interaction; its deliverances can have normative significance in the context of philosophy. Since sensibility is an epistemic virtue, a trait of character that agents have as second nature arising from a bildung, it makes sense if we use these judgements as input data in theory building. There is another way of making this point that Matt Stichter recently pointed out in the nature of virtues: virtues are skills to respond to reason, "and to act well in demanding situations" (Stichter, 2018, p. 2). And this applies too to sensibility. Notice that the relevant reliability that a framework that seeks to vindicate the claim of epistemological continuity requires is indeed a modest one since unlike the expertise reply, reliability does not by itself explain why we should rely on these verdicts. How modest must such a reliability be? Here is an attractive suggestion. The relevant reliability of a plausible framework should meet both negative and positive requirements. Negative requirement demands that the basis or framework should not be associated specifically or uniquely with any known human bias or flaws. And positive requirement demands that the relevant basis or framework should be indicative of being such that it not only can serve us well in mundane tasks but also in more demanding tasks such as philosophical theory building. And I argue that it is doubtful that Williamson's model meets the positive requirement. Also, it clearly does not meet the negative requirement in being associated with ego-centric bias. Further, I argue that the virtue as skill model meets both requirements. There is no known bias or flaws specific or unique to sensibility or the virtues. And virtues including sensibilities as social perceptual skills are dispositions that enable us to act well in demanding situations as earlier hinted. (I will return to this again shortly).

Finally, the reason-responsiveness view vindicates the claim of epistemological continuity since there is no positing of any faculty of cognition distinctive of philosophy. On the contrary, the ability we rely on has a social origin and we depend on it for much of our knowledge of the social world, including testimonial

³² In saying "rightly so", I meant to indicate that once we grant that the practice is in order within a broadly descriptive metaphilosophy, then in classifying the cases as they did, they were rationally responding to what has been made salient in the case.

knowledge.³³Moreover, the view shows how knowledge from thought experiments is embedded in a larger network of social knowledge and justification.³⁴

There is a particular way of unpacking this claim of continuity with respect to the virtue of sensibility that is very illuminating. And the idea is to follow a recent trend among virtue epistemologists in thinking of virtues as skills, a suggestion I have been hinting at already (Annas, 1995; Bloomfield, 2000; Stichter, 2013, 2016, 2018). This is a natural suggestion for sensibility as a virtue given that sensibility is a social perceptual or recognitional skill or capacity. And this means too that following this trend in virtue epistemology we can also derive a viable epistemology that is not philosophically suspect (Bloomfield, 2000), since the epistemology of thought experiments, on this suggestion, belongs to a general kind of knowledge we have good knowledge about. And here is how to think about this general kind of knowledge. Paul Bloomfield argues that skills have "an underlying intellectual structure (logos)", and "having a particular skill entails understanding the relevant logos" (Bloomfield, 2000, p. 23) and we might add that it also entails being able to respond in an appropriate way when faced with a situation that calls for the exercise of that skill. These suggestions of Bloomfield mesh nicely with the empirical study of skill (chess in this case) by Chase and Simon (1973); Gobet and Charness (2018); Groot (2008); Simon and Chase (1988). These studies reveal that skills (e.g., the skills of chess playing) enable the players to understand the "logic" of the game and more importantly to judge and respond to a problem position in the right way by picking out the appropriate "moves" that make checkmate likely. Further, I argue that sensibility in particular has this inner structure or logic that Paul Bloomfield claims for skills as well since it endows the agent with the capacity to resonate with rational considerations for or against a particular classificational judgement and to be able to classify situations in the appropriate way under normal circumstances. There is another component of skills that is also very illuminating for our account of sensibility as recognitional. In his analysis of the acquisitions of skills of various kinds, Dreyfus (2004) shows that it involves a transition from contextfree rule to non-rule based capacity to make judgements spontaneously by seeing similarity with previous experiences. And he suggests that "[the] skill model thus supports an ethics of situated involvement such as that of Aristotle, John Dewey, and Carol Gilligan" (Dreyfus & Dreyfus, 2004, p. 251). Thus, the nature and operation of sensibility in being non-rule based is a general phenomenon about skills and therefore unmysterious as well.

Moreover, the virtue as skill thesis allows us to give more plausibility to the claim that sensibility as a social perceptual skill is modestly reliable in the positive sense. How does the deliverances of our recognitional capacity become dependable or reliable? In my view, this is a more general question of how the judgements that are the

³³ Mark Alfano once argued using results from social psychology that virtues are fictions and that subjects do not have the putative dispositions since they are subject to situational variables (Alfano, 2012). However, in more recent work, Alfano argues that the situationist objection to the virtue framework is untenable because the empirical evidence fails replication (Alfano, 2018).

³⁴ This account is different from Sosa's approach in two ways. First, unlike (Sosa, 2007b) who thinks of the virtues as faculty-virtues, something like a well-functioning faculty of rational intuition, an account with a strong Platonic root (Axtell, 2000); the account here deeply relies on an Aristotelian understanding of the virtues. Second, Sosa's approach still falls within the exceptionalist framework, where the virtue framework is recruited to shore up the faculty of rational intuition.

deliverances of skills become dependable or reliable. They are dependable or reliable by the practice in which the skill is acquired, sustained, and improved upon. One constant factor often mentioned in the psychological literature is "practice" (Ericsson, 2014). In the formal setting in which this occurs, a particular kind of practice stands out: deliberate practice, in which one aims to improve by seeking feedback in the hope of identifying and correcting for errors. Virtues are also acquired, sustained, and improved upon by practice. As Aristotle argued:

We acquire them as a result of prior activities; and this is like the case of the arts, for that which we are to perform by art after learning, we first learn by performing, e.g., we become builders by building and lyre-players by playing the lyre. Similarly, we become just by doing what is just, temperate by doing what is temper ate, and brave by doing brave deeds" (*NE* 1103a32–1103b3).

On this thinking, we acquire the sensibility of kindness like we acquire skills by doing kind things and learning from people we find displaying such human excellence in our community. Such informal learning too has a core of feedback built into it. We learn from previous experiences not to give in easily to people who pose as beggars since sometimes they are pretenders. We also learn from the joy of relief and happiness we find in others when we show kindness to them. Further, as children we learn from teachers and parents. And as adults we learn from role models as well. Although such feedback does not have a formal structure of professional skill learning, they mirror a more general phenomenon of human learning and improvement.³⁵ Similarly, in acquiring epistemic sensibility, the child learns from parents and teachers how to apply the term "knows" and its cognates and how to use these terms in various circumstances for various ends and purposes. Baz (2016, 2017), to be discussed shortly, highlights one interesting study of how children acquire the term "knows" and its cognates. One thing that stands out in this particular study (Bartsch & Wellman, 1995) is the depth of social dependence of children, especially in their interaction with parents, and adults and the trusting relationships that provide the basis and foundation of the learning process.36

Notice the overarching point of this social dependence in the forging of our sensibilities, both epistemic and ethical. Since our sensibilities are forged in "the social world where we learn to interact with agents, their goals and their knowledge claims," and

³⁵ Notice that what I say here about learning from practice in the very activity in which that practice has a point and purpose does not conflict with my earlier reference to being an initiate in a form of life since the learning itself is part and parcel of the initiation.

³⁶ By a proper ethical training is meant the moral upbringing we receive as children and adults in the community under normal circumstances. In the epistemic case, this involves being brought up to use evaluative terms like "knows" and its cognates in the appropriate way. Of course, this can only occur when the environment is a normal environment, one not massively distorted by some vicious ways of thinking and valuation. An example of such a vicious environment would be one in which the child's trusting relationships and dependence are so manipulated and distorted so that the child's sensibilities and other intellectual skills and abilities do not enable him or her to be capable of engaging in effective inquiry, one that promotes knowledge and understanding of the world. This might happen because the child is trapped in an information enclave, what is also called "echo chamber." See C. Thi Nguyen (2020) for an illuminating discussion of this problem.

"since the subject of philosophy is that same social world, then our judgements about thought experiments should be helpful to our descriptions of that social world."³⁷

4 The reason-responsiveness view and some recent challenges to the method of thought experiments

The reason-responsiveness account scores a major point against the extant accounts especially that of Timothy Williamson in being able to deal with some recent objections to the philosophical method of cases. I take up these objections because they are cogent, and they depend on our best scientific knowledge of the competence that the method of cases depends upon to achieve its aim. Further, the objections highlight some unnoticed difficulties in recent defence of the method and its reliance by both mainstream philosophers and experimental philosophers alike. I would first discuss these objections or worries, present his empirically informed account of language, and then engage the objections and worries he raises with the reason-responsiveness view. The overall aim of this is to show that the attempt to undercut the claim of epistemological continuity by means of language does not work either. Let us begin then.

In some very interesting works, Avner Baz (Baz, 2016, 2017) argues that defenders of the method including Cappelen (2012), Williamson (2007) and Frank Jackson (Jackson, 2011) presuppose that philosophically interesting words like "knows" function and have the same profile with ordinary words like "table".³⁸ Using textual evidence, Baz shows how these theorists of philosophical methodology presuppose this view of language. For example, Jackson compares how we acquire the word "knows" with how we acquire the word "table." He says: "Everything in this area is highly contentious but one thing is clear. At some crucial stage in the process, we latch onto the relevant pattern... Most of us learn 'table' by latching onto the pattern that unifies the tables we see and using the word for that pattern" (Jackson, 2011, pp. 473–474). This he says applies to the word "knows." We acquire this term because "[a]t some point we latched onto the pattern" (Jackson, 2011 p. 474). In the case of Cappelen and Williamson, Baz argues that the patterns at stake in their accounts are non-linguistic. They are the set of things in the world that the term refers (Cappelen, 2012; Williamson, 2007, 2009). For example, Williamson says if two persons conflict in the verdict they give to a Gettier case and we are trying to determine whether they mean the same thing and therefore that they are in genuine disagreement, "[t]he central question is whether they use the word 'knowledge' with the same reference" (Williamson, 2009, p. 130).

The second worry Baz points out about these theorists is their explicit reliance on the atomistic-compositional view of language and linguistic competence in defending the method of thought experiments. On this view, arriving at the sense of an utterance involves arriving at the fixed sense of the individual parts of the utterance or text. In both Williamson (2007) and Cappelen (2012), this view derives from their reliance

³⁷ I am extremely grateful to an anonymous reviewer of this journal who suggested this excellent point to me.

³⁸ This is part of the thesis Baz calls, "the claim of continuity," expressed as a claim we should be sceptical about.

on compositional semantics in their respective epistemology of thought experiments. For example, Williamson says that: "[E]xpressions refer to items in the mostly nonlinguistic world, *the reference of complex expressions is a function of the reference of its constituents*, and the reference of a sentence determines its truth value" (Williamson, 2007, p. 281, emphasis, mine). In the same vein, Jackson very explicitly argues that the epistemology of thought experiments relies on the atomistic-compositional view. On this view, the representational function of a sentence like "it is raining outside" depends on its parts and how they are combined. Moreover, "we have a grasp of the representational contents of these parts, and of the way various modes of combination into sentences generate representational structures whose contents are a function of the contents of their parts and the way the parts are put together" (Jackson, 2011, p. 472).

Baz questions these accounts by drawing on the study by Bartsch and Wellman (1995) of how children acquire first natural language (English). This particular study tracks the development of children in the use of belief-desire terms like "believe," "knows," "think," "guess," "want," and their cognates between the age of one and half to six years. About this study, Baz (2016, 2017) says one reason it is important for the argument he makes is that the study focusses not merely on garden-variety concepts like furniture, vehicle, fruit, weapon, vegetable, and clothing, which tell us little to nothing about what we need to know about the business of studying philosophically interesting phenomena like knowledge, causation and free will. On Baz's view this observation is important because when the authors tried to codify "knows", they found that children use "knows" and its cognates to refer initially to instances of belief "felt to be justified, assumed to be true, or that enjoys markedly higher conviction than one described by think (Bartsch & Wellman, 1995, p. 40) and later to refer to "situations involving successful actions or to correct statements" (Bartsch & Wellman, 1995, p. 60). In a word, there is no single pattern the word tracks but family of patterns. Hence the first worry: Jackson, Williamson, and Cappelen are mistaken when they think of mastery of terms as mastery of the pattern traced by those terms.

Further, Baz argues against the atomistic compositional view by presenting an alternative view of language, which can make sense of the plasticity and open-endedness of human words revealed by the study. In particular, he draws from Wittgenstein's *Investigations* (Wittgenstein, 2010), and Merleau-Ponty's *Phenomenology of Perception* (Merleau-Ponty & Smith, 1969) to give a social-pragmatic account of language and linguistic competence on which understanding the speech of another requires first understanding the point of the actual speaker and by means of that coming to comprehend the parts of the utterance. The view essentially is a gestalt view of language and linguistic competence: we understand the parts of a speech by first understanding the whole of it, and that requires understanding the point of the actual speaker including the speaker's cares and commitments. Thus, unlike the atomistic-compositional view where linguistic sense is had by putting together the sense of the individual parts; on this picture we have to see the point of the actual speaker first, that is, her motive, her cares, her commitments, and her history before grasping the sense of the individual parts. Hence the second worry.

But Baz goes further by inferring that in philosophical thought experiments, those conditions of linguistic sense are lacking, and therefore the practice of relying on

philosophical thought experiments is misguided. For example, he says, in the harm and help case:

When we are presented with Knobe's scenarios and invited to say whether the chairman harmed, or helped, the environment intentionally, we are not asked an empirical question that expresses some particular interest *in the case at hand*, in a context that makes *that* interest intelligible; and there is *nothing* we might do to *find out*, empirically, whether she did, or did not. The "case" has been given to us by Knobe and is, empirically, as clear as it will ever be: there is nothing to find out about *it*. There is also *nothing* we commit ourselves to in saying ("judging," "intuiting") that the chairman harmed, or helped, the environment intentionally, as opposed to saying he did not—or anyway nothing but the truth of our answer; and we do not yet know what it might mean for it to be, or not to be, "true." There is, for example, no reason to expect those who say they "agree" with the sentence "The chairman of the board harmed [helped] the environment intentionally" to respond systematically differently to the chairman, or to an actual person who has done *just* what she did, from those who say they "disagree" with the sentence (Baz, 2017, fn. 27).

Let us deal with the first and second worries, and then consider the sceptical conclusion that Baz is drawing with his distinction of linguistic contexts. Given the reason-responsiveness view we can deal easily with the first worry. This is so because the account does not presuppose that philosophically interesting words like "knows" have the same profile as ordinary words like "table" since it is claimed that our capacity to deploy philosophically interesting words depends on recognition rather than on rule or pattern-based knowledge. Further, there is no suggestion that ordinary human words like "table" or "bachelor" have this profile.

The account can also deal with the second worry. If our grasping the application conditions of words like "knows" is based on recognition rather than on rules of language, a natural extension of that view is to say that our grasping the sense of an utterance is based on our recognitional capacity and not merely on the fixed properties of language or the semantic properties of parts of utterances. If this is so, then understanding the speech of another does not require that we first understand the parts as a way of grasping the whole. On the contrary, with recognitional capacity, we can grasp the whole much more directly. Compare an analogous situation of how someone might *recognise* an oak tree as one. With sufficient experience one can come to that conclusion almost immediately by seeing the appearance of the leaves without first putting together the subtle details of the various elements of the leaves to reach the relevant conclusion. Thus, on this thinking linguistic sense is explained not by reference to the fixed sense of the atomic parts of utterances but by reference to the normative properties of speakers and hearers, their recognitional capacity. And thus, like Baz's gestalt view, the idea that human words can speak for themselves, "over our heads as, as it were—and of language as a system of significant signs that does not depend on speakers (and listeners) for its ongoing maintenance" (Baz, 2017, p. 96) is completely rejected.

The view I am suggesting here, in particular, the idea of resorting to agent-level capacity to account for the nature of language and linguistic competence finds further support and inspiration in the work of the later Donald Davidson (1986). The later Davidson was perplexed by the problem of malapropism, namely, "our ability to perceive a well-formed sentence when the actual utterance was incomplete or grammatically garbled, our ability to interpret words we have never heard before, to correct slips of the tongue, or to cope with new idiolects" (Davidson, 1986, p. 95). In dealing with this problem, Davidson had to abandon the view that hearers and speakers are equipped with something like a theory or a generalisation or a set of semantic rules, principles, and conventions, which they also bring to bear in their linguistic exchange and in their production of linguistic meaning or sense (Davidson, 1984). On the contrary, Davidson argues that we must resort to the agents themselves as hearers and speakers and their ability to get things right from time to time, occasion to occasion. Here is an apt summary of the view:

This characterisation of linguistic ability is so nearly circular that it cannot be wrong: it comes to saying that the ability to communicate by speech consists in the ability to make oneself understood, and to understand. It is only when we look at the structure of this ability that we realise how far we have drifted from standard ideas of language mastery. For we have discovered no learnable common core of consistent behaviour, no shared grammar or rules, no *portable* (italics, mine) interpreting machine set to grind out the meaning of an arbitrary utterance (Davidson, 1986, p. 445).

And what I am suggesting here is that we see the recognitional ability of the agent as a more specific way of explaining the capacity by which the agent can get things right from time to time, occasion to occasion.³⁹ Further, this makes Davidson's way of telling the story less mysterious than it would ordinarily appear. Given this view of language on the table, we can deal with the complexity of language. Again, that is because we have a capacity to get things right from time to time, occasion to occasion—our recognitional capacity.

This brings us finally to what Baz says about the help and harm case. In his presentation of this case, he says he is establishing a distinction between "actual context" of speech and the "peculiar context" of speech and he is suggesting that in the peculiar context of speech, which features in analytic philosophy's reliance on the method of thought experiments, the conditions of meaning we find in actual contexts of speech are lacking. Thus, on this way of thinking further illustrated in his presentation of that case meaningful occasions of linguistic expressions must be ones that express an empirical question, in a context that can be empirically investigated, and where the investigator has particular interests, cares, and commitments to the truth of the answer. However, the problem with this criterion of meaningfulness as with any criterion of meaning ever posited in the history of philosophy that can pronounce one context good and another context problematic is that it presupposes that that we have knowledge of the boundary of linguistic sense. Indeed, this is part of the picture of language that

³⁹ The fact that language is complex or the fact that the world is complex is still compatible with the prospect of learning significant truths about the world or gaining significant understanding about the world.

Wittgenstein found necessary to reject in the *Investigations* (see Wittgenstein, 2010, § 18), namely, the idea that there could be such a thing as a criterion of linguistic sense.

Here is a more direct way to resist Baz's distinction between the natural context of speech and the peculiar context of speech in philosophy and thus his objection to the use of thought experiments in philosophy. If linguistic competence is recognitional as the reason-responsiveness view indicates, and thus non-rule based, it means we cannot fix any set of conditions that must be available to hearers and speakers such as the speaker's cares, commitments, and history and the empirical nature of a question or an inquiry for linguistic understanding to be possible. Moreover, given that the distinction that Baz is setting up using the harm and help case makes sense against the background of his own view of language and linguistic competence, with the reason-responsiveness view on the table, that distinction and the negative conclusion he draws about the philosophical use of thought experiments no longer stand irresistible.

5 Conclusion

In this paper, I have presented and defended the reason-responsiveness view of the epistemology of thought experiments. I have also shown how the account avoids the drawbacks of the extant views while vindicating the claim of epistemological continuity. Finally, I have shown how the view offers a way for champions of the claim of epistemological continuity to resist Avner Baz's objection to the claim of epistemological continuity and his objection to the philosophical use of thought experiments while taking on board some attractive elements of his view.⁴⁰

Let me end with where all these leave us with the philosophical method of cases. I would mention just two. First, for a long time, mainstream epistemology has been largely focussed on the lone individual inquirer and what cognitive resources he or she has in the attainment of knowledge or justified beliefs, a tradition that goes back to René Descartes in his meditations (Descartes, 1986). Happily enough, epistemologists in recent years have realised that the picture is misleading. We are socially and epistemically dependent on others for effective inquiry. This paper highlights how the epistemology of philosophy can connect or already does connect with this social turn. It shows that our philosophical knowledge or belief depends on cognitive devices we share with others or possess in the face of others and that trusting others is implicated in the process in which the competence is acquired, sustained, and improved upon.

The second implication relates to the epistemic aim of the philosophical method of cases. Given that phenomena of philosophical interests such as knowledge, free will and understanding do not admit of any simple classificatory rule, it means we have to be a little more careful about what conclusions to draw from counterexamples

⁴⁰ Baz also worries whether the questions at stake in the method of cases or thought experiments can be answered correctly or incorrectly, and what that correctness if any would be about, whether it would be about our concepts or items in the world independent of our concepts (Baz 2016, 2017). The thing to say here is that philosophical discussions can meaningfully proceed without first settling the question of the objectual ontology of human language. Controversies can be settled meaningfully just in terms of where the truth lies (Sosa, 2007a).

in philosophy.⁴¹ For counterexamples may indicate what we already know all along, namely, that there is no simple story to be had for these phenomena. This connects to one interesting suggestion by William Alston, namely, that epistemologists need to stop looking for some correct account of some concepts or phenomena of philosophical interests since these may have many packages or desiderata that they embed and instead focus on how these desiderata or packages relate to one another for a given phenomenon say of justification, "determining which of them [i.e., the desiderata] are feasible goals and what it takes to achieve each of those feasibilia, and identifying the contexts (interests, aims, problems) for which one or another is most important" (Alston, 1993, p. 534). Note that by itself this does not cast any gloomy picture about the philosophical method of cases given that its use in philosophy goes well beyond cases of counterexamples to include cases such as the twin-earth cases, where the aim is to draw attention to some interesting features of the world.

Acknowledgements I am grateful to two anonymous reviewers for this journal for their invaluable comments on this paper. I would like to also thank Alessandra Tanesini, whose comments in no small measure shaped the central arguments and structure of the paper. Further, I thank members of the Cogito Epistemology Centre, especially Chris Kelp, Mona Simon and Adam Carter for their helpful criticisms of an earlier version of the paper. Special thanks too to the organisers and participants of the workshop on "Formal and Informal Methods in Philosophy" at the Institute of Philosophy, Warsaw, Poland, for their invaluable comments and feedback on the paper.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/ by/4.0/.

References

- Alfano, M. (2012). Expanding the situationist challenge to responsibilist virtue epistemology. *Philosophical Quarterly*, 62(247), 223–249.
- Alfano, M. (2018). A plague on both your houses: Virtue theory after situationism and repligate. *Teoria*, 38, 115–122.
- Alston, W. P. (1993). Epistemic desiderata. Philosophy and Phenomenological Research, 53(3), 527-551.
- Annas, J. (1995). Virtue as a skill. International Journal of Philosophical Studies, 3(2), 227–243.
- Apperly, I. (2010). *Mindreaders: The cognitive basis of "theory of mind."* Psychology Press.
- Armstrong, D. M. (1973). Belief, Truth and Knowledge. Cambridge University Press.
- Axtell, G. (2000). *Knowledge, belief, and character: readings in virtue epistemology*. Rowman & Littlefield Publishers.
- Bartsch, K., & Wellman, H. M. (1995). Children talk about the mind: Oxford University Press.
- Baz, A. (2016). Recent attempts to defend the philosophical method of cases and the linguistic (re)turn. *Philosophy and Phenomenological Research*, 92(1), 105–130.
- Baz, A. (2017). The crisis of method in contemporary analytic philosophy. Oxford University Press.
- Bealer, G. (1996). A priori knowledge and the scope of philosophy. Philosophical Studies, 81(2-3), 121-142.

Bealer, G. (2000). A priori knowledge. *The Proceedings of the Twentieth World Congress of Philosophy*, 5, 1–12.

⁴¹ Avner Baz also makes this point abundantly clear (Baz 2016, 2017).

- Bermúdez, J. L. (2003). The domain of folk psychology. *Royal Institute of Philosophy Supplements*, 53, 25–48.
- Birch, S., & Bloom, P. (2004). Understanding children's and adults' limitation in mental state reasoning. Trends in Cognitive Sciences, 8, 255–260. https://doi.org/10.1016/j.tics.2004.04.011
- Bloomfield, P. (2000). Virtue epistemology and the epistemology of virtue. *Philosophy and Phenomeno-logical Research*, 60(1), 23–43.
- BonJour, L. (1998). In defense of pure reason. Cambridge: Cambridge University Press.
- Borg, E. (2018). On deflationary accounts of human action understanding. *Review of Philosophy and Psychology*, 9(3), 503–522.
- Brown, J. R. (1992). Why Empiricism Won't Work. PSA: Proceedings of the Biennial Meeting of the Philosophy of Science Association, 1992, pp. 271–279.
- Brown, J. R. (1991). The laboratory of the mind: Thought experiments in the natural sciences. Routledge.
- Brown, J. R. (2004). Peeking into Plato's Heaven. *Philosophy of Science*, 71(5), 1126–1138.
- Burge, T. (1979). Individualism and the mental. Midwest Studies in Philosophy, 4(1), 73-122.
- Cappelen, H. (2012). Philosophy without Intuitions. Oxford University Press.
- Cappelen, H. (2014). X-Phi without intuitions? In A. R. Booth & D. P. Rowbottom (Eds.), Intuitions: Oxford University Press.
- Cavell, S. (1969). Must we mean what we say?: A book of essays (Vol. 72). Cambridge University Press.
- Cavell, S. (1979). *The claim of reason: Wittgenstein, skepticism, morality, and tragedy* (Vol. 31). Oxford University Press.
- Chase, W. G., & Simon, H. A. (1973). Perception in chess. Cognitive Psychology, 4(1), 55–81. https://doi. org/10.1016/0010-0285(73)90004-2
- Chudnoff, E. (2011). The Nature of Intuitive Justification. Philosophical Studies, 153(2), 313-333.
- Clark, M. (1963). Knowledge and Grounds: A Comment on Mr. Gettier's Paper. *Analysis (United Kingdom),* 24(2), 46–48.
- Clatterbuck, H. (2013). The epistemology of thought experiments: A non-eliminativist, non-platonic account. *European Journal for Philosophy of Science*, *3*(3), 309–329.
- Davies, M., & Stone, T. (Eds.). (1995). Mental simulation: Evaluation and appli-cations. Oxford: Blackwell.
- Davidson, D. (1984). Inquiries into truth and interpretation. Oxford University Press.
- Davidson, D. (1986). A nice derangement of epitaphs. In E. Lepore (Ed.), Truth and interpretation: Perspectives on the philosophy of Donald Davidson (pp. 433–446). Blackwell.
- Descartes, R. (1986). Meditations on first philosophy: With selections from the objections and replies. Cambridge University Press.
- Deutsch, M. E. (2015). *The myth of the intuitive: Experimental philosophy and philosophical method*. The MIT Press.
- Dreyfus, H. L., & Dreyfus, S. E. (2004). The ethical implications of the five-stage skill-acquisition model. Bulletin of Science, Technology & Society, 24(3), 251–264.
- Dreyfus, S. E. (2004). The five-stage model of adult skill acquisition. Bulletin of Science, Technology & Society, 24(3), 177–181. https://doi.org/10.1177/0270467604264992
- Egler, M. (2020). No hope for the irrelevance claim. *Philosophical Studies*, 177(11), 3351–3371.
- Ericsson, K. A. (2014). The road to excellence: The acquisition of expert performance in the arts and sciences, sports, and games. Psychology Press.
- Evans, G. (1973). The causal theory of names. Aristotelian Society Supplementary, 47(1), 187–208.
- Foot, P. (1967). The problem of abortion and the doctrine of the double effect. Oxford Review, 5, 5-15.
- Fricker, M. (2003). Epistemic injustice and a role for virtue in the politics of knowing. *Metaphilosophy*, 34(1/2), 154–173.
- Fricker, M. (2007). Epistemic injustice: Power and the ethics of knowing (Vol. 69). Oxford University Press.
- Gendler, T. S. (1998). Galileo and the indispensability of scientific thought experiment. *British Journal for* the Philosophy of Science, 49(3), 397–424.
- Gendler, T. S. (2004). thought experiments rethought—And reperceived. *Philosophy of Science*, 71(5), 1152–1163. https://doi.org/10.1086/425239
- Gettier, E. L. (1963). Is Justified True Belief Knowledge? Analysis (united Kingdom), 23(6), 121-123.
- Gobet, F., & Charness, N. (2018). Expertise in chess.
- Goddard, C. (2010). Universals and variation. Words and the Mind: How Words Capture Human Experience, 72, 72–93.
- Goldman, A. I. (1994). Argumentation and social epistemology. *The Journal of Philosophy*, 91(1), 27–49. https://doi.org/10.2307/2940949

- Goldman, A. I. (2006). Simulating minds: The philosophy, psychology, and neuroscience of mindreading. Oxford University Press.
- Goldman, A. I. (2009). Précis of "Simulating minds: The philosophy, psychology, and neuroscience of mindreading." *Philosophical Studies*, 144(3), 431–434. https://doi.org/10.1007/s11098-009-9355-0

Gopnik, A., & Meltzoff, A. (1997). Words, thoughts, and theories. MIT Press.

Gordon, R. M. (1986). Folk psychology as simulation. Mind and Language, 1(2), 158-171.

- Groot, A. D. (2008). Thought and choice in chess. Amsterdam University Press.
- Haspelmath, M., & Tadmor, U. (2009). I. The loanword typology project and the world loanword database. In M. Haspelmath & U. Tadmor (Eds.), *Loanwords in the world's languages* (pp. 1–34). De Gruyter Mouton.

Horwich, P. (2011). Wittgenstein's Metaphilosophy. Oxford: Oxford University Press.

- Hutto, D. D. (2004). The limits of spectatorial folk psychology. Mind & Language, 19(5), 548-573.
- Irikefe, P. O. (2020). A fresh look at the expertise reply to the variation problem. *Philosophical Psychology*, 33(6), 840–867. https://doi.org/10.1080/09515089.2020.1761541
- Jackson, F. (1998). From Metaphysics to Ethics: A Defence of Conceptual Analysis (Vol. 1). Oxford: Oxford University Press.
- Jackson, F. (2011). On gettier holdouts. Mind and Language, 26(4), 468-481.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought* (Vol. 640). Basic Books.
- Ludwig, K. (2007). The epistemology of thought experiments: First person versus third person approaches. *Midwest Studies in Philosophy*, 31(1), 128–159.
- Machery, E. (2017). Philosophy Within its Proper Bounds. Oxford University Pres.
- McDowell, J. (1993). Knowledge by hearsay. In A. Chakrabarti & B. K. Matilal (Eds.), *Knowing from words* (pp. 195–224). Kluwer Academic Publishers.
- McDowell, J. (1994). Mind and world. Harvard University Press.
- McDowell, J. (1998). Mind, value, and reality (Vol. 109). Harvard University Press.
- Merleau-Ponty, M., & Smith, C. (1969). Phenomenology of perception. Routledge.
- Nado, J. (2015). Intuition, philosophical theorizing, and the threat of skepticism. In E. Fischer & J. Collins (Eds.), *Experimental philosophy, rationalism, and naturalism* (pp. 212–229). Routledge.
- Nado, J. (2016). The intuition deniers. *Philosophical Studies*, 173(3), 781–800. https://doi.org/10.1007/ s11098-015-0519-9
- Nado, J. (2020). Philosophizing out of bounds. *Philosophical Studies*. https://doi.org/10.1007/s11098-020-01582-0
- Nagel, J. (2012a). 8 Mindreading in gettier cases and skeptical pressure cases. Oxford University Press.
- Nagel, J. (2012b). Intuitions and experiments: A defense of the case method in epistemology. *Philosophy and Phenomenological Research*, 85(3), 495–527.
- Nagel, J. (2012). Mindreading in gettier cases and skeptical pressure cases. In J. Brown & M. Gerken (Eds.), Knowledge ascriptions. Oxford University Press.
- Nagel, J. (2013). Knowledge as a mental state. Oxford Studies in Epistemology, 4, 275-310.
- Nagel, J., San Juan, V., & Mar, R. A. (2013). Lay denial of knowledge for justified true beliefs. *Cognition*, 129(3), 652–661.
- Nersessian, N. J. (2007). Thought experimenting as mental modeling: Empiricism without Logic. Croatian Journal of Philosophy, 7(2), 125–161.
- Nguyen, C. T. (2020). Echo chambers and epistemic bubbles. Episteme, 17(2), 141-161.
- Nichols, S., & Stich, S. P. (2003). *Mindreading: An integrated account of pretence, self-awareness, and understanding other minds*. Clarendon Press/Oxford University Press.
- Nickerson, R. S. (1999). How we know-and sometimes misjudge-what others know: Imputing one's own knowledge to others. *Psychological Bulletin*, 125(6), 737–759. https://doi.org/10.1037/0033-2909. 125.6.737
- Norton, J. D. (1991). Thought ExpeRIMENTs in Einstein's work. In.
- Norton, J. D. (1996). Are thought experiments just what you thought? *Canadian Journal of Philosophy*, 26(3), 333–366.
- Norton, J. D. (2004). On thought experiments: Is there more to the argument? *Philosophy of Science*, 71(5), 1139–1151.
- Novaes, C. D. (2020). The role of trust in argumentation. *Informal Logic*, 40(2), 205–236.
- Perry, J. (1979). The problem of the essential indexical. Nous, 13(1), 3-21.
- Plantinga, A. (1993). Warrant and proper function. Oxford University Press.

Pollock, J. (1974). Knowledge and justification (Vol. 26). Princeton University Press.

- Pritchard, D. (2005). Epistemic luck (Vol. 29). Oxford University Press.
- Pritchard, D. (2012). On meta-epistemology. The Harvard Review of Philosophy, 18(1), 91-108.
- Pust, J. (2000). Intuitions as Evidence: Routledge.
- Rawls, J. (1951). Outline of a decision procedure for ethics. *The Philosophical Review*, 60(2), 177–197. Ryle, G. (2009). *The concept of mind*: Routledge.
- Scholl, B. J., & Leslie, A. M. (1999). Modularity, development and 'theory of mind.' Mind & Language, 14(1), 131–153.
- Schwitzgebel, E., & Cushman, F. (2015). Philosophers' biased judgments persist despite training, expertise and reflection. *Cognition*, 141, 127–137.
- Seyedsayamdost, H. (2015). On normativity and epistemic intuitions: Failure of replication. *Episteme*, 12(1), 95–116. https://doi.org/10.1017/epi.2014.27
- Shope, R. K. (2017). The analysis of knowing: A decade of research. Princeton University Press.
- Simon, H., & Chase, W. (1988). Skill in chess. Computer chess compendium (pp. 175-188). Springer.
- Singer, P. (1972). Famine, affluence, and morality. Philosophy and Public Affairs, 1(3), 229-243.
- Sorensen, R. A. (1992). Thought experiments (Vol. 44). Oxford University Press.
- Sosa, E. (1998). Minimal intuition. In M. DePaul & W. Ramsey (Eds.), *Rethinking intuition* (pp. 257–269). Rowman & Littlefield.
- Sosa, E. (2007a). Intuitions: Their nature and epistemic efficacy. Grazer Philosophische Studien, 74(1), 51–67.
- Sosa, E. (2007). A virtue epistemology: Volume I: Apt belief and reflective knowledge. Oxford University Press.
- Sosa, E. (2011). Can there be a discipline of philosophy? And can it be founded on intuitions? *Mind and Language*, 26(4), 453–467.
- Spaulding, S. (2012). Introduction to debates on embodied social cognition. *Phenomenology and the Cog*nitive Sciences, 11(4), 431–448. https://doi.org/10.1007/s11097-012-9275-x
- Stichter, M. (2013). Virtues as skills in virtue epistemology. Journal of Philosophical Research, 38, 333-348.
- Stichter, M. (2016). Practical skills and practical wisdom in virtue. Australasian Journal of Philosophy, 94(3), 435–448. https://doi.org/10.1080/00048402.2015.1074257
- Stichter, M. (2018). The skillfulness of virtue: Improving our moral and epistemic lives. Cambridge University Press.
- Strawson, P. F. (1992). Analysis and metaphysics : An introduction to philosophy. Oxford University Press.
- Thomson, J. J. (1971). A defense of abortion. Philosophy and Public Affairs, 1(1), 47-66.
- Thomson, J. J. (1985). The trolley problem. *The Yale Law Journal*, 94(6), 1395–1415. https://doi.org/10. 2307/796133
- Tobia, K., Buckwalter, W., & Stich, S. (2013). Moral intuitions: Are philosophers experts? *Philosophical Psychology*, 26(5), 629–638. https://doi.org/10.1080/09515089.2012.696327
- Weatherson, B. (2003). What good are counterexamples? Philosophical Studies, 115(1), 1-31.
- Weinberg, J. M., Nichols, S., & Stich, S. (2001). Normativity and epistemic intuitions. *Philosophical Topics*, 29(1–2), 429–460.
- Weinberg, J. M. (2007). How to challenge intuitions empirically without risking skepticism. *Midwest Studies in Philosophy*, 31(1), 318–343. https://doi.org/10.1111/j.1475-4975.2007.00157.x
- Williamson, T. (2000). Knowledge and its limits. Oxford: Oxford University Press.
- Williamson, T. (2004). Philosphical "intuitions" and scepticism about judgement. *Dialectica*, 58(1), 109–153.
- Williamson, T. (2007). The philosophy of philosophy. Blackwell Pub.
- Williamson, T. (2009). Replies to Kornblith, Jackson and Moore. Analysis (UNITED KINGDOM), 69(1), 125–135.
- Wittgenstein, L. (2010). Philosophical investigations. London: Wiley.
- Zagzebski, L. (1994). The inescapability of Gettier problems. Philosophical Quarterly, 44(174), 65-73.
- Ziółkowski, A., et al. (2021). The stability of philosophical intuitions: Failed replications of Swain. *Episteme*, 18(2), 328–346.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.