

Philosophical Intuitions and Wittgenstein's Language Games as Objects of Comparison

Kumpei Yamamuro

1. Introduction

As some philosophers note, the most prominent feature of contemporary analytic philosophy is its reliance on so-called philosophical intuitions¹. Hilary Kornblith, for instance, goes so far as to say:

George Bealer does it. Roderick Chisholm does it a lot. Most philosophers do it openly and unapologetically, and the rest arguably do it too, although some of them would deny it. What they all do is appeal to intuitions in constructing, shaping, and refining their philosophical views. (Kornblith 1998, 129)

Leaving aside how accurate his diagnosis is, thought experiments and the method of cases are ubiquitous in analytic philosophy to elicit philosophical intuitions to support or refute philosophical theories.

However, since the beginning of this century, experimental philosophy has allegedly provided evidence that philosophical intuitions are not as reliable as traditional armchair philosophers assume. For example, it has been shown, albeit controversially², that cultural differences in having intuitions about the theories of reference exist between East Asians and Westerners (Machery et al. 2004); one's mother tongue has an influence on her epistemic intuitions (e.g., Vaesen, Peterson, and Van Bezooijen 2013); moral intuitions are affected by order effects (e.g., Schwitzgebel and Cushman 2011), and so on.

Traditional philosophers have presented two kinds of important responses to such challenges from experimental philosophy. One kind is what I call *the expertise defense*, which appeals to the putative fact that philosophers, like any other professionals, possess the kind of expertise that guarantees the validity of their intuitions (e.g., Williamson 2011). The other kind is what I call *the mischaracterization objection*, which claims that experimental philosophers' challenges are misconceived, because philosophers' assertions do not hinge upon their so-called philosophical

intuitions (e.g., Cappelen 2012). Therefore, Herman Cappelen claims that experimental philosophy is a big mistake (Cappelen 2012, Ch. 11).

However, neither of these responses has been so effective. If experimental philosophy is mostly correct in debunking the unreliability of philosophical intuitions as evidence, how should we approach philosophical problems? Unfortunately, experimental philosophy does not seem to have much to say about how we should proceed³.

In this paper, I discuss a possible way out of this conundrum, drawing upon Wittgenstein's later philosophy. As is well known, Wittgenstein's later writings are full of imaginary language games, such as the builder's language game, the rule-following considerations, and the beetle in the box. Furthermore, Wittgenstein criticizes the reliance on intuitions⁴. Given that traditional philosophers are accused of relying on intuitions elicited from fictitious cases in thought experiments, it is interesting that the coexistence of a bunch of fictional scenarios and the critique of intuitions is not contradictory for Wittgenstein. Therefore, understanding how language games serve Wittgenstein's philosophical enterprise will provide a clue to tackling the methodological issues that we are facing. My contention is that this clue concerns the conception of thought experiments as experiments. In this paper, we will reconsider how we should treat fictional scenarios in philosophical inquiries.

This paper is organized as follows. Using an analogy of calculations, Section 2 clarifies that Wittgenstein's language games are objects of comparison. Section 3 examines the relevance of intuitions for language games as objects of comparison. Finally, Section 4 suggests that we should rethink our conception of thought experiments.

2. Language Games as Objects of Comparison

In his *Philosophical Investigations*, Wittgenstein states that his language games are objects of comparison:

Our clear and simple language-games are not preliminary studies for a future regimentation of language—as it were, first approximations, ignoring friction and air resistance. Instead, the language-games stand there as *objects of comparison* which, through similarities and dissimilarities, are meant to throw light on features of our language. (PI §130)

Here, although Wittgenstein explicitly states that language games are objects of comparison, what this means is quite unclear. This section aims to clarify this statement using an analogy of calculations.

Some philosophers have inadvertently called Wittgenstein's language games thought experiments; however, Wittgenstein says they are not experiments:

(Seemingly, I am performing 'thought-experiments'. Well, they're simply not experiments. Calculations would be much closer.) (LW I §519)⁵

Since Wittgenstein denies that his investigations with imaginary scenarios are experiments, labeling his language games as thought experiments is at least misleading. More importantly, Wittgenstein points out in this quote that his language games are much closer to calculations. However, what are the differences, according to Wittgenstein, between experiments and calculations? Why do these differences matter?

In a nutshell, what differentiates calculations from experiments is that calculations give us "a form of expression" to describe the results as the right or wrong ones⁶. Thus, Wittgenstein says:

I cannot make the result of the experiment at the same time into the result of the calculation. If the result is the result of the calculation, I have already fixed what I call 'obeying the rules' by my calculation. The calculation gives me a form of expression now: and *now* I say he gets either the right or the wrong result. — And the result of the experiment will then be not what result he will get if he follows the rules but whether or not he will follow the rules. (LFM 94)

We are, as it were, ignorant of what we are going to arrive at when conducting an experiment, and that is the whole point of experiments. In Wittgenstein's words, "the conditions of the experiment don't include the result" (LFM 97). On the other hand, when we make a calculation, we have already fixed what counts as the right and wrong result. The important point here is that calculations give us "a form of expression" or a rule with which we describe various results. For example, suppose that you put two balls into a bag in which you know there are already three more balls. Now, if you find only four of them, you would assume that something is amiss; you might have miscounted the number, or there might be a hole in the bag. In other words, the

calculation, $2 + 3 = 5$, is “the paradigm with which we compare” (LFM 104). The calculation or the object of comparison gives you “a form of expression” with which you describe the result you get—the four balls in the bag—as the wrong one.

Another relevant feature of calculations is that they are not, as it were, accountable to reality. We all know that a calculation (for example, “ $2 + 3 = 5$ ”) is not applicable to every object around us. In the above example, the calculation holds when it comes to balls; however, the calculation fails to hold if it is applied to drops of water or heaps of sand. Importantly, this fact does not invalidate the plausibility of the calculation. Calculations give a way to describe a result as right or wrong; however, they are not right or wrong in and of themselves once we have adopted them as calculations.

The analogy of calculations thus illuminates the nature of language games as objects of comparison. Wittgenstein’s fictional language games are meant to provide a way to describe the grammar of our language, which he thinks lacks “surveyability” (PI §122). Further, language games are not accountable to our actual linguistic practices. Therefore, it is incorrect to criticize Wittgenstein’s language games for being extraordinary or unrealistic. As with calculations, language games are not preconceptions “to which reality *must* correspond” (PI §131).

3. Objects of Comparison and Philosophical Intuitions

In the previous section, we have seen that Wittgenstein’s language games are not experiments but something closer to calculations. Language games, like calculations, function as objects of comparison. This section connects the discussions so far with the metaphilosophical issues concerning the role of intuitions and argues that the challenges posed by experimental philosophy are not problematic in view of Wittgenstein’s fictitious language games.

As we saw in the first section of this paper, experimental philosophy has criticized philosophers’ reliance on intuitions as sources of evidence. Should Wittgenstein be charged with the same fault? Does his method of grammatical fiction depend upon unreliable intuitions?

Before answering these questions, let us ask a related question: Does the correctness of calculation results hinge upon the calculator’s intuition? We sometimes say that a person intuitively knows the answer if, for example, she instantly calculates a result that others would take a considerable amount of time to obtain. However, here, “intuition,” is used in a different sense from the one with which experimental philosophy is concerned. In this case, the results

which people obtain will eventually converge; for example, “intuition” implies that the person obtains the result considerably faster than others. Thus, Wittgenstein says: “A man is only said to know by intuition that $25 \times 25 = 625$ if 625 is in fact the result which we all get by calculation” (LFM 30). On the other hand, intuitions elicited in thought experiments will often not converge, as shown by experimental philosophers. What they mean by “intuition” is wildly diverse⁷; however, it does not imply that some but not others intuitively know as in the case of calculations. Intuition, in the sense with which experimental philosophy is concerned, is not relevant to calculations.

Then, does it mean that intuition does not guarantee the correctness of a calculation? Here, Wittgenstein's so-called rule-following considerations are relevant; Wittgenstein argues in his *Philosophical Investigations* that it is “an unnecessary evasion” to appeal to intuition to know how to follow a rule:

If intuition is an inner voice—how do I know *how* I am to follow it? And how do I know that it doesn't mislead me? For if it can guide me right, it can also guide me wrong. ((Intuition an unnecessary evasion.)) (PI §213)

Intuition alone does not guarantee that a calculation is correct. This is because *the correctness of intuition* would be in limbo, and we would have no other recourse when our intuitions differ. More precisely, where there is no convention or practice, there is no right or wrong intuition in the first place.

If not intuition, what guarantees the correctness of a calculation? According to Wittgenstein, what underlies calculating is not intuition but practice and training:

But a man is said to know $1 + 1 = 2$ not because 2 is in fact the result which we reach by calculation—for what sort of calculation should we use?—but because he says with the rest of us that $1 + 1 = 2$.

The real point is that whether he knows it or not is simply a question of whether he does it as we taught him; it's not a question of intuition at all. (LFM 30)

Hence, the correctness of the result of a calculation does not hinge upon the calculator's intuition. A calculation is what we adopt as a norm (LFM 98), and the correctness relies upon whether we

calculate according to the convention⁸: “Before the calculation was invented or the technique fixed, there was no right or wrong result” (LFM 95). When one says that a judgment is intuitive in the absence of convention, it only means that the judgment seems natural to the calculator. Therefore, even if an answer seems intuitive in this sense to someone, it does not make the answer correct. For example, without mathematical conventions about infinity, someone saying that “ $\infty - \infty = 0$ ” is intuitive would not imply anything more or less than that, much less that it is correct.

Now, I am ready to turn to our original question: Do Wittgenstein’s language games rest upon intuition? He describes people who behave in a certain way in an imaginary situation; however, is it problematically based on *his* intuition that they behave in such a way? As might be already evident from the discussions above, the answer is negative if what has been said about calculations holds for language games as objects of comparison as well. That is, if language games are what we should adopt as norms like calculations, we can say that Wittgenstein’s use of language games does not rely on intuitions. In the remainder of this section, I will demonstrate that this is the case.

In the very first section of his *Philosophical Investigations*, Wittgenstein states the following:

Now think of the following use of language: I send someone shopping. I give him a slip of paper marked “five red apples”. He takes the slip to the shopkeeper, who opens the drawer marked “apples”; then he looks up the word “red” in a chart and finds a colour sample next to it; then he says the series of elementary number-words—I assume that he knows them by heart—up to the word “five”, and for each number-word he takes an apple of the same colour as the sample out of the drawer.—It is in this and similar ways that one operates with words.—“But how does he know where and how he is to look up the word ‘red’ and what he is to do with the word ‘five’?”—Well, I assume that he *acts* as I have described.
(PI §1)

Wittgenstein makes sure that he *assumes* that the person acts as he described. He does not claim that it is natural or intuitive for that person to act in such a way. The language game is given on the assumption that he acts thus and so. Wittgenstein likens a language game to a yardstick (PI §131). A yardstick functions as an object of comparison and gives us a form of expression. That is, it enables us to describe things around us in terms of length. There is no room here for issues related to intuition. Just as a yardstick does not reveal the nature or essence of the thing measured, neither do language games reveal the nature or essence of our language.

Therefore, it misses the point to argue against Wittgenstein's language game that others would have a different intuition about how one acts. That is as if bringing up a recalcitrant case against the calculation " $2 + 3 = 5$ " does not constitute an objection to it. In the same way that calculations are accepted and used as rules or paradigms independent of experience, language games are accepted and used as objects of comparison.

Still, the following objection might be raised. Since language games are objects of comparison, there may be no room for intuition about what they should be like; however, it is a matter of intuition about what *kind* of language games are accepted, because we do not accept every norm or object of comparison. Indeed, Wittgenstein himself suggests that language games must be acceptable. After describing a language game in PI §143, he notes:

After all, I'd like you to say: "Yes, it's true, one could imagine that too!"—But was I trying to draw someone's attention to the fact that he is able to imagine that?—I wanted to put that picture before him, and his *acceptance* of the picture consists in his now being inclined to regard a given case differently; that is, to compare it with this sequence of pictures. I have changed his *way of looking at things*. (PI §144)

Thus, if "his *acceptance* of the picture consists in his now being inclined to regard a given case differently," is the method of language games based on intuition about whether a given language game is acceptable?

If persons want to call the acceptance intuitive, I would not oppose it, unless they fail to distinguish one thing from another. However, a language game can be done away with and replaced with another, if they are not "inclined to regard a given case differently." In other words, such an "intuition" is not used as evidence, as in thought experiments.

Again, the analogy with the choice of the unit of measurement helps us see the difference. We can say that we rely on intuitions to choose a unit of measurement over another. However, such intuitions are not concerned with which unit is the right one, and, in this sense, they are different from the kind of philosophical intuitions discussed in the current metaphilosophical debates. When it comes to choosing a unit, we do not thereby claim that it is the correct one.

Therefore, the challenge of experimental philosophy is irrelevant. Suppose that someone accepts a language game (e.g., says that "one could imagine that too!") and another does not. The question is whether this divergence of "intuitions" in this example is problematic. Some accept

imperial units, while others metric units. This is not problematic, at least in most cases⁹, because they are objects of comparison, and hence, not contradictory. These are just the two different forms of expression.

4. The Conception of Thought Experiments as Experiments

We have seen that Wittgenstein's language games are immune to the challenge posed by experimental philosophy. One might say that this conclusion is evident, since the criticisms of experimental philosophy are not directed against Wittgenstein's language games in the first place. However, preceding discussions are still fruitful. Having seen how Wittgenstein's language games do not depend on intuition, we are now in the position of identifying what is at the root of the current methodological plight of traditional philosophers who use thought experiments. In what follows, I argue that the crux of the problem lies in the conception of thought experiments as experiments, although the discussion must be a mere sketch because of the lack of space.

According to Wittgenstein, we conduct experiments to find out results (LFM 94). In other words, it is essential for experiments that we should not know what we are going to get as results. The results are used as evidence for or against theories. Many philosophers take thought experiments as serving the analogous function. That is, philosophers conduct thought experiments to elicit philosophical intuitions and use them as evidence for or against philosophical theories. The difference is supposed to lie in the fact that thought experiments are conducted in the mind.

Yet, is the experimental method suitable for the problems at hand? If thought experiments are experiments, the result of a thought experiment is whether or not one would be inclined to apply a given concept to a certain situation, not whether it is correct to do so, as there is no right or wrong result in an experiment. There may be a problem with the conditions of the experiment; however, its results must be treated as data of equal importance, whatever they may be. If this is the case, as long as thought experiments are understood as experiments, philosophers cannot presuppose that correct judgments exist about the cases described in thought experiments. Theories and hypotheses are tested by the results of experiments, not the other way around¹⁰. As A. J. Ayer says, "we do not conceive the laws of nature as imperatives" (Ayer 1956, 145). After conducting a thought experiment, we may formulate, based on its results, the idea that the concept in question applies to such and such case. Yet, is this what we want, or does it solve a philosophical problem?

We must say, “problem and method pass one another by” (PPF §371).

Obviously, philosophers do not conceive of thought experiments in this way. Otherwise, they would not consider the challenge from experimental philosophy as a challenge in the first place. Pointing out that various factors influence people's intuitions and that the philosophers' intuitions are not widely shared among laypeople should contribute to rendering thought experiments as experiments more valid rather than refuting them. For their purposes, philosophers must claim that not all intuitive judgments elicited by thought experiments are right¹¹ but that one class of judgments is right, and another is wrong. This leads to *the expertise defense*: Professional philosophers have the kind of expertise that laypeople do not have, which makes *their* intuitions reliable. However, as I mentioned in Section 1, this rejoinder has not been successful.

Traditional philosophers are right in thinking that experimental methods will not solve philosophical problems. However, they are wrong in assuming that they can find what we ought to say through intuition. Granted, we can ask what concept should be used in a given context, if the context is mundane. For example, you are shown a picture of a familiar animal and apply “dog” to it. In such a situation, we can legitimately judge that you have correctly applied the concept. However, most cases depicted in thought experiments belong to boundary cases—the main point of conducting thought experiments. This means that we do not have a practice or convention for using the concept or word in question in such cases. As I have argued, in the absence of convention, we cannot discover what to say, because what we should say is based on our linguistic practices¹². In addition, even where there is a convention, there is no discovery, because it is no less preposterous to say that we have discovered that we ought to call a cat “cat” or that the number three follows the number two than to say we have discovered the rules of chess. Wittgenstein says: “There is no discovery that 13 follows 12. That's our technique” (LFM 83). We can also say that there is no discovery that we should call a cat “cat”; that's our technique.

Thus, once the perspective of technique and practice is overlooked and once discovering whether one should apply a particular concept to a certain case to figure out the nature or essence of the concept is deemed essential, the method of using fictitious cases is considered analogous to experiments. However, if a thought experiment is an experiment, then, unless one is experimenting on philosophers' intuitions, one is not allowed to adopt only the philosophers' intuitions as the result of that experiment. Therefore, the challenge of experimental philosophy can be viewed as a consequence of the conception of thought experiments as experiments. Insofar as thought experiments are considered experiments, the criticism from experimental philosophy

seems warranted. Hence, philosophers must rethink whether thought experiments can and should be considered analogous, in important ways, to actual experiments.

However, we must not overstretch the analogy between thought experiments and calculations, which Wittgenstein, presumably, emphasized precisely to make us reconsider the analogy between thought experiments and experiments (cf. LFM 14). Wittgenstein points to our inclination to stick to a certain picture or analogy and overstretch it as a source of philosophical confusions. His approach to dissolving such confusions is that of offering another analogy (e.g., analogy between language and *Spiel*). In doing so, he does not aim to assert the truth or superiority of the new analogy. Rather, he offers the new analogy to dislodge the present one by showing that the predominant analogy is not the only possible one. Therefore, we should abstain from considering the analogy between thought experiments and calculations as absolute in order not to fall prey to another confusion.

5. Concluding Remarks

In this paper, I have examined Wittgenstein's language games as objects of comparison and argued that they are immune to the problem of the reliability of philosophical intuitions through the analogy of calculations and the units of measurement. Moreover, I suggested that the challenge posed by experimental philosophy is a corollary of the conception of thought experiments as experiments. However, there remains a lot to be demonstrated. For example, in this paper, I have discussed thought experiments as if they were monolithic for want of space; however, some have argued that they can be categorized by kind. Furthermore, as Pritchard points out, the kind of intuitions to which analytic philosophers supposedly appeal are manifold (Pritchard 2012)¹³. Future work must consider such distinctions and elaborate on the sketch presented in this paper. Such work can help elucidate Wittgenstein's remark that "what Mach calls a thought experiment" is, fundamentally, "a grammatical investigation" (PR §1).

¹ What I call "intuitions" or "philosophical intuitions" in this paper may be understood as corresponding to what Duncan Pritchard calls *extensional intuitions*: "Much of the focus when it comes to the role of intuition in epistemology is on our intuitive responses to cases, where we are asked to form an intuitive judgement about whether the target term is applicable in the case under discussion (which may be actual or hypothetical). Call such intuitive judgements, *extensional intuitions*" (Pritchard 2012, 91).

² Cf. Deutsch 2009, 2010, 2015; Cappelen 2012; Devitt 2011, 2012.

³ Jonathan M. Weinberg claims that experimental philosophy can help philosophical progress by *via negativa* (Weinberg 2017).

⁴ For example, although Wittgenstein does not use the same word (viz., "intuition"), he says: "In philosophical

discussions, you continually get someone saying, "I see this directly by inspection." No one knows what to say in reply. But if you have a nose at all, you will smell that there is something queer about saying you recognize truth by inspection" (LFM 173).

⁵ In the vicinity of the quote, Wittgenstein discusses the dawning of an aspect by means of imaginary scenarios.

⁶ The act of calculating can be an experiment, depending on the context. For example, if one wants to see "if the chalk will stand the strain" by calculating on a blackboard, such a calculation can count as an example of an experiment (LFM 93).

⁷ Cf. Fischer and Collins 2015.

⁸ For example, it is misleading to say that, " $2 + 2 = 4$ " is the expression of a convention. For he says that "it is as if the convention had been made" (AWL 157). What is important is not whether such a convention was actually made in the past but how it is currently used in our language. Thus, Yemima Ben-Menahem argues that "Wittgenstein's use of convention is synchronic rather than diachronic" (Ben-Menahem 1998, 120).

⁹ Of course, it can be problematic in practice for different people to use different units. However, this is an entirely different problem from the one with which we are concerned.

¹⁰ See Machery (2015, 197) for a discussion on "theory contamination" in thought experiments.

¹¹ To say that all judgments are correct means that there are no right or wrong judgments.

¹² Timothy Williamson seems to think that skepticism about the use of intuitions in thought experiments leads to skepticism about the ability to apply concepts in general, since the capacities that underlie philosophical intuitions are the same ones that underlie everyday judgments (cf. Machery 2011, 196). What he fails to see, however, is that even if he is right, this does not make the application of concepts in thought experiments right or wrong. What is important is whether the convention of using the word in question exists rather than what capacities are used.

¹³ What seems particularly relevant to the discussions in this paper is the apparent similarity between what he calls *intensional intuitions* and/or *intensional platitudes* and Wittgenstein's grammar.

References

- Ayer, A. J. 1956. "What is a Law of Nature?" *Revue Internationale Philosophie*, 10(2=36): 144–165.
- Ben-Menahem, Yemina. 1998. "Explanation and Description: Wittgenstein on Convention," *Synthese*, 115(1): 99–130.
- Cappelen, Herman. 2012. *Philosophy without Intuitions*. Oxford University Press.
- Deutsch, Max. 2009. "Experimental Philosophy and the Theory of Reference," *Mind & Language*, 24(4): 445–466.
- . 2010. "Intuitions, Counter-Examples, and Experimental Philosophy," *Review of Philosophy and Psychology*, 1(3): 447–460.
- . 2015. *The Myth of the Intuitive: Experimental Philosophy and Philosophical Method*. The MIT Press.
- Devitt, Michael. 2011. "Experimental Semantics," *Philosophy and Phenomenological Research*, 82(2): 418–435.
- . 2012. "Whither Experimental Semantics?" *Theoria*, 27(1): 5–36.
- Fischer, Eugen and Collins, John. (eds.) 2015. *Experimental Philosophy, Rationalism, and Naturalism: Rethinking Philosophical Method*, Routledge.
- Fischer, Eugen and Collins, John. 2015. "Rationalism and Naturalism in the Age of Experimental Philosophy," in

- Fischer and Collins 2015, 3–33.
- Komblith, Hilary. 1998. “The role of intuition in philosophical inquiry: An account with no unnatural ingredients,” in *Rethinking intuition: The psychology of intuition and its role in philosophical inquiry*, M. R. DePaul and W. M. Ramsey (eds.), Rowman & Littlefield, 129–141.
- Machery, Edouard, Mallon, Ron, Nichols, Shaun, and Stich, Stephen. 2004. “Semantics, Cross-Cultural Style,” *Cognition*, 92: B1–B12.
- Machery, Edouard. 2011. “Thought Experiments and Philosophical Knowledge,” *Metaphilosophy*, 42(3): 191–214.
- . 2015. “The Illusion of Expertise,” in Fischer and Collins 2015, 188–203.
- Pritchard, Duncan. 2012. “On Meta-Epistemology,” *The Harvard Review of Philosophy*, 18(1): 91–108.
- Schwitzgebel, Eric and Cushman, Fiery. 2011. “Expertise in Moral Reasoning? Order Effects on Moral Judgment in Professional Philosophers and Non-Philosophers,” *Mind & Language*, 27: 135–153.
- Vaesen, Krist, Peterson, Martin and Van Bezooijen, Bart. 2013. “The Reliability of Armchair Intuitions,” *Metaphilosophy*, 44: 559–578.
- Weinberg, Jonathan M. 2017. “What is Negative Experimental Philosophy Good For?” in *The Cambridge Companion to Philosophical Methodology*, Soren Overgaard and Giuseppina D’Oro (eds.), Cambridge University Press, 161–183.
- Williamson, Timothy. 2011. “Philosophical Expertise and the Burden of Proof,” *Metaphilosophy*, 42(3): 215–229.
- Wittgenstein, Ludwig. 1975. *Philosophical Remarks*, Rush Rhees (ed.), Raymond Hargreaves and Roger White (trans.), Basil Blackwell. (PR)
- . 1982. *Last Writings on the Philosophy of Psychology*, vol. I, G. H. von Wright and Heikki Nyman (eds.), C. G. Luckhardt and Maximilian A. E. Aue (trans.), Basil Blackwell. (LW I)
- . 1989. *Wittgenstein’s Lectures on the Foundations of Mathematics, Cambridge, 1939*, Cora Diamond (ed.), The University of Chicago Press. (LFM)
- . 2001. *Wittgenstein’s Lectures, Cambridge, 1932–1935: From the Notes of Alice Ambrose and Margaret Macdonald*, Alice Ambrose (ed.), Prometheus Books. (AWL)
- . 2009a. *Philosophical Investigations*, 4th edition, P. M. S. Hacker and Joachim Schulte (eds.), G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte (trans.), Blackwell. (PI)
- . 2009b. *Philosophy of Psychology — A Fragment*, P. M. S. Hacker and Joachim Schulte (eds.), G. E. M. Anscombe, P. M. S. Hacker, and Joachim Schulte (trans.), Blackwell. (PPF)