

## The Place of Saying and Showing In Wittgenstein's *Tractatus* and Some Later Works

MARTIN PULIDO

In a letter to Bertrand Russell, Wittgenstein complained that the British philosopher did not understand the main message of the *Tractatus*. He explained that “the main point is the theory of what can be expressed by propositions—i.e., by language . . . and what cannot be expressed by propositions, but only shown; which, I believe, is the cardinal problem of philosophy” (qtd. in Stern 69–70). This division would be the means by which Wittgenstein would “set a limit . . . to the expression of thoughts” (*TLP* 3).<sup>1</sup> Despite Wittgenstein’s insistence, many philosophers have been loath to accept his distinction. Russell claimed it left him “with a certain sense of intellectual discomfort,” and assumed this hurdle could be overcome through the implementation of metalanguage (*TLP* xxi).<sup>2</sup> The possible connection between propositional showing and mystical things that “make themselves manifest” made other thinkers hesitant to accept the distinction (6.522). Some looked at apparent contradictions that arise in the *Tractatus* regarding the showing notion and assumed that it was

<sup>1</sup> *TLP* will be the abbreviation for the *Tractatus* throughout this paper. However, when it comes to citing the propositions, “*TLP*” will be omitted except where necessary for clarification.

<sup>2</sup> Russell’s suggestion in the introduction shows that he either ignored or did not understand Wittgenstein’s critique of his theory of types. For a short discussion of this dispute between Wittgenstein and Russell/Carnap, see Friedlander 111.

*Martin Pulido is a senior majoring in philosophy and English at Brigham Young University. His interests include meta-ethics, practical reason, logic, classical pragmatism, and phenomenology. He is currently applying to graduate programs in philosophy.*

infeasible as a result (Harward 6).<sup>3</sup> Given these responses, was this vital thesis of the *Tractatus* a mistake?

In this paper, I will look at and criticize scholarly attempts to clarify Wittgenstein's distinction and resolve textual tensions about it in the *Tractatus*. Then, I will discuss how Wittgenstein uses saying and showing in the text to treat central problems in logic, mathematics, ethics, and value theory. By misunderstanding the logic of language, Wittgenstein believes philosophers have become perplexed by problems which have no solution. His aim is to dissolve these problems, and show they were not what they made themselves out to be. I will explain how Wittgenstein examines tautologies in the *Tractatus* to show his "fundamental idea [in logic] . . . that the logical constants are not representatives" (4.0312). Important implications follow from this in challenging logicism's attempt to reduce mathematics to logic while claiming that there are mind-independent logical facts for which logic must account. Through separating the said from the shown, Wittgenstein also arrives at a fact-value distinction in the *Tractatus* while considering ethics and aesthetics. As opposed to logical positivism, Wittgenstein sees the distinction not as exposing the triviality of values, but rather the triviality of facts.

After noting how the distinction between saying and showing plays a central role in the *Tractatus*, I will argue that it persists through Wittgenstein's later writings and provides continuity to his thought. For instance, many central insights of the *Tractatus* that are acquired through the saying-showing theme are used to explain the nature of mathematical propositions in Wittgenstein's future work in mathematics. Likewise, an insight from the *Tractatus* will guide Wittgenstein's criticism of G.E. Moore's common sense attempts to refute skepticism in *On Certainty*. Wittgenstein's unfolding of the preconditions of meaning for our empirical claims follows his disclosure of the preconditions of meaning for logical propositions in the *Tractatus*. Our knowledge of our epistemological bedrock cannot be sensibly discussed; it can only be shown. Saying and showing can thus be seen as a central tool that Wittgenstein uses in addressing the manifold "problems" of philosophy. He uses them to carry out what he

<sup>3</sup> Harward has noted several problematic assertions.

1. Wittgenstein asserts a proposition shows its sense and what shows cannot be said, but also claims a proposition's sense is what is said.
2. One point in the *Tractatus* argues that what can be known cannot be said, which clashes with another statement that holds that propositions show what they say.
3. The assertion that propositions show how things stand on the condition of their truthfulness and say they do so stand comes up against the assertion that every proposition already has sense and cannot be given it.
4. Wittgenstein claims propositions show logical form and only some sensible propositions show sense. This appears to create two different kinds of things being shown.

perceives to be philosophy's mission: to clarify our thoughts, sharpen the boundaries of what can and cannot be said, and circumscribe the limits of the natural sciences (4.1-4.115).

### A Clearer Distinction?

Several commentators have analyzed Wittgenstein's distinction to resolve textual tensions and clarify it.<sup>4</sup> Not surprisingly, this endeavor has led to a variety of interpretations aimed at answering different criticisms made of Wittgenstein. Unfortunately, many positions that were never specified or implied by Wittgenstein have been generated as a result. In responding to those who complain that Wittgenstein groups the showing of logical form with the mystical, Richard M. McDonough argues that they fail to recognize the multiplicity of showing categories in the *Tractatus*. Of course, logical form dwells in the same unsayable realm as the mystical, along with the ethical and aesthetic. Nonetheless, McDonough argues, "Wittgenstein distinguishes between that which is shown by symbols or a symbolic system and that which shows itself . . . without any connection with symbols" (9-10). The mystical belongs to the latter, and so the logical showing themes should be considered separately. Yet it isn't clear that Wittgenstein draws McDonough's distinction. While no doubt logical form is connected with the symbols of logical propositions, this does not mean Wittgenstein held that the mystical can be shown without the facts of the world, or without language. In reference to Uhland's poem, "Graf Ebenhards Weissdorn," Wittgenstein claimed the unsayable was "contained in what has been uttered," its value manifest through the poem's words (qtd. in Tilghman 64). So McDonough's assertion that the logical showing themes are unique is not certain, or at least not as radical as he might suppose.

Many other authors follow McDonough in supposing there are different categories of showing in the work. The main drive for doing so is to reconcile the assertion that "what *can* be shown, *cannot* be said" (4.1212) with the claim that "propositions show what they say" (4.461).<sup>5</sup> Donald W. Harward attempts reconciliation by claiming there are two showing classifications in the work (6-8). The first kind of showing is "demonstrative," involving the presentation of something by a person to an audience; it says and shows. Here, Harward has something in mind like our elementary school practice of "show and tell": Leroy shows the class his purple

<sup>4</sup> See among others, Stenius 179, McDonough 8-11, Moore 473-74, Harward 5-15, Shields 10-13.

<sup>5</sup> Emphasis mine. This is the second point of tension that Harward records. See footnote 3.

bunny Buford. On the other hand, the second kind of showing is “reflexive,” in that it is successful in showing something without an audience. Harward’s example is “that this is an English phrase shows itself” (7). That our statements are in English is shown without being said. In some notes that Wittgenstein dictated to G.E. Moore, he gives a similar example of reflexive showing: “In [the] ordinary proposition . . . ‘Moore good,’ this shews and does not say that ‘Moore’ is to the left of good” (qtd. in Gerrard 55). In fact, *this* statement cannot possibly say that Moore is to left of good, it can *only* show it.

Harward believes the distinction between reflexive and demonstrative showing can then resolve the contradictory statements in the *Tractatus*. It is only the reflexive showing that cannot be said, while the demonstrative can both be shown and said. Unfortunately, Harward’s efforts are not convincing. Wittgenstein communicated to Moore that what was shown in his reflexive example was arbitrary and could be said in other propositions.<sup>6</sup> On the other hand, Wittgenstein affirms that the logical properties shown are not arbitrary and “cannot be said in any proposition” (qtd. in Gerrard 55). The first are shown and not said; the second are shown and cannot be said. Furthermore, I agree with Philip R. Shields that Harward’s considerations are foreign to the *Tractatus*, and blur the “sharp boundaries” that Wittgenstein was trying to set to the expression of thought (12; TLP 4.112).

Nonetheless, Shields sees value in examining demonstrative and reflexive types of showing. He reconstructs them to refer to the presentation of propositions’ external and internal relations. The external relations are a proposition’s sense, what could be the case in the world (4.122). Internal relations are the structural, formal properties necessary for propositional signs to express sense. Shields’ example of internal relations in the *Tractatus* is where Wittgenstein holds that logical contradictions and implications are shown in their propositions’ structure (4.1211). However, he believes (and I agree) that the apparent contradiction between TLP 4.1212 and 4.61 can be resolved not by urging that what is shown cannot be said in one type of showing, but by looking at “the explicit asymmetry between saying and showing” (Shields 12).

Saying and showing are mutually dependent. First, both forms of showing are logically prior to what is said. This is because the form (reflexive) and the sense (demonstrative) of a proposition must be logically prior if the proposition is to have a truth-value, and thus say something about the

<sup>6</sup> Perhaps it is possible that language always shows more than it says, that no matter how many propositions are given, they cannot explain all that is shown in those propositions. Nonetheless, this possible limit of saying and showing in language is not what Wittgenstein has chiefly in mind.

world. Second, saying has what Shields calls “phenomenological priority” in that showing is only possible by being manifested through what is said to be the case (13; *TLP* 3.3). Thus, when Wittgenstein claims that what can be shown cannot be said (4.1212), he does not mean a proposition or picture cannot be used to say something about the world, but that their form and sense can have no truth-values. Since they lack truth-values, nothing of them can be said; to do so is nonsense. Shields explains how this interpretation is compatible with the claim that propositions show what they say (4.461): propositions show a possible state of affairs by modeling it (their sense), and saying affirms that this state of affairs obtains. So one always says what is shown in asserting that the possibility shown by a proposition’s sense obtains in the world. However, the external and internal relations of a proposition can never be themselves represented in propositions, only presented or shown in propositions.

A. W. Moore grasps the impossibility of saying what is shown in one of his examples (474). Inspired by the *Tractatus* (2.173–2.174; 5.633–5.6331), he takes up what can be described in a person’s visual field and observes that no matter how complete the description, it can never represent the point of view from which the vision comes. But the application of terms such as “right” and “left” in the description shows the point of view, although it cannot be said. More importantly, nothing in the visual field could be talked about or understood without the point of view itself; the perspective is a precondition of sight or talk about what is seen. This resonates with Wittgenstein’s early conviction that “I am placed in [the world] like my eye in the visual field” (*Notebooks* 73e). The point of view from which the world is seen is from the self, and so “the world is my world” (*TLP* 5.62). Like the visual field, the point of view from which the world appears can never itself be represented. With Shields’ interpretation of Wittgenstein’s saying and showing, and the aid of the other clarifications, I will turn to discussing the distinction’s application in the *Tractatus* in dealing with central problems in logic, mathematics, and value theory.

### Saying and Showing in the *Tractatus*

In the *Tractatus*, Wittgenstein uses the distinction between saying and showing as the chief means to explain how language is used. He aims at getting us to see the differences between what is describable in language and what cannot be so described (the essential) via saying and showing. As Marie McGinn holds, the beginning of the *Tractatus* is about painting a picture of our language (logical space) for clarification (28). The assertions about facts and objects serve as correlates that will be mirrored by propositions

and their elements. This modeling of language helps us understand that propositions like facts are by their nature complex (2–2.01; 3.141–3.142; 3.25), and that for names (or simple signs) like objects to “occur in [an elementary proposition], this possibility must be in [the names] from the beginning” (2.012, 4.2).<sup>7</sup> Names cannot occur by themselves, but in the nexus of propositions (2.0122; 3.3).

Thus, there is something essential, or a priori, that all names must share and constitute, so that “an imagined world, however different it may be from the real one, must have *something*—a [logico-pictorial] form—in common with it” (2.022–2.023; 2.033; 2.15–2.151; 3.311). But the essential is not another fact of the world that can be pictured, but represents the limits of possibility, subsisting “independently of what is the case” (2.024; 3.312). The essential shows the limit of the possible arrangements of objects in states of affairs, and thus the limit of the possible arrangements of names in propositions that model them (2.16). This is further disclosed through the *Tractatus*’s picture theory of meaning.

In this theory, pictures depict “reality by representing a possibility of existence and non-existence of states of affairs” (2.201; 2.11).<sup>8</sup> They depict states of affairs through the way their elements combine in a determinate structure (2.14). They both say and show: they show their sense (what would be the case if things were true) (2.221), and say that the state of affairs they claim to represent is the case (4.022). As pictures, we do not know a priori that the situations they contain do obtain; reality will have to be consulted (2.223–2.225). If the pictures agree with reality, they are true; if not, they are false (2.222). Regardless of this agreement, we do understand what would be the case if they were true or false: we know what to look for, for “if a fact is to be a picture, it must have something in common with what it depicts” (2.16; 2.22). This is the logico-pictorial form or the possibility of expressing its sense (3.13) that the picture-propositions “display” but cannot depict (2.172). McGinn explains:

If we could depict what is essential to a picture, what it has in common with what it depicts, then what we depicted would have to be something that the picture depicted either correctly or incorrectly, and that the picture and what it depicts could therefore lack.

<sup>7</sup> It is notably here where Wittgenstein follows Frege in noting the unity of the proposition. The proposition is basic, since words by themselves do not have the resources to explain a sentence. The “worldly” correlate is the fact which is composed of objects. For some discussion on the problems besetting the use of simple objects and logical atomic facts for the saying and showing theme see Geach 42–44.

<sup>8</sup> The existence and non-existence of states of affairs is what reality is. Wittgenstein calls the existent ones “positive facts,” and the non-existent “negative facts” (2.06).

Thus, “[a] picture cannot ... place itself outside its representational form” (TLP 2.174), for whatever a picture represents from a position outside is something that can or can not be the case, which the picture can therefore represent as being otherwise. (30)

What holds for the non-depiction of pictorial form is the same for the logical form of propositions. Language and pictures cannot say what their structures have in common, they can only show them, because any language or picture relies on the logical form that is mirrored in them. We cannot step out of our language with language to depict language (4.121).

Wittgenstein claims our thoughts are logical pictures of fact that find perceivable expression in propositions (3.0; 3.1). Following Frege, this expression is a propositional sign, or physical marking, whose elements (simple signs or names) are determinately arranged to render the expression articulate by corresponding to the objects of thought (3.12–3.141; 3.2). All propositions share in having expression, “the mark of a form and a content” (3.31). If we do not grasp the expressions that propositions put on show, we cannot understand them (4.024). As logical pictures, propositions have a sense in modeling a possible state of affairs, and are true or false by their affirmed sense agreeing or disagreeing with reality (4.01–4.022).

A proposition’s form remains constant, while anything else can be variable. This includes the sense, because propositions can and do picture different states of affairs. If they could not, all propositions would signify the same thing. Once a constituent of a proposition becomes a variable (“X is a tiger” instead of “Tiglo is a tiger”), a class of propositions emerge that can provide values for the variable, which depend on the meaning our conventions have given to the proposition’s parts (“is a tiger”). However, when all propositional signs are turned into variables, a class emerges that can provide variables for the proposition, independently of convention, but dependent on the proposition’s logical form. This is the proposition’s logical prototype (3.315).

The simple signs show whether the proposition’s structure is tautological or not (6.1267; 5.525; Harward 10). If it is not tautological, it shows that it is a proposition reaching out to reality, affirming a specific state of affairs. On the other hand, if the propositions are tautologies, they do not describe states of affairs that could fail to obtain; they say nothing. Wittgenstein then shows how the propositions of logic are all tautologies. In genuine propositions, “a situation is, as it were, constructed by way of experiment,” and they “construct a world” (4.031; 4.023). Logical propositions do not. Joachim Schulte explains how Wittgenstein opts in the *Tractatus* to present this recognition graphically. He states, “The truth table, the schema, and the representation are supposed—each in its own

way—to make the logical as *clear* as possible, without talking about it” (66). The proposition is a truth function of elementary propositions, correlating with atomic facts. Wittgenstein demonstrates this by taking a proposition like “there are books in the room or there are rhinos in the room” ( $B \vee R$ ) and placing it in a truth table that enumerates the truth possibilities for the proposition based on the truth possibilities of the constituents, “B” and “R.” To determine the truthfulness of this proposition (if either B or R, or both obtain), one cannot simply analyze the symbols, but one must explore and find out if it agrees with reality. Because of this, the proposition says something; it has sense, as it claims to say something about reality.

However, logical propositions (as tautologies) are different (6.1). When it comes to a proposition such as “the car is blue or it is not” ( $B$  or not  $B$ ), one does not have to consult reality at all, as there are no truth-possibilities in the table other than the statement’s being true (6.113).<sup>9</sup> As such, tautologies do not say anything at all; they cannot, as neither tautologies or contradictions “represent any possible situations” (4.462–4.463). Thus, Wittgenstein states that they can only say nothing; they are senseless (4.461; 4.4611).<sup>10</sup> But this does not mean they do nothing; they show instead of say, and what they show is the general form of propositions that discloses how propositions are to be used. That the truth of a proposition follows from the truths of others is seen in their structure, or the propositions’ internal relations (5.13–5.131).

If he is right, Wittgenstein believes he can dispose of “laws of inference,” and other “logical objects’ or ‘logical constants’” that Frege and Russell had supposed (5.132; 5.4). The only logical constant is what is common among them all: the general propositional form (5.47). Wittgenstein realized when we ask what the nature of logic is, we are in an awkward situation: nothing is more fundamental, and so there is no higher order of objects that can serve as a reference. This had a significant bearing on the philosophy of mathematics of Wittgenstein’s day, given how some of his contemporaries were trying to reduce mathematical propositions to logic.

To understand Wittgenstein’s contributions to the philosophy of mathematics as developed from his insights in the *Tractatus*, it is helpful to consider the historical background. Harward provides this background in great detail, so I will use his account as a kind of shorthand (51–59). He claims that there were three camps discussing the nature of mathematical propositions, which he calls formalists, intuitionists, and logicians.

<sup>9</sup> In the case of contradictions, which Wittgenstein holds are really tautologies, one does not have to consult reality because the truth-possibilities are necessarily restricted to being always false.

<sup>10</sup> This coincides with Wittgenstein’s sentiments in his picture theory of meaning that “there are no pictures that are true a priori” (2.225). Tautologies cannot be pictures as they are true a priori.

Formalists hold that mathematical propositions are meaningless formulae governed by arbitrary rules. With no subject matter, mathematical notation is meaningless, displaying abstract operations consistently working within an accidental framework. Despite this, mathematical propositions may serve useful purposes for counting or for coordinating points on a graph. According to Harward, intuitionists view mathematical statements as meaningful, as they either correspond to logical objects or invented concepts that are necessarily true. Lastly, logicians try to use logical axioms to define all mathematical concepts and operations. For them, the subject matter of mathematics is reducible to logic, from which it gains its significance.

While these three camps consider the nature of mathematical propositions, another three—Platonists, naturalists, and conventionalists—seek to answer questions regarding their content: what are mathematical propositions themselves about? Platonists claim they refer to abstract entities, naturalists that they are about natural processes (either cerebral or of the natural world) subject to reality's contingencies, and conventionalists hold they are about real things (arbitrary relations) only applicable to a limited context(s).

With these views in the background, Wittgenstein's insights on the nature of mathematics and its possible subject matter are enlightening. First of all, he is at odds with all groups concerning the content of mathematical propositions. He disagrees with the Platonists that math involves a necessary description of mathematical objects, as he believes they no more exist than logical objects. Likewise, he argues against the conventionalists that mathematical rules are constructed so that their statements like " $5+7=12$ " are only true in general contexts. The power of mathematics lies in its necessity. Like logical propositions in the *Tractatus*, mathematical statements show themselves as tautological, thus not depending on any possible contextual variables (6.22). Given this necessity, the naturalists are also wrong in assigning contingency to mathematics; regardless of the way things are in the world, the mathematical propositions are necessarily true (6.2321). So as explained in the *Tractatus*, mathematical propositions are not sensible.

Wittgenstein also disagrees with the traditional theories regarding the nature of mathematics. While formalism correctly argued that mathematical statements are not sensible and as tautologies follow from necessity, "it fails to see that the function of mathematical propositions is to show the relation of mathematics to" ordinary language usage (qtd. in Harward 57). Wittgenstein believes intuitionism falsely holds that the concepts of mathematics have a subject matter, although it is correct in observing the immediate understanding we have of them. Language is what provides the "intuition" (6.233). Most important, however, are Wittgenstein's

critiques of the popular logicism of his day. Wittgenstein believed Frege and Russell were incorrect in founding math in logic, for mathematical propositions are not about mind-independent entities.

Frege and Russell were persuaded that the logic math was based upon had descriptive content, and thus had to account for logical objects or constants. Since tautologies were used to prove theorems in mathematics all the time, they felt they needed to justify their truthfulness. Just as there are biological facts (crocodiles exist), astronomical facts (the earth has one moon), and mathematical facts ( $1+1=2$ ), they supposed there must be mind-independent truths about logic in the universe. This was especially troubling for the early Russell, who held that whatever can be thought and said only has meaning when it corresponds to or names an entity. But how are logical facts, and constants like “not,” “or,” “and,” “class,” and “member of” to be identified? Since they are not empirically observed, a platonic move was initiated by Kant and eventually by Frege to accommodate intellectual intuitions of such constants (once Frege’s set theory is shown to be paradoxical by Russell).

Russell did not want to rely on intuition at all, so he reattempts to deduce mathematics from axioms. To escape the paradox he presented to Frege, Russell develops a “theory of types,” which claims individuals and classes are of different logical types, which cannot be considered on the same grounds.<sup>11</sup> Variables cannot range over everything. Rather, propositional functions and relations are restricted to the range of objects (their type) for which they yield significant propositions, when taken as values for its variables. So the propositional function “ $x$  is a philosopher” yields significant propositions when Kant and Locke are taken as values of “ $x$ .” Similarly, it is nonsense to say “a class of mongoose is a mongoose”; it does not qualify as an assertion because it does not yield a significant proposition. So by asserting that the significant propositions yielded by a class or set of individuals are different from those yielded by a class of classes (and so on, in an ever ascending hierarchy), he believes he can avoid both the paradox he earlier discovered and the liar’s paradox.<sup>12</sup>

<sup>11</sup> This theory is introduced in Appendix B of Russell’s *Principles of Mathematics* to circumvent the logical paradox.

<sup>12</sup> The theory of types tries to circumvent the liar’s paradox by claiming that the liar can be asked what type of false proposition he is giving. When he states what type the proposition is, the liar will be giving a proposition of a higher order type than the lying proposition. Since the propositions are of different types, there is no contradiction, so the liar remains a liar after all. Russell adds, “if he said he was asserting a false proposition of the 30,000th type, that would be a statement of the 30,001st type, so he would still be a liar.” See Odell 28–30. Russell recognizes that his theory is not trouble free, as it would mean logical laws (including the theory of types itself) could not be asserted in an unrestricted sense. See Carey and Ongley 232–33.

Russell's revisions are not over yet. To complete the reduction of math to logic, he hesitantly assumes in the first edition of the *Principia Mathematica* the not self-evident axiom of infinity, which posited an infinite number of logical objects.<sup>13</sup> Russell believes there are meaningful statements we can make about an infinite number of individuals, as the antecedent of a conditional (Carey and Ongley 106). Yet if this is the case, there must be logical objects that the infinite number of individuals refers to in the conditional. Given Russell's mathematical realism, without accepting the axiom he could not show how math could be reduced to logic. Likewise, he could not show that every integer has a successor without assuming an infinite number of individuals. As numbers are classes of classes of individuals, they are of a different type than classes of individuals. The number 0, the empty class, cannot count as an individual used to define its successor 1, the class whose only member is the empty class, or be used in defining further successors (Carey and Ongley 106). The theory of types forces Russell to admit infinitely many individuals as an axiom.

Wittgenstein is not satisfied with Russell's proposed solution, thinking that Russell is only showing that his attempts to explain mathematical propositions by reducing them to logic are misplaced. First, the axiom of infinity is an empirical assertion, in direct tension with logic's a priori status, and Russell's attempt to derive math solely from logic. If empirical, the axiom could be refuted (6.1222), and like with the axiom of reducibility, "even if [the axiom of infinity was] true, [its] truth could only be the result of a fortunate accident" (6.1232). On some possible world, it could easily not obtain, and "It is clear . . . that logic has nothing to do with the question whether our world really is like that or not" (6.1233).

Wittgenstein further believes he can demonstrate Russell's theory of types is both impossible and unnecessary. Take for instance the theory's claim that "a class of mongoose is a mongoose" is nonsense." As Anthony Kenny explains, this claim can only mean either that the series of sounds or paper markings enclosed in the quotation marks have yet to be assigned meaning in some language, or that the meaning of the English expression yields no sense (43–44).<sup>14</sup> The former would be a trivial empirical fact. The latter will not do. For if the claim is nonsense the expression has no meaning in English, but its meaning is what was presupposed to make the very judgment that it is nonsense in the first place. Wittgenstein observes the lesson learned:

<sup>13</sup> I am not suggesting Russell does not introduce other axioms or theories to develop his notions of logic and mathematics. Here, I am only mentioning these two things (the theory of types and the axiom of infinity).

<sup>14</sup> This insight was clarified to me in Shields 15.

In logical syntax the meaning of a sign should never play a role. It must be possible to establish logical syntax without mentioning the meaning of a sign. . . . From this observation we turn to Russell's 'theory of types.' It can be seen that Russell must be wrong, because he had to mention the meaning of signs when establishing the rules for them. (3.33–3.331)

Wittgenstein's own solution is to explain language in a way, which recognizes that the rules governing signs are extracted from the logical form that they put on show (4.122; Shields 15). So Wittgenstein shows how logic must deal with the preconditions of meaning. Whether signs can be combined in an assertion or yield nonsense is determined by logical forms that can be reflexively shown through a proposition's internal properties (4.124). They show that something has to be meaningful before it can be true or false, and logic deals with truth functions that show how it is possible to derive complex propositions from simple ones. Wittgenstein explains,

Once a notation has been established, there will be in it a rule governing the construction of all propositions that negate  $p$ , a rule governing the construction of all propositions that affirm  $p$ , and a rule governing the construction of all propositions that affirm  $p$  or  $q$ ; and so on. These rules are equivalent to the symbols; and in them their sense is mirrored. (5.514)

The whole truth-functional table listing the truth-possibilities of simple signs thus demonstrates the rules of use applied in logic; truth is not what tautologies have but what they represent. Following the *Tractatus*, the non-sensible tautologies of mathematics do not describe logical objects, but rather show formal features, such as their natural necessity and their function to govern what is sensible. Thus, logical propositions are radically different from empirical propositions, for they say nothing about the world, but show its form.

### Ethics and Values in the *Tractatus*

Even before writing the *Tractatus*, Wittgenstein wrote in his *Notebooks* that his "work ha[d] broadened out from the foundations of mathematics to the essence of the world" (qtd. in McGuinness 61). That saying and showing was the cardinal problem of philosophy was not only clear to Wittgenstein from its application to logic and the philosophy of mathematics, but also from the clarity it brought to the question of ethics and values.

In the *Tractatus*, the world is presented as a totality of states of affairs or facts, which are a series of related atomic objects. Language describes the world by modeling the states of affairs; names correspond to the atomic objects and sentences to the facts. The arrangement of names in a sentence mirrors some possible arrangement of objects that makes up a state of affairs, so that the sentence has the same logical form, becoming a picture of how things could stand in the world. Since all facts in the world obtain accidentally, so that “all propositions are of equal value,” there are no propositions that can report anything sublime or important (6.4; 6.41).<sup>15</sup> As such, value cannot be in the world since value cannot be incidental (and even if it was, it would not have value) (6.41). But if values are not in the world, nothing can be said of them. Value statements cannot picture any state of affairs, so value, the world’s and life’s meaning, must somehow stand outside the world.

There are no ethical propositions, only statements running against the boundaries of language (6.42–6.43).<sup>16</sup> As Wittgenstein later shares in a lecture on ethics, even if an omniscient being wrote all he knew in a big book containing a whole description of the world, “this book would contain nothing that we would call an ethical judgment or anything that would logically imply such a judgment” (“Ethics,” 252–53). Wittgenstein describes ethics and aesthetics as being “one and the same” (6.421) in not only belonging to the realm of what cannot be said, but in the function they perform. In his earlier *Notebooks*, he explained how both see things *sub specie aeternitatis* (TLP 6.45; Tilghman 46) or from outside: ethics sees the world this way (“ethics is transcendental,” TLP 6.421), and aesthetics sees a particular object this way (*Notebooks* 83).<sup>17</sup> He even describes a musical tune as “a kind of tautology,” complete in itself apart from the world (qtd. in Tilghman 170).<sup>18</sup>

This separates strongly questions of value from scientific questions. Logical positivists (especially Ayer) assimilated this fact-value distinction to belittle ethics with their verifiability theory of meaning. For the positivist, a factual statement would be one that claims a table is solid or five feet long; it is a statement about reality. This statement can be presented to others, and if they are willing, they can use their reasoning and a measuring device to determine whether the table is actually the described length.

<sup>15</sup> For Wittgenstein’s denial of causality and metaphysical necessity, see TLP 6.31–6.375.

<sup>16</sup> Wittgenstein sees most of philosophy as doing a similar thing: “Most of the propositions and questions of philosophers . . . belong to the same class as the question whether the good is more or less identical than the beautiful” (4.003).

<sup>17</sup> Wittgenstein, *Notebooks* 83.

<sup>18</sup> See Wittgenstein, *Notebooks* 40.

Value-statements, however, cannot claim the same degree of certainty, as they do not appear to be about reality. What can they measure and how would they measure it? To say that it is true that a painting is beautiful is not about correspondence with reality, but to reveal the opinion of the speaking subject. Another person would not be wrong for thinking the same painting is not beautiful. As such, the value statements do not describe facts, but rather emotive displays of preference, as is captured in Ayer's boo-hurrah theory. Ethics and aesthetics are both sorts of babbling, and so do not matter. Hence, we should focus our energies on the empirically verifiable subject matter of science. For Wittgenstein this suggestion completely fails to understand the fact-value distinction. On the contrary, he presses that values are the only things that *matter* at all.

For Wittgenstein, while values cannot be talked about, a value like something's importance is shown in how we treat it, how we spend our time with it, talk about it, and so forth. To understand this more clearly, we could consider the telling of a joke. Let's suppose someone shares a knock-knock joke. What is said in the joke is fact or fiction (or a little of both), and may be funny, but its funniness is not something that can be said of the story in itself. To add "And this is all very funny," to the joke would be saying something rather awkward that is not really about the joke at all. That the joke is funny is manifest in the responses (the giggles and laughter of the audience, the fact that it is shared by the listeners to their friends), not in the joke itself. The funniness cannot be said, only shown. But to hold that value judgments are nonsensical is not to degrade them, but to show the boundaries for how they can be thought about. The nonsense of value statements can never be used to justify a positivist claim that we *should* then turn to science's subject matter, for then this "should" is itself nonsensical as a value statement.

After all, scientific and philosophical practices are not value-free enterprises. What fact tells us that we *should* investigate any given thing about the world, or make any change to the world through applying knowledge we already possess? No fact says we should search for a cure for cancer, provide shelter for the homeless, or call up a friend we have not heard from in years, and yet it is these sorts of questions that we think about almost all the time. They are the soul of the world. Wittgenstein himself wrote that the *Tractatus* is a "work [that] consists of two parts, the one presented here plus all that I have not written. And it is precisely this second part that is the important point" (qtd. in Stern 8). And he clearly expressed his personal leanings: "I may find scientific questions interesting, but they never really grip me. Only *conceptual* and *aesthetic* questions do that. At bottom I am indifferent to the solution of scientific problems; but not the other sort" (*Culture and Values* 79). Wittgenstein read poetry,

meditated on music, and avidly read and enjoyed William James' the *Varieties of Religious Experience*. He even recommended this work to a philosophy student of his (Goodman, "Wittgenstein and James" 59–60).<sup>19</sup> B. R. Tilghman has observed how these nonsensical interests of Wittgenstein baffled the positivists. Members of the Vienna Circle, like Carnap and Schlick, met with Wittgenstein at times expecting elucidations on the nature of logic, and instead received defenses of religion or listened to Wittgenstein recite and discuss poetry (Tilghman 18). This suggests the saying and showing distinction was not a philosophical project to snub values. Rather, the distinction could rightly be conceived along the lines of Kant's distinction between the phenomenal and noumenal world in preserving the realm of values, religion, and the mystical from the possible arrogance of the sciences.

Wittgenstein was adamant that scientific answers keep the problems of life completely untouched (6.52); facts only set the problems (6.4321). We can mistakenly suppose that the answer to life's meaning, like the meaning of any project which we participate in, can be explained in terms of its contribution to some larger project or cosmic story. Thus, temporal life is supposed to have meaning by being subsumed within eternal life (6.4312). We try to infer from this life's facts what the eternal plan must be, but obviously an infinite regress threatens: "is not this eternal life itself as much of a riddle as our present life?" (6.4312). So factual inferences cannot provide a solution. The solution emerges in vanishing the problem of life as being a problem about meaning (6.521) and recognizing it as a problem about how to live and look at the world. If the ethical will has any influence at all, it "can only be the limits of the world [the self] that [it] alters, not the facts" (6.43; 5.632). Thus, our attitude to the world taken through the will may change the way the world appears, so that the world for the happy man is different than for the unhappy man. Ethics involves adopting a certain view of the world, whose reward resides in itself (6.422).

These many insights garnered from applying the distinction between saying and showing in the *Tractatus* demonstrate that Wittgenstein's interests were not limited to logic and mathematics, but embraced broader contemplations in value theory and ethics. As Brian McGuinness observed, they also illustrate that there may have been more to an anecdote

<sup>19</sup> While it is beyond the scope of this paper, it is interesting to note how Wittgenstein shifts from holding that religious language is nonsense in his lecture on ethics to agreeing with James that this language has "sense" rooted through its use in human life in his 1947 *Remarks on the Philosophy of Psychology*. Religious statements have significance that is established by their use; their service provides something we understand. Goodman explores this further in "Wittgenstein and James: Pragmatism and Will" 64–68, and in "Wittgenstein and the Varieties of Religious Experience" 36–59.

of Russell's than one might first recognize (61). Russell recalled an evening before the Great War when Wittgenstein was pacing around his room. Curious about his behavior, Russell asked him, "Wittgenstein, are you thinking about logic, or about your sins?" Wittgenstein exclaimed, "Both!"

### Saying and Showing in the Later Wittgenstein

Despite clear signs of a distinction between the early and late Wittgenstein,<sup>20</sup> the saying and showing distinction appears throughout his writings, demonstrating both the continuity of his thought and the significance of this insight. The rejection (or modification and recognition of the limitations) of the picture theory of meaning because of an inability to account for atomic facts does not involve abandoning this doctrine (*PI* 55–63).<sup>21</sup> While his understanding of meaning turns aside from looking at the mirroring of the world and language from a single essential form in the *Philosophical Investigations*, this later work still examines how the meaning of language shows itself in the rich variety of forms of our ordinary use of language (or language-games). We see this in the *Philosophical Investigations*, when Wittgenstein brings up the notion of aspect-blindness, which is the failure to understand what language's usage makes obvious (*PI* 211–214e). Showing continues to bear import on Wittgenstein's discussion of the use of language, his stances on the nature of mathematical propositions, and his denouncement of both skepticism and claims to indubitable knowledge. His task remains to draw a limit to the expression of thought.

For instance, there is conformity between the *Tractatus* and Wittgenstein's later manuscripts on the philosophy of mathematics in the application of the showing doctrine. For Wittgenstein, math is an assortment of methods by which its employment puts clearly the connections that are conceptually located in everyday language usage. The nature of math is bound to the uses of mathematical propositions.

In his *Remarks on the Foundations of Mathematics*, Wittgenstein echoes his prior stance that the propositions of mathematics cannot be sensible as they have no subject matter; rather, they are prescriptive in showing

<sup>20</sup> For instance, Norman Malcolm makes a list of fifteen significant theses in the *Tractatus* that the later Wittgenstein rejects. See Malcolm viii.

<sup>21</sup> *PI* will be the abbreviation for the *Philosophical Investigations* throughout this paper. Harward examines how Wittgenstein begins the shift in the *Philosophische Grammatik*. While he continues to hold propositions demand reality to be compared to them, he notes that the agreement of pictorial and logical form is misleading. Apparently, what makes something a picture is somewhat arbitrary. He observes instead how signs gain their life in the intercourse of everyday people. The picture theory is rejected as a general theory of significance, although Wittgenstein still believes it is important in many cases. See Harward 40–44.

the rules of use for our ordinary sensible talking and thinking (Harward 60). Wittgenstein explained, “Mathematics forms a network of norms” (qtd. in Shanker 389). In his unpublished manuscript on the philosophy of mathematics, Wittgenstein further elucidated: “Mathematical and logical propositions are preparations for the use of language, almost like definitions are. It’s all a put-up job. It can all be done on a blackboard. We just look at the signs, and never go outside the blackboard” (qtd. in Shanker 262). Just as practical concerns and uses give meaning to words like “chair,” calculus gives and shows the meaning to mathematical signs. If we look for their meaning in some reality where logical objects dwell, we are bound to end up confused. Wittgenstein urged, “When we consider propositions about zero we are not dealing with a realm of entities in the most important sense of ‘about’—we are giving rules for the use of zero” (qtd. in Harward 61). These examples demonstrate how Wittgenstein’s showing insights in the *Tractatus* carry over to his future work on mathematics, although his later thought more explicitly claims that math is raised on the presuppositions of everyday life and language as developed in the *Investigations*.

Wittgenstein’s *On Certainty* addresses both the Cartesian skeptic’s doubts about the existence of an external world and G. E. Moore’s common sense arguments that claim to provide irrefutable knowledge of one. Since this work uses the saying and showing division and the last remarks in this work were written two days before Wittgenstein’s death, it attests to Wittgenstein’s continuing commitment to this theme. In the work, Wittgenstein explains how both Moore and the skeptic have made fundamental mistakes regarding the nature of certainty, doubt, and knowledge, and their relationship to language. I believe Wittgenstein’s approach is to develop a conclusion he drew in the *Tractatus*: “Scepticism is *not* irrefutable, but obviously nonsensical, when it tries to raise doubts where no questions can be asked. For doubt can exist only where a question exists, a question only where an answer exists, and an answer only where something *can be said*” (6.51).

The skeptic fails to see how “doubting must take place within a language-game, and thus cannot be engaged in willy-nilly” (Gill 280). To meaningfully doubt, there must be grounds (or rules) to account for it, and this presupposes understanding the nature of knowledge and beliefs. As Jerry H. Gill observes, “doubt is parasitic on belief,” so that belief is both psychologically and logically prior (281).<sup>22</sup> To meaningfully deny our basic certainties (like the existence of an external world) is impossible, because doing so presupposes the structural realities that would give the doubt credibility. Furthermore, doubting everything destroys the meaning of doubt

<sup>22</sup> See also Sultana 210.

since it does not have an end (OC 625).<sup>23</sup> Thus, Wittgenstein “strives not so much to refute the skeptic’s conclusion as to show the meaninglessness of his procedure” (Sultana 211).

On the other hand, Moore’s refutation of the skeptic is also misguided in asserting that our certainty of common sense propositions yields irrefutable knowledge. In his “Proof of an External World,” Moore believes he has outwitted the Cartesian skeptic by simply holding up a hand and saying, “this is one hand,” and then after lifting up the other, “this too is a hand” (299). Thus, according to Moore, it is certain that there are at least two hands, which are external objects. Since external objects imply an external world, there is an external world. In another work, “A Defence of Common Sense,” Moore lists a series of propositions, like “his body has existed continuously since his birth,” of which he is absolutely certain (194–95).

Wittgenstein does not doubt that Moore’s statements are certain; they “stand fast” for him and for us too (OC 84). Moore also gets it right in resisting the skeptic’s doubts. Where Moore falls into error is in assuming that a lack of doubt entails something’s truth. From psychological certainty about something, “it doesn’t follow that it is so”; rather, “what we can ask is whether it can make sense to doubt it” (OC 2). If to doubt the proposition does not make sense, then the opposite assertion of knowledge makes no sense either (OC 58). Norman Malcolm shares how Wittgenstein looks at the variety of ways in which we claim knowledge: sometimes we claim it when we have pieces of evidence to support our claim, that we have taken something into consideration, or that we have double-checked our work (211–12). In each case knowledge can be contrasted with someone’s actual or possible disbelief. But when doubt is logically excluded, knowledge makes no sense, because the “I know’ has no *job* to do” (211).<sup>24</sup> Wittgenstein explains in another work, “I know how to ascertain that I have two coins in my pocket. But I cannot ascertain that I have two hands, because I cannot doubt it” (*Last Writings*, 106e).<sup>25</sup>

The problem with Moore’s propositions is that they have no recognizable verification procedure, so that both knowledge and doubt are out of place. That we could be wrong about our having a body or possessing two hands lacks meaning. We do not understand how we could be mistaken,

<sup>23</sup> OC will be the abbreviation for *On Certainty* throughout this paper.

<sup>24</sup> Malcolm notes a later statement of Wittgenstein to this effect: “We say ‘I know . . .’ where there can be doubt, whereas philosophers say we know something precisely where there is no doubt, and thus where the words ‘I know’ are superfluous as an introduction to the statement.” See Wittgenstein, *Last Writings Psychology* 106e (paragraph 834).

<sup>25</sup> Wittgenstein, *Last Writings* 106e (paragraph 832).

and we do not understand what could count as proof. We cannot meaningfully *say* we possess knowledge. Rather, “That [one] does know takes some shewing” (OC 14). But what could this mean? Wittgenstein explains, “My life shews that I know or am certain that there is a chair over there, or a door, and so on.—I tell a friend, e.g., ‘Take the chair over there,’ ‘Shut the door,’ etc. etc.” (OC 7). We show our knowing by our actions and also in what we say (OC 431). In this sense, Wittgenstein’s account of knowledge echoes the showing of values in the *Tractatus*. Knowledge about or the importance of an object is shown in our human behavior and projects. As Shields points out, this showing relates to the showing of internal properties of propositions (18–19). When I am with a sick man (OC 10), my knowledge of his sickness is shown within the internal properties of the situation. This means it involves me doing things like sitting next to his bed and holding his hand, trying not to aggravate his nerves, checking his temperature, and going out to purchase prescription drugs on his behalf.<sup>26</sup> It is further manifest in what I say: “He may never recover,” “Call 911,” “Does he have any last requests?,” or “We should talk to his family; he is getting worse.”

Moore’s examples are yet important in drawing attention to the framework of our empirical claims. They show that eventually as with mathematical and logical propositions, the “justification [of empirical statements] comes to an end” (OC 192). Wittgenstein is sharing how we arrive at an epistemological bedrock that permeates our language, and provides the very condition on which we can doubt or affirm anything at all. It is a “world-picture,” an “inherited background against which I distinguish between true and false” (OC 94). These bedrock propositions function like “hinges” in that being exempt from doubt they “stay put,” and allow rational inquiry (OC 341–43). The hinges let us know what is being doubted in any given doubt, and how such doubt is to be removed (Travis 233). But like logical form, the hinges can only be displayed, making all doubts (the skeptic) or justifications (Moore) of it lead to confusion.

All opponents of the skeptic are likewise attempting to state what cannot be said, but only shown: the very rules governing the existing language-game make certainty undeniable, but it does not make what we are certain of irrefutably true. Wittgenstein remarked, “Moore does not *know* what he asserts he knows . . . it stands fast as part of our *method* of doubt and enquiry” (OC 151). It belongs to the very “scaffolding of our thoughts” (OC 211). McGinn correctly observes that the certainty Moore tries but fails to express “represents a limit on our use of words. The role of this certainty in our language game means that we cannot place it against a

<sup>26</sup> Examples like these are derived from Shields 19.

background of other attitudes; it is essential to our mastery of our language and therefore prior to our assertion of anything as true or false" (34). Hence, *On Certainty* is an account of how Wittgenstein employs the saying and showing theme as a precondition for meaningful discourse of empirical claims, as opposed to his focus on the preconditions of the meaning of logical propositions in the *Tractatus*.

### Conclusion

The *Tractatus* utilizes the distinction between saying and showing to explain how the basis of logic is in propositions' logical form. With this in mind, Wittgenstein denounces logical constants and provides novel answers to the problems besetting logic and the philosophy of mathematics inherited from Frege, Russell, and other contemporaries. What is shown (logical form) is shown by the tautologies, which makes the saying and sense of genuine propositions possible. Wittgenstein provides an account of how logic is the result of having a consistent symbolism. When signs are used consistently they give rise to logical principles that are not themselves true or false, but show how the symbols are defined truth-functionally. That "B or not B" is always true regardless of B shows how these symbols are used in logic. Hence, "Logic has to take care of itself" (*TLP* 5.473). Besides this usage in the *Tractatus*, saying and showing also has an application in recognizing the difference between contingent facts and absolute values. While language can only depict the facts, this does not reduce values' importance, but this can only be shown. Ethics is not about the world, but about changing the metaphysical subject's view of the world.

Although the nature of the meaning of language gradually shifts from picturing to ordinary usage, Wittgenstein sticks to utilizing the saying and showing themes to discuss how rules of use are demonstrated in mathematical propositions and how the ground of our epistemological framework is both irrefutable and unjustifiable (in the traditional sense), as it permeates our language-games. The distinction is often positioned to follow Wittgenstein's observation made in *On Certainty*: "It is so difficult to find the *beginning*. Or, better: it is difficult to begin at the beginning. And not try to go further back" (*OC* 471). For Wittgenstein, recognizing what can be shown and not said helps one avoid this mistake, and see that the problems of philosophy are deep and important pseudo-problems that by their nature cannot be solved, only dissolved (*TLP* 3; 4.003; *PI* 111).

## Works Cited

- Carey, Rosalind, and John Ongley. *Historical Dictionary of Bertrand Russell's Philosophy*. Lanham: Scarecrow, 2009.
- Friedlander, Eli. *Signs of Sense: Reading Wittgenstein's Tractatus*. Cambridge: Harvard UP, 2001.
- Geach, P. T. "Saying and Showing in Frege and Wittgenstein." *The Philosophy of Wittgenstein*. Ed. John V. Canfield. Vol. 3. New York: Garland Publishing, 1986. 54-70.
- Gerrard, Steven. "One Wittgenstein?" *From Frege to Wittgenstein*. Ed. Erich H. Reck. New York: Oxford UP, 2002.
- Gill, Jerry H. "Saying and Showing: Radical Themes in Wittgenstein's 'On Certainty.'" *Religious Studies* 10.3 (1974): 279-90.
- Harward, Donald W. *Wittgenstein's Saying and Showing Themes*. Bonn: Bouvier, 1976.
- Kenny, Anthony. *Wittgenstein*. Cambridge: Harvard UP, 1973.
- Malcolm, Norman. *Nothing is Hidden: Wittgenstein's Criticism of his Early Thought*. Oxford: Basil Blackwell, 1986.
- McDonough, Richard M. *The Argument of the Tractatus*. Albany: SUNY Press, 1986.
- McGinn, Marie. "Saying and Showing and the Continuity of Wittgenstein's Thought." *The Harvard Review of Philosophy* 9.1 (2001): 24-36.
- McGuinness, Brian. "The Grundgedanke of the Tractatus." *Understanding Wittgenstein*. Ed. Godfrey Vesey. Ithaca: Cornell UP, 1974. 49-62.
- Goodman, Russell. "Wittgenstein and James: Pragmatism and Will." *Pragmatism and Values*. Ed. John Ryder and Emil Višňovský. New York: Rodopi, 2004. 59-72.
- . "Wittgenstein and the Varieties of Religious Experience." *Wittgenstein and William James*. Cambridge UP, 2002. 36-59.
- Moore, A. W. "On Saying and Showing." *Philosophy* 62.242 (1987): 473-97.
- Moore, G. E. "A Defence of Common Sense." *Contemporary British Philosophy* 2nd Ser. Ed. J. H. Muirhead. New York: Macmillan, 1939. 193-223.
- . "Proof of an External World." *British Academy Proceedings* 25 (1949): 273-300.
- Odell, S. Jack. *On Russell*. Belmont: Wadsworth/Thomson Learning, 2000.
- Schulte, Joachim. Trans. William H. Brenner and John F. Holley. *Wittgenstein: An Introduction*. Albany: State U of New York P, 1992.

## Works Cited

- Shanker, Stuart. *Wittgenstein and the Turning Point in the Philosophy of Mathematics*. London: Croom Helm, 1987.
- Shields, Philip R. *Logic and Sin in the Writings of Ludwig Wittgenstein*. Chicago: U of Chicago P, 1993.
- Stenius, Erik. *Wittgenstein's Tractatus: A Critical Exposition of its Main Lines of Thought*. Ithaca: Cornell UP, 1960.
- Stern, David G. *Wittgenstein on Mind and Language*. New York: Oxford UP, 1996.
- Sultana, Mark. "Bridging the Gulf Between Wittgenstein's Works: A Matter of Showing." *Forum Philosophicum* 12.2 (2007): 207–25.
- Tilgham, B. R. *Wittgenstein, Ethics, and Aesthetics*. Albany: State U of New York P, 1991.
- Travis, Charles. *The Uses of Sense*. Oxford: Clarendon, 1989.
- Wittgenstein, Ludwig. *Culture and Values*. Eds. Georg Henrik Von Wright and Heikki Nyman. Trans. Peter Winch. Chicago: U of Chicago P, 1984.
- . "Ethics, Life and Faith." *The Wittgenstein Reader*. ed. Anthony Kenny. 2nd ed. Cambridge: Wiley-Blackwell, 2006. 251–66.
- . *Last Writings on the Philosophy of Psychology*. Eds. Heikki Nyman and G. H. Von Wright. Trans. C. G. Luckhardt and Maximilian A. E. Aue. Chicago: U of Chicago P, 1982.
- . *Notebooks, 1914–1916, 83*. 2nd Edition. Eds. G. E. M. Anscombe and Georg Henrik Von Wright. Trans. G. E. M. Anscombe. Chicago: U of Chicago P, 1984.
- . *On Certainty*. Eds. G. E. M. Anscombe and G. H. von Wright. Trans. Denis Paul and G. E. M. Anscombe. Malden: Wiley-Blackwell, 1979.
- . *Philosophical Investigations*. Trans. G. E. M. Anscombe. New York: Macmillan, 1953.
- . *Tractatus Logico-Philosophicus*. Trans. D. F. Pears and B. F. McGuinness. New York: Routledge, 1961.