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Ph.D. Dissertation

Wittgenstein on Nonsignificant Propositions

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August, 2001**



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Abstract

This dissertation is a systematic study of Wittgenstein's ideas on non-significant propositions, specifically tautologies, mathematical propositions, scientific laws in the *Tractatus*, grammatical propositions in the *Investigations*, and Moore-type propositions in *On Certainty*. My aim is to show that these propositions are closely connected. I take Wittgenstein's discussions of them to be a theme developed both in the early and later periods of his philosophy. His idea is that since such propositions cannot be properly regarded as empirical or true or false, they are radically different from propositions that are. He sees the conflation of these two kinds of proposition as a major source of philosophical illusions. For this reason, it is important for him to clarify the logical status of such nonsignificant propositions.

**To my father Zhongbang Li,
who brought me up in a difficult situation, taught me to value learning,
and encouraged, supported, and understood me when I chose to study philosophy.**

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Puqun Li
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Ottawa

“Indeed, the logical proposition acquires all the characteristics of a proposition of natural science and this is the sure sign that it has been construed wrongly.”

--Tractatus Logico-Philosophicus

“We predicate of the thing what lies in the method of representing it. Impressed by the possibility of a comparison, we think we are perceiving a state of affairs of the highest generality.”

--Philosophical Investigations

“We are interested in the fact that about certain empirical propositions no doubt can exist if making judgments is to be possible at all. Or again: I am inclined to believe that not everything that has the form of an empirical proposition *is* one”

--On Certainty

Abbreviations

Full references are under "Wittgenstein" in the bibliography.

BB *Blue and Brown Books*

NB *Notebooks: 1914-16*

OC *On Certainty*

PI *Philosophical Investigations*

PG *Philosophical Grammar*

PR *Philosophical Remarks*

RFM *Remarks on the Foundations of Mathematics*

TLP *Tractatus Logico-Philosophicus*

Z *Zettel*

Contents

Acknowledgments

Abbreviations

Introduction.....	1
Chapter I	
Wittgenstein on Non-significant Propositions in the <i>Tractatus</i>	8
Chapter II	
Wittgenstein on Grammatical Propositions in the <i>Investigation</i>	31
Chapter III	
Moore-type Propositions in <i>On Certainty</i>	54
Chapter IV	
The Status of Moore-type propositions: Wittgenstein's criticisms of Moore	79
Chapter V	
Foundations and Grounds in <i>On Certainty</i>	93
Chapter VI	
Wittgenstein, Quine and the Analytic/Synthetic Distinction.....	113
Chapter VII	
Conclusion: Continuity in Wittgenstein's Philosophy.....	138
Bibliography.....	153

Introduction

This dissertation is a systematic study of Wittgenstein's ideas about nonsignificant propositions, specifically tautologies, mathematical propositions, scientific laws in the *Tractatus*, grammatical propositions in the *Investigations*, and Moore-type propositions in *On Certainty*. I take Wittgenstein's ideas about these propositions to be a continuous theme developed both in the early and later periods of his philosophy.

While the sort of nonsignificant propositions discussed in the *Tractatus*, grammatical propositions discussed in the *Investigations*, and Moore-type propositions discussed in *On Certainty* differ in many ways, they are all propositions that cannot properly be regarded as empirical, and hence true or false. In Wittgenstein's philosophy, they differ radically from significant propositions, which are capable of being either true or false, and he sees the conflation of these two kinds of propositions as a major source of philosophical illusion. For this reason he thinks it important to distinguish them from significant or empirical propositions.

The present study provides a window through which we can see the general conception and method of Wittgenstein's philosophy and enables us to see an important continuity in the two periods of his philosophy. As Wittgenstein understands it, philosophy is an activity of elucidation aimed at the logical clarification of thoughts. This conception of philosophy, though took its shape in the *Tractatus*, also represents (with some adjustments) his later understanding of the subject. An important part of philosophical activity is to clarify the logical status of nonsignificant propositions.

Wittgenstein's conception of non-significant propositions has never been systematically investigated. While separate studies of Wittgenstein's ideas regarding

tautologies, mathematical propositions, scientific laws, grammatical propositions, and Moore-type propositions have been done, no systematic investigation of continuity in the treatment of these propositions has been undertaken. The connection between Wittgenstein's ideas regarding these propositions has not been ignored, but the continuity of his ideas has not been fully recognized. My research is intended to bring these ideas together and see their continuity.

The first three chapters introduce Wittgenstein's ideas about nonsignificant propositions as they figure in Wittgenstein's three important works: the *Tractatus*, *Philosophical Investigations*, and *On Certainty*. Chapter I describes Wittgenstein's ideas about nonsignificant propositions in the *Tractatus*. I argue that, for Wittgenstein, logical propositions (i.e., tautologies), mathematical propositions even laws of physics and the principles of nature, are to be seen as nonsignificant. According to him, when philosophers see logical and mathematical propositions as saying something either about universals or Platonic entities or about the world, and when they see laws of physics and the principles of nature as representing facts, they are conflating significant propositions with nonsignificant ones. They are not clear about how nonsignificant propositions work in the symbolism. The correct way of seeing logical and mathematical propositions is to see logical propositions as limiting (empty) significant propositions, to see mathematical propositions as equations and substitution rules. Even the laws of physics and the principles of nature are not to be considered as significant—the former are to be viewed as forms (or nets) of description and the latter *a priori* insights about the forms in which the propositions of science can be cast. Wittgenstein thinks many philosophical illusions arise from taking such nonsignificant propositions to be significant and he assumes these

illusions can be dissolved once for all by his clarification of the logical status of these propositions.

Chapter II focuses on grammatical propositions as Wittgenstein discusses them in *Philosophical Investigations*. I first consider Wittgenstein's transition from his discussion of logic to that of grammar. Then I argue that his distinction between grammatical propositions and empirical ones is a continuation of his early distinction between nonsignificant propositions and significant ones. In the *Investigations* Wittgenstein regards many philosophical illusions as arising from the confusion of grammatical and empirical propositions. But in contrast to the *Tractatus*, where Wittgenstein clarifies the logical status of non-significant propositions in order to dismiss philosophical illusions once for all, in the *Investigations* he takes particular grammatical propositions (he now recognizes countless grammatical propositions, not just those non-significant propositions mentioned in the *Tractatus*) to be valuable for exposing philosophical illusions case by case.

In *On Certainty*, Wittgenstein turns to a particular group of propositions that are not subject to truth and falsity—Moore-type propositions. Such propositions seem to have the form of an empirical proposition in that they seem to say something about the world. In this sense, they are like significant propositions construed in the *Tractatus* and empirical propositions understood in the *Investigations*. However, according to Wittgenstein, they are neither true nor false. If we see how they are actually used (in normal situations), we see that they are like nonsignificant propositions or grammatical propositions. They do not say anything empirical. Moore's mistake (when he tries to defend realism by uttering Moore-type propositions) consists in taking these propositions

to be empirical knowledge claims, thus conflating them with empirical propositions. This is discussed in Chapter III.

Since *On Certainty* is rarely compared with Wittgenstein's first two books, I shall devote another two chapters to it, focusing on the issue of Moore-type propositions. In Chapter IV, I deal with the question of whether Wittgenstein's treatment of Moore-type propositions involves a tension since Wittgenstein criticizes Moore for taking Moore-type propositions to be knowledge claims while still maintaining that he (Wittgenstein) knows these propositions. I argue that the tension is only apparent. In cases where Wittgenstein uses "I know" to make Moore-type propositions, he uses the phrase differently from Moore. While Moore uses "I know" (in uttering Moore-type propositions) to make knowledge claims outside particular (non-philosophical) contexts, Wittgenstein imagines particular cases in which the use of "I know" in such propositions functions as an exclamation, or introduces a grammatical explanation, etc. The fact that Wittgenstein does not tell us the contexts in which his utterances (e.g., "I know my name is L. W.") are or may be used is no reason to think he believes no particular context is needed for these utterances to be meaningful. For him, to understand such utterances is neither to see them as immediately true nor to assert or say them (as Moore does) out of particular contexts. Whether Moore-type propositions are actually formulated or not, they are to be understood in terms of our actions. If we understand such utterances in such terms, we shall not question them (as the skeptic would do), nor shall we defend them (as Moore tries to do). Moore's utterances are just as idle as the skeptic's doubt is.

Another issue in connection with the status of Moore-type propositions is whether Wittgenstein thinks Moore-type propositions provide grounds (reasons) for our

knowledge, and whether they are foundations that support our knowledge as premises support an argument. The issue here is whether Wittgenstein is a kind of foundationalist. Some scholars interpret Wittgenstein as defending foundationalism in one way or another. Avrum Stroll, for example, takes Wittgenstein to be defending foundationalism in which the foundations of the language-game (Moore-type propositions) stand outside of and yet support the language-game. He takes Wittgenstein to be insisting that Moore-type propositions are more fundamental or basic than other propositions and that other propositions depend on Moore-type propositions while Moore-type propositions do not depend on anything.

In Chapter V, I question this and other interpretations of Wittgenstein as a foundationalist. By exploring Wittgenstein's own ideas on foundations and grounds in *On Certainty*, I try to show that Wittgenstein does not subscribe to foundationalism in any interesting sense. Wittgenstein denies that there are grounds [*Grund*] for our language-games. He does not hold that our actions are grounds for our language-games and knowledge. Moreover, the foundations of language-games, i.e. our basic beliefs (Moore-type propositions) do not provide reasons and justification for language-games. They do not stand outside and make possible our language-games. When Wittgenstein speaks of grounds and foundations, he is only reminding us of how we play language-games and noting that we treat certain beliefs and propositions as standing fast. Wittgenstein does not put forward a theory of Moore-type propositions.

In order to understand Wittgenstein above ideas about nonsignificant propositions better, I make a comparative study of Wittgenstein and Quine in Chapter VI, focusing on the analytic/synthetic distinction. While Wittgenstein's distinction between propositions

that are not to be characterized as true or false and propositions that are either true or false seems to be close to the analytic/synthetic distinction, his views are not open to Quine's criticism of the analytic/synthetic distinction. On the surface, Wittgenstein (in the *Investigations* and in *On Certainty*) seems to agree with Quine that there is no sharp (theoretical) distinction between two kinds of proposition. What he discusses under the rubric of grammatical propositions and Moore-type propositions as opposed to empirical propositions seems comparable to what Quine discusses under the rubric of analytic sentences as opposed to synthetic sentences. But they are actually radically different.

Wittgenstein is concerned with philosophical confusions caused by failing to understand the logic or grammar of our language, notably the distinction between empirical propositions and non-empirical propositions. He believes that pointing out the distinction can help to dissolve philosophical confusions. Quine, by contrast, is concerned with the question of how we proceed from stimulus to science. Unlike Wittgenstein, who finds it urgent to clarify language, Quine aims to build a scientific-*cum*-philosophical system. In the system, all sentences are either true or false, no matter whether they are logical laws or mathematical sentences. If we understand Quine and Wittgenstein in their respective philosophical projects, we shall see that the question whether Wittgenstein's distinction is subject to Quine's criticism does not make any interesting sense.

Finally, in Chapter VII, I argue that Wittgenstein's ideas of the distinction I have been discussing constitute an important continuity in his philosophy. While there are huge differences between his early writing the *Tractatus* and his later writings, especially *Philosophical Investigations* and *On Certainty*, they are not diametrically opposed. I reiterate that for Wittgenstein failure to understand the distinction he described is a main

source of philosophical illusion, and stress that he thinks that making clear the distinction (which is an activity of elucidation and clarification) serves as a useful antidote to such illusion.

Chapter I

Non-significant Propositions in the *Tractatus*

The task of the *Tractatus* is “to draw a limit to thought, or rather—not to thought, but to the expression of thoughts” (TLP Preface, p. 3). Wittgenstein aims “to make [thoughts] clear and to give them sharp boundaries” (TLP 4.112). Since expressions of thoughts are significant propositions (TLP 3.1),¹ the *Tractatus* provides an account of the general form of propositions. Wittgenstein proceeds in the following way. He first explains the nature of significant propositions (TLP 3.1-6.031), then distinguishes them from propositions that do not express thoughts, notably propositions of logic (TLP 6.1-6.13), mathematical “pseudo-propositions” (TLP 6.2-6.241), laws of physics and principles of nature (TLP 6.3-6.375). These latter propositions, in contrast with significant propositions, are non-significant or *a priori* because they do not represent facts. But they are not nonsensical. They still play a role in the symbolism. The discussion from 6.1 to 6.375 aims at clarifying the role each kind of non-significant proposition plays. In this chapter, I explain how, according to Wittgenstein, non-significant propositions are different from, yet connected with, significant propositions. I argue first that, for Wittgenstein, to draw the limit of significant propositions (i.e., the limit of the expression of thoughts), it is necessary to distinguish them not only from logical propositions, but also from mathematical propositions, laws of physics and the principles of nature. Secondly, I argue that this distinction helps Wittgenstein combat the idea that logic and all the *a priori* propositions can be somehow justified.

In subsequent chapters, I shall show how Wittgenstein’s distinction between significant propositions and non-significant propositions develops into his later

distinctions between empirical propositions and grammatical propositions (in the *Investigations*) and between empirical propositions and Moore-type propositions (in *On Certainty*).

Let me start with Wittgenstein's discussion of the propositions of logic. For Wittgenstein, propositions of logic are tautologies (TLP 6.1; see the NB, p. 126 (4)). They have the following characteristics. They say nothing (TLP 6.11, 6.121), i.e., they are contentless (TLP 6.111) and have no "subject-matter" (TLP 6.112). They are not empirical generalizations (TLP 6.1231, 5.552). They presuppose elementary propositions; "The propositions of logic," Wittgenstein says, "presuppose that names have meaning and elementary propositions sense; and that is their connection with the world"² (TLP 6.124). But the truth-value of a proposition of logic is independent of the truth-value of its elementary propositions. In a simple tautology " $p \vee \sim p$ ", both p and $\sim p$ (assuming they are atomic propositions) are significant propositions, i.e., each says something about the world. But they combine in this schema to cancel out what they separately say. This is why "Logic is prior to every experience" (TLP 5.552) and can be said to be independent of the facts.

A tautology seems to say something about the world but actually it does not; it is not a significant proposition. In contrast to the truth of significant propositions, the truth of logical propositions can be recognized from the symbols alone:

It is the peculiar mark of logical propositions that one can recognize that they are true from the symbol alone, and this fact contains in itself the whole of philosophy of logic. And so too it is a very important fact that the truth or falsity of non-logical propositions *cannot* be recognized from the propositions alone (TLP 6.113).³

Wittgenstein warns us not to conflate logical propositions and non-logical propositions:

Indeed the logical proposition acquires all the elements of a proposition of natural science and this is the sure sign that it has been construed wrongly (TLP 6.111, cf. 5.551).

That a tautology is a non-significant proposition does not mean that it is nonsensical and plays no role in the symbolism, however. In the *Notebooks*, Wittgenstein calls tautologies “pseudo-propositions” but still asserts that they play a role in our symbolism.

Every connexion of signs which appears to say something about its own sense is a pseudo-proposition (like all propositions of logic). (NB p. 12e (9))

But since I can after all write down $p \vee \sim p$ and $p \bullet \sim p$, particularly in connexion with other sentences, it must be clearly set forth what role these pseudo-propositions have, especially in such connexions. For they are not, of course, to be treated as a completely meaningless appendix—like e.g. a meaningless name. Rather they do belong in the symbolism—like “0” in arithmetic (NB p. 58e (8)).

In the *Tractatus* Wittgenstein no longer calls tautologies “pseudo-propositions”, but speaks of them (and contradictions) as “propositions”⁴ in extreme or limiting cases (TLP 4.46, 4.461 and 4.466). And he continues to stress that they are not nonsensical but rather part of the symbolism. “Tautologies...are not, however, nonsensical. They are part of the symbolism, much as ‘0’ is part of the symbolism of arithmetic” (TLP 4.4611).⁵

The role that tautologies play in the symbolism is that they not only “show that they say nothing” (TLP 4.461) but also present (*darstellt*) the scaffolding of the world (TLP 6.124). They show “the logic of the world” (TLP 6.22) and give “the formal—logical—properties of language and the world” (TLP 6.12)⁶. It is not difficult to

understand that tautologies show that they say nothing, since they are combinations of propositions that cancel one another.⁷

Wittgenstein seems to identify the propositions of logic (tautologies) with analytic propositions. At one point, he explicitly says: “the propositions of logic say nothing. (They are the analytic propositions)” (TLP 6.11). But his use of the notion of analyticity is radically different from Kant’s use. For Kant, the truth of an analytic proposition depends only on the meaning of its concepts; it is a proposition in which the meaning of the predicate is already contained in the meaning of the subject. For example, “A physical object is extensional,” and “A triangle has three angles.” In the *Tractatus* some sentences look like analytic propositions in this sense. For example, “A spatial object must be situated in infinite space”, “A speck in the visual field must have some colour”, “Notes must have some pitch”, and “[O]bjects of the sense of touch must have some degree of hardness’ (TLP 2.0131). The truth of these sentences seems to follow from the meaning of the concepts.

Still Wittgenstein does not use “analyticity” in Kant’s sense, and he does not have much use for it (Remark 6.11 is the only place in the *Tractatus* where he employs this notion). Nor does he take the sentences cited in TLP 2.0131 to be analytic. For him, the sentence “A speck in the visual field must have some colour” is not a tautology and hence not analytic. What it shows is the internal relation between “speck” and “colour” (cf. TLP 4.122, 4.124, 4.125). An internal relation is necessary. As Wittgenstein puts it: “A property is internal if it is unthinkable that its object should not possess it” (TLP 4.123). A speck without colour is not a speck. A significant proposition says one thing and shows something else, whereas a sentence concerning an internal relation says nothing. There is

no general fact corresponding to the sentence “A speck in the visual field must have some colour”, whereas there may be a fact corresponding to the proposition “This speck is red”.

Tautologies also say nothing (TLP 4.461). But Wittgenstein treats tautologies and sentences concerning internal relations differently. According to his idea of truth-functionality, while a tautology is truth-functionally always true, truth functions do not apply to sentences concerning internal relations. He calls tautologies “[senseless] propositions,” but for him sentences concerning internal relations are “pseudo-propositions”.⁸ In his later writings, Wittgenstein abandons the truth-functional account of logical propositions and takes sentences concerning internal relations to be “grammatical propositions”.⁹ In the *Tractatus*, however, he sees such sentences as unnecessary and possibly misleading. They are unnecessary, because, in a suitable notation, what a sentence like “A speck in the visual field must have some colour” attempts to say is shown in particular significant propositions such as “This speck is blue” and “That speck is red”. They are misleading, because, unlike tautologies, they seem to be about something. The sentence “A speck in the visual field must have some colour”, for example, seems to be about a particular (or general) speck and colour. The only trouble is that we tend to treat the formal concepts “speck” and “color” as proper concepts and end up postulating a general fact corresponding to the sentence.¹⁰

Like propositions of logic, mathematical propositions do not express thoughts (TLP 6.21). They too are contentless and we do not compare them with facts to determine their correctness. The “possibility of proving the propositions of mathematics means simply that their correctness can be perceived without its being necessary that what they

express should itself be compared with the facts in order to determine its correctness” (TLP 6.2321).¹¹ In this sense, propositions of logic and mathematics are *a priori*. It is true that we may use mathematical propositions to infer significant propositions from other significant propositions, but propositions of pure mathematics are not themselves significant propositions (TLP 6.211). If we have two significant propositions, for example, “There are 10 blue books on the desk” and “There are 10 red books on the desk”, then we can infer (using a mathematical proposition “ $10 + 10 = 20$ ” as a substitution rule) another significant proposition, “There are 20 books on the desk.”

On the other hand, in contrast to propositions of logic, mathematical propositions are equations (substitution-rules) (TLP 6.2, 6.24). Also, while the constituents of a tautology are significant propositions, no significant proposition occurs in a proposition of pure mathematics. Moreover, unlike the logical constant in a tautology, the sign of equality never occurs in a significant proposition.

But while mathematical propositions are pseudo-propositions (TLP 6.2), they are not nonsensical pseudo-propositions. According to Wittgenstein, whenever a formal concept is used as a proper concept-word, a nonsensical pseudo-proposition results. For instance, “There are objects” is a nonsensical pseudo-proposition, since the formal concept “object” is being used as a concept proper (TLP 4.1272). By contrast, in a mathematical proposition, e.g., “ $2 + 2 = 4$ ”, the formal concepts “2” and “4” are not used as concepts proper. (Compare “There is only one 1” and “ $2 + 2$ at 3 o’clock equals 4”, where the formal concepts “1”, “2” and “4” are used as concepts proper and the sentences are nonsensical (TLP 4.1272)). Thus the distinction between a nonsensical pseudo-

proposition and a pseudo-proposition of mathematics seems to be that the former attempts to say something (i.e., to represent some fact), whereas the latter does not.

What is the role of mathematical propositions in the symbolism, if they are not nonsensical? First, as noted above, mathematical propositions serve as substitution-rules. This understanding of mathematical propositions foreshadows Wittgenstein's later idea that mathematical propositions are grammatical propositions. Secondly, they show what tautologies show. As Wittgenstein puts it, the "logic of the world, which is shown in tautologies by the propositions of logic, is shown in equations by mathematics" (TLP 6.22).¹²

After discussing mathematical propositions Wittgenstein discusses the laws of physics (e.g. the axioms of Newtonian mechanics) and the principles of nature. He suggests that the laws of physics (e.g., the axioms of Newtonian mechanics) are used in constructing significant propositions, but are not themselves significant propositions.

Newtonian mechanics, for example, imposes a unified form on the description of the world...Mechanics determines one form of description of the world by saying that all propositions used in the description of the world must be obtained in a given way from a given set of propositions—the axioms of mechanics (TLP 6.341).

Mechanics is an attempt to construct according to a single plan all the *true* propositions that we need for the description of the world (TLP 6.343).

Unlike significant propositions, the axioms of mechanics "never mention *particular* point-masses: [they] will only talk about *any point-masses whatsoever*" (TLP 6.3432).

Although the axioms are about the point-masses in general, they say nothing about any particular point-masses and are not pictures of the world. Hence they are not significant propositions.

It may be objected that Wittgenstein himself takes the axioms of Newtonian mechanics to be significant propositions, since he says the “laws of physics, with all their logical apparatus, still speak [*sprechen*], however indirectly, about the objects of the world”¹³ (TLP 6.3431). This seems to imply that the laws of physics after all do represent the facts of the world. But Wittgenstein does not use the word “*sprechen*” (“speak”) in the same sense as “*sagen*” (“say” or “represent”)¹⁴. He does not claim that the laws of physics represent the objects of the world. For him, propositions represent only facts or states of affairs (see TLP 2, 2.01, 2.141 and 4.01); they do not represent objects. “Objects can only be *named*. Signs are their representatives. I can only speak [*sprechen*] *about* them: I cannot *put them into words* [*aussprechen*]” (TLP 3.221).

The laws of physics are different from, as well as similar to, the propositions of logic. They are different because they are not tautologies. The axioms of Newtonian mechanics “speak about the objects of the world” (TLP 6.3431). They tell us not only “the precise way in which it is possible to describe it [the world] by these means”, but also that it is simpler to describe the world “with one system of mechanics than with another” (TLP 6.3431). The propositions of logic, by contrast, only “presuppose that names have meaning and elementary propositions sense” (TLP 6.124); they do not speak of the objects of the world nor do they give particular nets for description as the laws of physics do.¹⁵

Moreover, whereas there are no propositions or thoughts ‘beyond’ the propositions of logic, there are axioms of other physical theories (e.g., Einstein’s Relativity Theory and Quantum Mechanics) ‘beyond’ the axioms of Newtonian mechanics. The fact that there are different physical theories shows that we have

alternative forms for describing the world, and that Newtonian mechanics, as a “unified form on the description of the world” is optional (TLP 6.341).¹⁶ It is important, however, to notice that the sense in which a form (of the description of the world) is optional is different from the sense in which a significant proposition describes a situation that may be otherwise. Whereas a significant proposition may be true or false by virtue of its representing or not representing a fact, a form does not represent any fact. The form is optional in the sense that it may or may not be used (and the only consideration is simplicity or something equally pragmatic). It tells us nothing about the world (TLP 6.342) and is thus neither true nor false. We do not detect the correctness of forms by calculating their logical properties (as we do with propositions of logic) or by calculation (as we sometimes do with propositions of mathematics).

For Wittgenstein, logic is internal to language or symbolism. By this I mean that for him as soon as language is used, it is used logically. The axioms of mechanics, by contrast, are not internal to language, which means that we may use laws of physics other than the axioms of mechanics in describing the world. But this is not to say that in the *Tratatus* there are different degrees of necessity. Whatever laws of physics we use, they are “nets” we adopt in describing facts. Unlike significant propositions, they are still *a priori* rather than *a posteriori*.

On the other hand, the axioms of mechanics have a status similar to that of logical propositions: neither of them represents facts. The “possibility of describing the world by means of Newtonian mechanics tells us nothing about the world” (TLP 6.342).

Commenting on 6.342, Black remarks:

logic guarantees the possibility of a description according to the demands of a particular theoretical system, while mechanics supplies the details of

the mode of description. (Logic tells us that a geometrical net *could* fit the phenomena to any desired degree of accuracy: mechanics then chooses the shape of the elements of the net.) (Black, *ibid.* p. 353)

I think Black is emphasizing that logic deals with all logical possibilities and mechanics deals only with some (i.e. physical) possibilities. This may be part of what Wittgenstein had in mind at 6.342, but it is surely not all he was thinking about. When he compares logic with the axioms of mechanics, Wittgenstein is also stressing their similarities: neither of them represents any fact of the world; they are both *a priori*.¹⁷

Wittgenstein next discusses the logical status of so-called principles of nature, notably the principle of sufficient reason, the principle of least action, and the principle of continuity in nature. The traditional treatment of these principles is that, although they are different from laws about particular facts, they say something about the structure or essence of the world.¹⁸ They provide “the explanations of natural phenomena” (TLP 6.371). Wittgenstein’s own treatment of these principles is radically different. According to him, there is “no *a priori* order of things” (TLP 5.634), and there is “no compulsion making one thing happen because another has happened” (TLP 6.37). He even takes the belief in the “causal nexus” to be “superstition” (TLP 5.1361). The law of causality, according to him, does not represent *a priori* order in the world. Rather it, together with the laws of continuity in nature and of least effort in nature, etc., is an *a priori* insight we have about “the forms in which the propositions of science can be cast” (TLP 6.34).

In physics we may have different systems for describing the world, each of which is like a net we impose on the description of the world (TLP 6.341-6.342). The principle of sufficient reason, the law of conservation and the law of causality, by contrast, are about the net and not about what the net describes (TLP 6.35). They are possible forms of

laws. Rather than express the structure of nature, they stand a step further from nature.

Taking the law of causality as an example, Fogelin nicely explains this point:

In sum, the law of causality does not give us *a priori* knowledge that the world must be disposed of in a certain way, but instead, we demand that laws take certain forms; our *a priori* insight is that such forms are possible (6.33). For this set of cases, then, we have a diagnosis of the confused thought that leads to the belief in necessary structures in nature. For whatever reason, we accept the demand (for example) that laws of nature employ continuous, but never discontinuous, functions. We then project this demand concerning the form that laws must take upon nature itself. This projection illicitly converts our *a priori* knowledge concerning the *possible* form of a law into an *a priori belief* concerning the actual disposition of objects that fall under a law. Once these confusions are unraveled, we see that “what is certain *a priori* proves to be something purely logical [i.e., conceptual]” (6.3211), for the question of what propositions are possible does fall into the domain we have sketched for logic (Fogelin, *ibid.* p. 89).

This is to say that the law of causality, the law of conservation and so on, are not laws *in* nature, but *our a priori* insights of possible forms of the propositions of science (TLP 6.33, 6.34).

Wittgenstein’s treatment of the law of induction is different from that of other principles of nature. While he takes the other principles of nature to be *a priori* insights about the forms in which the propositions of science can be cast, he regards the law of induction as a significant proposition.

The so-called law of induction cannot possibly be a law of logic, since it is obviously a proposition with sense.—Nor, therefore, can it be an *a priori* law (TLP 6.31).

There seems to be an inconsistency here. On the one hand, Wittgenstein takes the law of induction to be a significant proposition (TLP 6.31). On the other hand, he takes it to be a rule of description: “the procedure of induction consists in accepting as true the *simplest* law that can be reconciled with our experiences” (TLP 6.363). Black believes that 6.31 is

“in direct conflict with 6.363, where induction is said to consist in the choice of the simplest law harmonizing with experience.” He adds that in 6.363 “the ‘law of induction’ would resemble the ‘law of causality’ (6.32) in being the ‘form of a law’ and so *a priori* after all” (Black, *ibid.* p. 345).

Contrary to Black, I do not think 6.32 and 6.363 are inconsistent. The idea about induction stated in 6.31 is not Wittgenstein’s. There he was only trying to show what the so-called law of induction amounts to. His real position about induction is expressed in 6.363 and 6.3631--induction is a procedure.¹⁹

Consider 6.31 first. It is easy to see that, on Wittgenstein’s account, the so-called law of induction (if taken to be a significant proposition) is not a law of logic. Whereas a proposition of logic (i.e., a tautology) says nothing about the world, the so-called law of induction must say something about it. It is also easy to see that the law of induction is not an *a priori* law; if it is a significant proposition it cannot be *a priori*. What is less easy to see is why Wittgenstein says that the law of induction is a significant proposition.²⁰ We tend to suppose that Wittgenstein is identifying the law of induction with the claim that regularities that have held in the past will continue to hold in the future (Nature is uniform).²¹ But for Wittgenstein this claim cannot be a significant proposition. Unlike “The sun will rise tomorrow”, it is like a formula; it does not represent a fact. I suppose here Wittgenstein is thinking of hypotheses like “The sun will rise tomorrow”²² (TLP 6.36311), which may turn out to be true or false, and which states a fact.²³ The so-called law of induction is not something *a priori* (which is not about the facts of the world) nor is it a logical proposition (which is always true). If there were a law of induction (notice

how Wittgenstein speaks of it: “the *so-called* law of induction”), it would take the form of a particular hypothesis.

This does not mean that Wittgenstein himself wants to call a hypothesis (e.g. “The sun will rise tomorrow”) “the law of induction”. For him, induction is essentially a procedure (TLP 6.363, 6.3631). The law of induction as a procedure is neither true nor false. As a way of acting, “the procedure of induction consists in accepting as true *the simplest* law that can be reconciled with our experiences” (TLP 6.36)²⁴.

So far we have seen that the laws of physics and the principles of nature are neither propositions of logic, mathematical propositions, nor significant propositions: but they are related to all three. They are similar to propositions of logic and mathematical propositions, because they are *a priori* and hence non-significant. But they are also related to significant propositions, because they offer *priori* insights about the forms in which the propositions of science can be cast (the principles of nature) or forms of description of the world (the laws of physics) (TLP 6.34, 6.341).

While it is clear Wittgenstein thinks all such non-significant propositions are *a priori*, it is unclear whether he takes all *a priori* sentences to be necessary. His remarks concerning this issue are not transparent:

The propositions of logic are tautologies (TLP 6.1).

Indeed people even surmise that there must be a ‘law of least action’ before they knew exactly how it went. (Here, as always, what is certain *a priori* proves to be purely logical) (TLP 6.3211).

There is no compulsion making one thing happen because another has happened. The only necessity that exists is *logical* necessity (TLP 6.37). Just as the only necessity that exists is *logical* necessity, so too the only impossibility that exists is *logical* impossibility (TLP 6.375).

Taking 6.1, 6.37 and 6.375 together, we may interpret Wittgenstein as holding that necessity applies only to propositions of logic (tautologies). But then we have a problem. 6.3211, 6.37 and 6.375 together suggest that necessity is applicable to everything that is *a priori*. If Wittgenstein uses the word “logical” in 6.3211, 6.37 and 6.375 in the same sense, he seems to be regarding “*a priori*” as a synonym for “necessary”. But Wittgenstein does not seem to use the word “logical” in the same sense in 6.3211 as in 6.37 and 6.375. He italicizes the word “logical” in 6.37 and 6.375 and seems to have regarded the sense of “logical” in these passages differently from its sense in 6.3211.²⁵ Moreover, sentences concerning internal relations, though not tautologies, also seem necessary.²⁶ Thus, Wittgenstein does not seem to hold that whatever is *a priori* is also necessary.

Both Fogelin and McGuinness deny that in the *Tractatus* there exist propositions that are neither logical nor significant.²⁷ It is true that Wittgenstein speaks explicitly only of tautologies as both propositions and necessary, and that he does not take mathematical propositions, laws of physics and the principles of nature to be propositions (not even to be propositions in limiting cases, i.e., tautologies). But neither Fogelin nor McGuinness directly addresses the roles of the *a priori* propositions that are not tautologies, especially the laws of physics and the principles of nature. As I see it, Wittgenstein had two contrasts in mind: one is between what is *a posteriori* and what is *a priori*, the other between the necessary and the contingent. These contrasts do not overlap completely. While he holds what is necessary is also *a priori*, he does not take everything *a priori* to be necessary.²⁸ Rather, he seems to confine necessity to tautologies. This may be because

the necessity of a tautology can be clearly seen if we calculate its logical properties. We cannot do the same with other *a priori* propositions.²⁹

Wittgenstein is not merely contrasting significant propositions (which are contingent) with logical propositions (which are necessary). He is also contrasting what is *a posteriori* (significant propositions) with what is *a priori* (including the propositions of logic, mathematical propositions, the laws of science, and the principles of nature). Only by noting the second contrast can Wittgenstein succeed in drawing a limit to significant propositions and the thoughts they express. This is why the discussion of non-tautological *a priori* propositions is an indispensable part of the *Tractatus*.

We are now in a position to consider the question why Wittgenstein takes pains to distinguish these non-significant propositions from significant propositions. His remarks about non-significant propositions (i.e., propositions of logic, mathematics, etc.) are, in large measure, a response to Russell's treatment of them. Thus a comparison of their ideas will serve to answer the question.

Russell takes logic and mathematics to be *a priori* knowledge. "There are," he says, "propositions known *a priori*...among them are the propositions of logic and pure mathematics" (Russell, *Problems of Philosophy*, pp. 80-81, see also p. 77). And these propositions can be known: "It must be taken as a fact, discovered by reflecting upon our knowledge, that we have the power of sometimes perceiving such relations between universals, and therefore of sometimes knowing general *a priori* propositions such as those of arithmetic and logic" (ibid. p. 99). Moreover, Russell seeks to justify these propositions. He asks, "How is it possible that there should be such knowledge?"

(Russell, *ibid.* p. 81) According to him, these propositions can be justified by referring not to entities, but to qualities and relations that have being.

The fact seems to be that all our *a priori* knowledge is concerned with entities which do not, properly speaking, *exist*, either in the mental or in the physical world. These entities are such as can be named by parts of speech which are not substantives; they are such entities as qualities and relations (*ibid.* pp. 89-90).

It is evident that, for Russell, *a priori* knowledge is not contentless, because it refers to universals. In other words, according to Russell, logic is a fact-stating science: "Logic is concerned with the real world just as truly as zoology, though with its more abstract and general features." (*Introduction to Mathematical Philosophy*, p. 169) The facts are relations among universals, which although without existence, have being. In a sense, they resemble empirical propositions, though they are never false.

Wittgenstein agrees with Russell that logical and mathematical propositions cannot be proved or disproved by experience (TLP 6.1222), but he denies that they refer to universals and that they need justification. For Wittgenstein, logic is autonomous. "Logic must take care of itself" (NB p. 2). His discussion of logic and mathematics, as well as the laws of physics (and so on) aims at clarifying or explicating their roles in our symbolism, rather than trying to justify them. For him, logic and other *a priori* propositions must be shown, not justified, and to postulate a world of universals as Russell did does not explain how *a priori* propositions are *a priori*.³⁰ The laws of physics, like logic and mathematics, for Wittgenstein, do not depict any facts; they do not depict or capture necessity in the world. There is no *a priori* order of things in the world (5.634), and "there is no compulsion making one thing happen because another has happened. The only necessity that exists is *logical necessity*" (6.37). This is

Wittgenstein's crucial move. It points out an important fact that logic is impossible to be justified. In order to be able to justify logic, one would have to stand outside of the world, which is impossible.³¹ As Wittgenstein puts it at 5.61:

**Logic pervades the world: the limits of the world are also its limits.
So we cannot say in logic, 'The world has this in it, and this, but not that.'
For that would appear to presuppose that we were excluding certain possibilities, and this cannot be the case, since it would require that logic should go beyond the limits of the world; for only in that way could it view those limits from the other side as well.**

The attempts to justify logic presuppose that logic is right, i.e. that certain possibilities are right, and it excludes certain other possibilities. But this is impossible, for "logic deals with every possibility"(2.0121). It is illegitimate to say that this logic is right or better than that one. Logic cannot be justified.

Both Wittgenstein and Russell think that we can recognize the correctness of logic and mathematics. But their understanding of what their correctness consists in is very different. For Russell, to know logic and mathematics is to know relations among universals (see Russell, *ibid.* p. 105). For Wittgenstein, by contrast, we need only inspect the signs that express logic and mathematics to see their correctness (6.113, 6.2321). Thus Wittgenstein treats Russell's justification of logic and mathematics in terms of universals as nonsense. For him, once we note that logic is autonomous, we shall not try to justify it.

I have shown that, for Wittgenstein, logical propositions, mathematical propositions, laws of physics and principles of nature are all non-significant propositions. They must not be conflated with significant propositions, since to conflate them involves an illegitimate attempt to justify non-significant propositions by postulating universals or other abstract entities.

In the next chapter I shall show how Wittgenstein's view about non-significant propositions (logical propositions and other *a priori* propositions) develops into a view about grammatical propositions, and the philosophical significance of that development.

Endnotes:

¹ A significant proposition (*Satz*) is “a picture of reality” (TLP 4.01) and represents “the existence and non-existence of [a state of affairs]” (TLP 4.1). “A proposition must restrict reality to two alternatives; yes or no” (TLP 4.023). A proposition is like an arrow—it has sense (TLP 3.144). Wittgenstein may have intended to use “proposition” (*Satz*) to refer to only a sentence that pictures or represents reality. But he also talks about *Satze* in logic and mathematics, laws of nature, etc. A proposition of logic, as we shall see later in the chapter, is not a significant proposition, though Wittgenstein calls it a *Satz*. Propositions of mathematics, he says, are pseudo-propositions (*Scheinsatze*, TLP 6.2), not real [significant] propositions. The German word “*Satz*” can be translated as “proposition” or “principle”. When Wittgenstein talks about all propositions (*Satze*) expressing the laws of nature (TLP 6.34), it is helpful to render “*Satz*” as “principle”. The important thing is the role the word “*Satz*” plays in particular contexts. But following the English translation of the *Tractatus*, I shall speak of logical propositions and mathematical propositions.

² In a formulation “ $n \vee \sim n$ ”, if n is a piece of nonsense, then “ $n \vee \sim n$ ” will not be a tautology, although its structure is similar to a tautology, say, “ $p \vee \sim p$ ”, where p is a significant proposition.

³ This does not mean that we can recognize the *truth* of the propositions of logic necessarily by direct inspection. Rather, we have to calculate the logical properties (using a truth table) of a proposition of logic in order to see its correctness (TLP 6.126).

⁴ The reason for calling tautologies propositions may be twofold. (1) “Given the tautology $p \vee \sim p$ we may notice that its logical constants also find employment in non-logical propositions. It is precisely through this connection with non-logical propositions that tautologies are themselves counted as genuine—though queer—propositions.” (Robert Fogelin, *Wittgenstein*, p. 85; see also Peter Carruthers, *Tractarian Semantics*, p. 61) (2) “From the standpoint of the theory of truth-functionality, the particular specifications of truth values for tautologies and contradictions are on a par with any other specification.” For example, the truth table of a complex empirical proposition $p \& q$ must be four lines (e.g., FTFF) and the truth-table of a tautology $p \vee \sim p$ also has four lines (TTTT) (Fogelin, *ibid.* p. 46).

⁵ When Wittgenstein states that we can do without logical propositions (tautologies) (TLP 6.122), he means that if we have a specification of the symbolism with clear formation rules, we can dispense with tautologies. He is not denying tautologies, when formulated, are part of the symbolism.

⁶ According to Donald Peterson, at 6.12, 6.124 and 6.22, Wittgenstein intends to establish a connection between two conceptions of logic adopted in the *Tractatus*. One is the logic of the logical constants, which is the traditional subject of formal logic, and which Wittgenstein takes to be ultimately truth-functional. The other is what might be called the “pictorial/factual” logic of those “logico-pictorial forms” common to sentences and the world they represent. According to Peterson, Wittgenstein wants to connect these two conceptions of logic by holding the idea that “tautologies are inherently true in virtue of the internal feature of tautological form, and that they thus presuppose that their component sentences have sense, and so show something about the objects and forms to be found in world.” (*Wittgenstein's Early Philosophy: Three Sides of the Mirror*, Harvester Wheatsheaf, 1990, p. 101) Wittgenstein did seem to have these two conceptions of logic, but it is hard to see whether he succeeded in connecting them.

⁷ It is not, however, so easy to understand Wittgenstein’s idea that tautologies show the scaffolding of the world. Fogelin takes Wittgenstein’s idea that tautologies show this to be a form of referentialism. As he says: “Propositions of logic and mathematics are still seen in the guise of propositions, but as failed propositions. Furthermore, it is through revealing themselves as failed propositions that they are able to do something no proper propositions is able to do: reveal to us the necessary structures of thought and reality.” Fogelin concludes that Wittgenstein replaces “a naïve referentialism” by “a sneaky, backdoor referentialism” (Fogelin, “Wittgenstein’s critique of philosophy”, *The Cambridge Companion to Wittgenstein*, ed. Hans Sluga and David G. Stern, p. 46). But we have to notice that for Wittgenstein, “showing” is not “saying” or “representing”; tautologies and mathematics do not *refer to* the structure of the world.

⁸ Similarly, unlike the tautology “ $p \vee \sim p$ ”, “ $(p) (p \vee \sim p)$ ” [“Every proposition is either true or false”] is not a proposition of logic. In “ $(p) (p \vee \sim p)$ ”, p and $\sim p$ are not significant propositions, hence “ $p \vee \sim p$ ” is not a combination of significant propositions, despite that it has an expression similar to that of a tautology.

⁹ Moore recorded that Wittgenstein explained “internal relations” as “a relation which holds if the terms are what they are, and which cannot therefore be imagined not to hold” (Moore, *Philosophical Papers*, p. 294). According to Moore, Wittgenstein thought the expression “internal relation” is misleading, and he later spoke of “an internal *or grammatical* relation” (ibid. p. 295).

¹⁰ For Wittgenstein, not all pseudo-propositions are nonsensical. Mathematical propositions are pseudo-propositions (TLP 6.2), but not nonsensical. There is a difference between a pseudo-proposition containing formal concepts, e.g., “A speck in the visual field must have some color”, and a pseudo-proposition containing formal concepts but used as proper concepts, e.g., “There are objects”, “1 is a number”, “There is only one zero”, and “ $2 + 2$ at 3 o'clock equals 4” (TLP 4.1272). The latter kind of propositions are more likely to be taken as saying something about the facts of the world. Moreover, while a pseudo-proposition containing formal concepts used as proper concepts is nonsensical, it is not nonsensical in the same sense as an illogical expression (like “at is wise”) or an expression with an illegitimate use of a symbol (like “Socrates is identical”) is nonsensical. “At is wise” is nonsensical because it is an ungrammatical expression. By contrast, “Socrates is identical” is nonsensical because “there is no property called identical”: “we have failed to make an arbitrary determination” (TLP 5.4731); “we have not given *any adjectival* meaning to the word ‘identical’” (TLP 5.4733). Most of the propositions to be found in philosophical works (e.g., “The good is identical with the beautiful” (Cf. TLP 4.003)) are nonsensical, because philosophers either failed to give any clear meaning of the words in the propositions or they used formal concepts as proper concepts.

¹¹ This means that either we simply accept the proposition of mathematics or we derive them by calculation—not by some act of privileged insight (see Black, ibid. p. 342).

¹² But it is hard to see, as Black points out, “how what is shown in equations can be assimilated in this way to what is shown in tautologies” (Black, ibid. p. 341).

¹³ The expression “however indirectly” is not in the original German text (see Black, ibid. p. 361).

¹⁴ Wittgenstein uses the word “*sprechen*” in TLP 3.221, 4.002, 4.221, 4.126, 4.1272, 6.3431, and 7.

¹⁵ Hacker points out, I think correctly, that since “the propositions of logic, unlike those of physics, are not descriptions of the properties and relations of objects in a certain domain, since they are senseless, they cannot constitute a genuine [...] foundation for prescriptive norms of thinking” (P.M.S. Hacker, *Wittgenstein's Place in Twentieth-Century Analytic Philosophy*, p. 34).

¹⁶ Peterson argues that it is “at least an exaggeration to say as Wittgenstein does that ‘the form is optional’ (TLP 6.341) since the form of the mesh determines the simplicity of description provided, and also whether or not a complete description is possible at all” (ibid. p. 135).

¹⁷ McGinn interprets Wittgenstein’s conception of the laws of physics as “synthetic a priori constructions” and “synthetic principles”:

Wittgenstein uses a number of examples and comparisons in an attempt to bring out both the similarities and differences between natural or scientific laws, the laws of mechanics, say, and the laws of logic. The aim is to get us to see scientific laws as synthetic a priori constructions—a form of “a priori insight” (6.34)—whose significance depends upon their application, that is, upon their being used as a means for constructing the propositions of science. The laws of mechanics, seen in this way, do not express necessary truths about the world, but are akin to synthetic principles which guide our construction of description of the world, and regulate the transition between one form of

description and another. It is not the system of laws itself that is important, but the precise way in which it enables us to construct true descriptions of the world (Marie McGinn, "Between Metaphysics and Nonsense: Elucidation in Wittgenstein's *Tractatus*", *The Philosophical Quarterly*, Oct. 1999, pp. 509-510.)

I think it is a bit misleading to say that the laws of mechanics are synthetic a priori. At least, it is not clear in what sense McGinn uses the word "synthetic". Wittgenstein never uses the word in the *Tractatus*.

¹⁸ Russell, for example, takes such principles to be super-empirical propositions--propositions about the general essence or structure of the world, and he speaks of them as being true or false. "The general principle of science," Russell remarks, "such as the belief in the reign of law, and the belief that every event must have a cause, are as completely dependent upon the inductive principle as are the beliefs of daily life. All such general principles are believed *because mankind have found innumerable instances of their truth and no instances of their falsehood* [my emphasis]" (Russell, *Problems*, p. 63). Russell also takes logical laws to be knowledge claims. "Such principles [i.e., the law of identity, the law of contradiction, and the law of excluded middle, etc.], however, are not trivial to the philosopher, for they show that we may have indubitable knowledge which is in no way derived from objects of sense." (ibid. p. 66).

¹⁹ Brockhaus regards the inconsistency as only apparent. His explanation of the inconsistency is somewhat similar to mine. "But I think that the contradiction is only apparent. In 6.31 he is clearly referring to some inductive principle which is seen as having metaphysical roots. In the later passage [6.363] he is explaining the *actual use* of induction in science. The two are clearly not the same." (Richard R. Brockhaus, *Pulling Up the Ladder: The Metaphysical Roots of Wittgenstein's Tractatus Logico-Philosophicus*, (La Salle, Illinois: Open Court, 1991) p. 243).

²⁰ To call the so-called law of induction a significant proposition runs counter to Russell's understanding of the law. Russell thinks "our inductive principle is at any rate not capable of being *disproved* by an appeal to experience...The inductive principle, however, is equally incapable of being *proved* by an appeal to experience" (Russell, *Problems of Philosophy*, p. 62). He also thinks that the law of induction is a logical principle: a priori knowledge claim (ibid. pp. 67-68).

²¹ Hans-Johann Glock interprets Wittgenstein's position on induction this way: "the law of induction...expresses an empirical proposition, namely that our forms of description will continue to fit future facts in the way they have done in the past" (*A Wittgenstein Dictionary*, Blackwell, 1996, p. 342). This interpretation attempts to explain why Wittgenstein says the so-called law of induction is obviously a proposition with sense. I think it is problematic for two reasons. First, it is far from clear that at 6.31 Wittgenstein is talking about "forms of description". Secondly, even if we grant that Wittgenstein is talking about "forms of description", it is still wrong to say that, as Glock does, the laws of induction means "our forms of description will continue to fit future facts in the way they have done in the past." For Wittgenstein, our forms of descriptions may be more or less pragmatic for the description of facts, but they do not "fit" facts, as if they are made true or false by facts.

²² H. O. Mounce seems to interpret Wittgenstein's use of "the so-called law of induction" to mean that "Nature is uniform" and that a hypothesis like "The sun will rise tomorrow":

By 'the so-called law of induction' Wittgenstein means the view that what will occur in the future will confirm to what has been experienced in the past. This, he says, is not a law of logic, for it has a sense. By this he means that it pictures a possible state of affairs and therefore, unlike the laws of logic, allows of possible states of affairs that will falsify it. This is why he says it is a hypothesis that the sun will rise tomorrow (*Wittgenstein's Tractatus: An Introduction*, The University of Chicago Press, 1981, pp. 73-74).

I think this interpretation is wrong. "Nature is uniform" as it stands does not picture any possible state of affairs, whereas "The sun will rise tomorrow" does.

²³ Russell takes "The sun will rise tomorrow" to be a belief about which we feel not "the slightest doubt":

We are all convinced that the sun will rise to-morrow. Why? Is this belief a mere blind outcome of past experience, or can it be justified as a reasonable belief? It is not easy to find a test by which to judge whether a belief of this kind is reasonable or not, but we can at least ascertain what sort of general beliefs would suffice, if true, to justify the judgment that the sun will rise to-morrow, and the many other similar judgments upon which our actions are based (Russell, *ibid.* p. 55).

Clearly, Russell wants to justify our belief that the sun will rise tomorrow by some general belief. Wittgenstein's position on the belief is different. In the *Tractatus*, he thinks that there is only a psychological justification for it (6.3631), while in *Philosophical Investigations* and *On Certainty*, such beliefs are not treated as needing any kind of justification; we simply hold them.

²⁴ I believe the following remark of Ilham Dilman captures Wittgenstein's real position on induction:

The principle of the uniformity of nature, then, is not a very general hypothesis; to think so is to misunderstand its logic. When a scientist meets a specific non-uniformity he does not conclude that here is a respect in which nature is not uniform. He looks for an explanation of what he takes to be an anomaly—the kind of explanation he has used or will use in other situations. In other words he never accepts a specific non-uniformity as final and irreducible. He tries to represent it as part of wider uniformity—thus: Floor boards do not generally give way under our feet (uniformity). When they do (non-uniformity) this may be because e.g. they are riddled with wood worm or dry rot. Under such conditions floor boards do give way under our weight (uniformity). This is a feature of scientific *procedure*. Within the grammar of scientific investigation no non-uniformities are final. The scientist's faith in the uniformity of nature is, therefore, part of the *attitude he must adopt* if he is to go on with scientific research and investigation (my emphasis) (Ilham Dilman, *Induction and Deduction: A study in Wittgenstein*, p. 6).

²⁵ Commenting on this remark, Black observes "here, 'logical' cannot mean quite the same as it has done earlier in the book. [At 6.124], logical propositions were said to be generated inexorably by the rules of logical syntax. In the present context, the relevant syntax must be that which governs the special 'language' of science, and W. is here emphasizing the *variability* of scientific systems of representation. We might say: what is 'a priori certain' is the *conceivability*, the possibility, of laws of the causal sort." (Black, *ibid.* p. 346)

²⁶ Fogelin isolates this problem when he says that for Wittgenstein not "everything necessary can be mirrored in and thus shown by propositions of logic (tautologies). Perhaps certain necessary structures can be shown in other ways, say, by recognizing the meaninglessness of attempts to speak about them. I think that this is Wittgenstein's position, but this is difficult to document." (*Wittgenstein*, p. 238, endnote 1.)

²⁷ McGuinness claims that for Wittgenstein "the various types of propositions found in science can be accounted for without supposing that there are propositions which are *neither* propositions with sense (i.e. pictorial propositions) *nor* propositions without sense (i.e. tautologies or contradictions)." ("Philosophy of Science in the *Tractatus*", *Revue Internationale de Philosophie*, 23, p.157, reprinted in *The Philosophy of Wittgenstein*, John V. Canfield (ed.), Vol. 2 *Logic and Ontology*. Fogelin argues that for Wittgenstein there are no non-tautological necessary propositions (Fogelin, *Wittgenstein*, pp.88-92).

²⁸ Wittgenstein seems to take "necessary" and "certain" to be roughly interchangeable. "A tautology's truth is certain" (TLP 4.464), "The certainty...of a situation is not expressed by a proposition, but by an expression's being a tautology" (TLP 5.525). "The propositions of logic are tautologies." (TLP 6.1) "The only necessity that exists is *logical necessity*." (TLP 6.37, 6.375)

²⁹ Later Wittgenstein will call all the a priori propositions discussed in the *Tractatus* "grammatical propositions."

³⁰ McGinn states Wittgenstein's understanding of logic and mathematics as follows:

It is not, of course that logic somehow *corresponds* with reality, for the propositions of logic do not *say* anything *about* reality—but logic and mathematics serve to reveal what the absolutely necessary or formal properties of reality are... The *Tractatus* account of logic and mathematics does not make use of the myth of a special realm of objects [as Russell does—my addition], but it does nevertheless regard logical and mathematical necessity as something absolutely hard and unalterable. This absolute hardness arises, not because of the peculiar nature of the facts that logical and mathematical necessity reflect, but because logic and mathematics represent the structural limit on the form that facts can take. Logic and mathematics are not *about* anything but they still show us something that is objectively necessary. (Marie McGinn, *Sense and Certainty: A Dissolution of Scepticism*, Basil Blackwell, 1989, pp.125-126)

I believe McGinn captures the difference between Russell's and Wittgenstein's understandings of logic and mathematics.

³¹ Compare Harry Sheffer's remark: "the attempt to formulate the foundations of logic is rendered arduous by a ... 'logocentric' predicament. *In order to give an account of logic, we must presuppose and employ logic*" (Sheffer, "Review of *Principia Mathematica*, Volume I, second edition." *Isis* 8, 1926, p. 228).

Chapter II

Grammatical Propositions in the *Investigations*

In writings after the *Tractatus*¹ Wittgenstein often talks about grammar and grammatical propositions.² His ideas about them are closely connected with his early ideas about propositions of logic³ and other non-significant propositions (i.e., mathematical propositions, laws of physics, etc.). This represents a “grammatical turn” in his philosophy. In this chapter, I examine Wittgenstein’s transition from the ideas about non-significant propositions in the *Tractatus* to the ideas about grammatical propositions in his later works, most prominently in the *Investigations*. I plan to discuss three issues: first, what led Wittgenstein to make this shift; secondly, the continuity and discontinuity in the transition; and finally, based on the discussion of the first two issues, how the change in question shows that, to a large extent, the *Investigations* refines rather than completely rejects the *Tractatus*.

According to Wittgenstein, the essence of language in the *Tractatus* lies in its capacity to represent the facts of the world, and the conception of logic is understood in terms of the common structure of the world and language (see TLP 6.12, 6.124). While significant propositions say something about the facts of the world and are contingent, logical propositions say nothing and are necessarily true. Wittgenstein also claims that propositions of mathematics, the laws of physics and the principles of nature are neither propositions of logic nor significant propositions, but still play roles in the symbolism. There are, however, other propositions that are neither logical propositions (tautologies) nor significant propositions, but still seem to be necessary. For instance, propositions concerning internal relations (e.g., “Notes must have some pitch” and “[O]bjects of the

sense of touch must have some degree of hardness” (TLP 2.0131)) and propositions concerning colour incompatibility (e.g., “a point in the visual field has two different colours at the same time” (6.3751)). What is the logical status of these propositions? Do they play a role in the symbolism?

In the *Tractatus*, Wittgenstein seems to treat propositions concerning internal relations as nonsensical pseudo-propositions that cannot be said, for what they try to say is shown in significant propositions.⁴ After the *Tractatus* he came to realize that the function of language is not just representational and, consequently, such pseudo-propositions do play roles in our language. Wittgenstein would say they are grammatical propositions that express conceptual relations. For example, since he suggests the sentence “Every rod has a length” (PI 251) expresses the conceptual relation between “rod” and “length”, he would also think the sentence “Notes must have some pitch” expresses the conceptual relation between “notes” and “pitch” (TLP 2.0131).

As for the proposition concerning colour incompatibility, in the *Tractatus* Wittgenstein takes it to be a contradiction. The statement “a point in the visual field has two different colours at the same time,” he says, “is a contradiction” (TLP 6.3751). Wittgenstein seems to have thought that the statement could be analyzed, and a contradiction would sooner or later appear explicitly in the analysis. The analysis is possible because, according to Wittgenstein, the two conjuncts in the statement are not elementary propositions and “red” and “blue” are not names of simples. For elementary propositions are logically independent, hence their conjunction cannot be contradictory (TLP 2.061-2.062). But Wittgenstein did not work out the analysis in the *Tractatus* and

later realized he had been mistaken in speaking of “this point is blue and this point is red” as a contradiction.

In “Some Remarks on Logical Forms” (SRLF) he concedes that the analysis he had envisioned cannot be given. The reason is that whereas the standard truth table for a contradiction “p & q” is

p & q
T F T
F F T
F F F
T F T

the truth-table of the statement “this point is blue (p) and this point is red” (q) is

p & q
T F F
F F T
F F F

One line is missing (TFT). Thus, instead of taking the statement “it is blue and it is red” to be a contradiction, Wittgenstein now regards it as containing two propositions that exclude (not contradict) each other. He remarks: “I here deliberately say ‘exclude’ and not ‘contradict’, for there is a difference between these two notions, and atomic propositions, although they cannot contradict, may exclude one another” (SRLF, p. 168). The introduction of the notion of “exclusion” represents a drastic revision of the truth-table symbolism (as the second truth table reveals). In saying that p and q are exclusive of one another, Wittgenstein has to explain why it is so. His explanation is that the Tractarian account of logic is mistaken, for “The grammatical rules for “and”, “not”, “or”, etc. are indeed not exhausted by what [he] said in the *Tractatus*, but there are rules for truth-functions, that also concern the elementary parts of the proposition” (Phil. Bem. 34-5). This in turn led Wittgenstein to hold that the statement “the simultaneous presence

of two colours at the same place in the visual field is impossible”, not because it is a contradiction, but because it is a grammatical rule for the truth-functions of statements about colours.

After the *Tractatus* Wittgenstein treats both kinds of propositions (i.e., propositions concerning internal relations and propositions concerning colour incompatibility) as expressions of grammatical rules. Likewise, he takes the a priori sentences discussed in the *Tractatus* – propositions of mathematics, laws of physics, etc.— to be grammatical. Before moving on to discuss various grammatical propositions in the *Investigations*, however, I want to briefly clarify Wittgenstein’s conception of grammar.

After the *Tractatus* and before the *Investigations*, Wittgenstein takes grammar to be the constitutive rules of language. Grammar, he says, is “the accounting book of language” (PG 44); it contains the rules of language and describes the use of words (PG 23). In the *Blue and Brown Books* Wittgenstein goes on to speak of language as a calculus, as though it were completely rule-governed (BB, p. 42, p. 65). But he also concedes that “in general we don’t use language according to strict rules—it hasn’t been taught us by means of strict rules, either. *We*, in our discussions on the other hand, constantly compare language with a calculus proceeding according to exact rules.” (BB, p. 25) Moreover, in the *Blue and Brown Books* he sometimes understands grammar in terms of use rather than just rules (BB, p. 23, p. 135) and he takes the use of a word (and a sentence) to embrace more than just rules.

This understanding of grammar is further developed in the *Investigations*. In particular, at PI 84 he states “the application of a word is not everywhere bounded by

rules” and at PI 81 he observes that it is not the case that “if anyone utters a sentence and *means* or *understands* it he is operating a calculus according to definite rules.” This does not mean, however, there are no rules in our language, only that our language is not strictly rule-determined.

Wittgenstein’s transition from non-significant propositions in the *Tractatus* to grammatical propositions in the *Investigations* constitutes a major shift in his thought, though there is continuity as well.⁵ In the following discussion, I shall show three prominent aspects of this continuity as well as three major discontinuities. As for continuities, first, like non-significant propositions discussed in the *Tractatus*, grammatical propositions say nothing factual. Secondly, just as in the *Tractatus* logic is self-contained, in the *Investigations* grammar is autonomous. Thirdly, just as he took the conflation of non-significant propositions with significant propositions to be a major source of philosophical illusions, so now he takes the conflation of grammatical propositions and empirical propositions to be a major source of them. On the other hand, as for discontinuities, first, the domain of grammatical propositions is much larger than that of non-significant propositions discussed in the *Tractatus*. Secondly, in contrast with the *Tractatus*’ distinction between non-significant and significant propositions, the distinction between grammatical and empirical propositions is not theoretical. Thirdly, unlike logic in the *Tractatus*, which is hidden, grammar lies in plain view. I shall now proceed to examine the discontinuities and to discuss the entwined continuities at the same time.

A first prominent discontinuity in this transition is that the domain of grammatical propositions is much greater than that of the non-significant propositions. In the

Tractatus, non-significant propositions compose four groups—logical propositions, mathematical propositions, laws of physics and the principles of nature—and they are treated consecutively in a systematic way (TLP 6.1-6.375). In the *Investigations*, by contrast, grammatical propositions comprise a large variety of propositions, and they are discussed case by case as particular examples for the clarification of philosophical problems.⁶ I shall focus on four examples of grammatical proposition in the *Investigations*.

1) *Propositions that teach, remind, and explain the ways we use certain words and sentences.* “Every rod has a length” (PI 251), “An order orders its own execution” (PI 458), and “[B]elieving is not thinking” (PI 574) can be used to teach, remind, and explain the way we use the word “rod”, “order”, “believing” and “thinking”.⁷ Such propositions are used in contrast with empirical propositions. While empirical propositions say something factual and are contingent, these propositions say nothing factual and are not contingent. When discussing examples of grammatical propositions, Wittgenstein always has a philosophical point in mind. For example, he reminds that the proposition “Every rod has a length” has a “quite different role from one used in connexion with the proposition ‘This table has the same length as the one over there’”. And he did this to warn us not to take “Every rod has a length” to be a description of an empirical fact (i.e., a fact corresponding to “Every rod has a length”). For him, while the former proposition, as a grammatical proposition, is necessary and a priori, the latter is not a grammatical proposition, but an empirical one. Again, he mentions that the proposition “[B]elieving is not thinking” is to clarify the point that unlike “thinking”, “believing” is not the process concept some philosophers take it to be.

2) *Propositions that are means of representation.* The Tractarian idea that some a priori propositions serve as “form” and “net” (TLP 6.341) is extended beyond science. It is replaced by the idea of a “method of representation” or “form of representation” (PI 50, 104 and 158), which may be expressed by grammatical propositions. In the footnote on page 46 in the *Investigations*, Wittgenstein calls attention to Faraday’s remark in *The Chemical History of a Candle*: “Water is one individual thing—it never changes.” I think Wittgenstein is taking this remark to be a grammatical proposition, and a means of representation, for it cannot be refuted by water’s changing from the solid state ice to the liquid state. For Wittgenstein, Faraday is adopting a way of talking about water; he is not saying anything empirical about water.⁸ That is, he decided to talk about water as one individual thing (presumably H₂O) whatever physical state it is in.

3) *Frame-propositions or propositional schemata.* In PI 114 and PI 134 Wittgenstein talks about frame-propositions or propositional schemata. For example, he discusses the proposition “This is how things are”, which was mentioned in the *Tractatus* as the general form of propositions (TLP 4.5). This proposition, he now says, is “the frame through which we look at it [the thing’s nature]” (PI 114). “[O]ne can say that that sentence stands for any statement. It is employed as a propositional *schema*, but *only* because it has the construction of an English sentence” (PI 134). Wittgenstein now stresses that although the proposition “This is how things are” still “gets employed as a propositional variable” (we might call it a “frame-proposition” or a “schema-proposition”) it is an English sentence.

The proposition is also very different from an empirical proposition like “Bell Street is 1000m long”, since we do not compare it with reality. “To say that this

proposition agrees (or does not agree) with reality would be obvious nonsense.” (PI 134) The sentence “This is how things are” “*sound[s] like a proposition*”; it seems to give us information about reality, but actually it “merely trac[es] round the frame through which we look at [reality]” (PI 114). When we take a sentence schema to be the general propositional form, we are committed to the mistaken view that the essence of a proposition is to describe how things are.

4) *Mathematical propositions*. In the *Tractatus* Wittgenstein holds that “in real life a mathematical proposition is never what we want. Rather, we make use of mathematical propositions only in inferences from propositions that do not belong to mathematics to others that likewise do not belong to mathematics” (TLP 6.211). He goes on to say that mathematical propositions are equations that express the substitutability of two expressions (TLP 6.24). This shows that the idea of mathematical propositions as rules, though not fully developed, is already in the *Tractatus*. Constrained by his picture theory of language, however, Wittgenstein calls mathematical propositions “pseudo-propositions” (TLP 6.2).

With the abandonment of the picture theory, Wittgenstein no longer regards mathematical propositions as “pseudo-propositions”. He holds that the characteristic use of mathematical propositions is as rules for transforming expressions of empirical propositions (LFM 82, 246; AWL 154; PG 347), or, more generally, as rules for framing descriptions. “Of course, in one sense mathematics is a branch of knowledge,--but still it is also an *activity*. And ‘false moves’ can only exist as the exception. For if what we now call by that name became the rule, the game in which they were false moves would have been abrogated” (PI, p.227). “In mathematics we are convinced of *grammatical*

propositions; so the expression, the result, of our being convinced is that we *accept a rule*" (RFM 162).

These four kinds of grammatical propositions do not cover all the grammatical propositions discussed in the *Investigations*. Propositions expressing criteria (rather than symptoms) (PI 354) along with some psychological expressions (e.g., "I am in pain") are also grammatical propositions. Moreover, some of the propositions that were taken to be nonsensical in the *Tractatus* are no longer so labeled in the *Investigations* but rather taken to be grammatical propositions. For example, whereas in the *Tractatus* Wittgenstein says that the proposition "'1' is a number" is nonsensical (TLP 4.1272), in the later period of his philosophy he would treat the proposition as a grammatical proposition or remark. In the *Tractatus* '1' is a formal concept and a significant proposition cannot incorporate a formal concept. To say the proposition is nonsensical seems to preclude it from the symbolism. But we do say "'1' is a number," for example, to tell or remind a child of the use (grammar) of '1', and that it is a word for a number. In the *Investigations*, the proposition, not being an empirical proposition, still has a use in our language.

Furthermore, in the later period of his philosophy, Wittgenstein does not purport to give an exhaustive list of grammatical propositions, nor does he aim to give an explanation of our language, or propose a theory of language. Rather, when he discusses particular grammatical propositions, he is giving various kinds of descriptions of how we use language, in order to dissolve particular philosophical problems. As he puts it:

We must do away with all *explanation*, and description alone must take its place. And this description gets its light, that is to say its purpose, from the philosophical problems. These are, of course, not empirical propositions; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: in spite of an urge to misunderstand them. (PI 109)

A second discontinuity in Wittgenstein's transition is that while in the *Tractatus* Wittgenstein makes a sharp distinction between significant propositions and non-significant ones, later he does not think a sharp line can be drawn. Wittgenstein in the *Tractatus* holds that logical propositions and mathematical pseudo-propositions are sharply distinguished from significant propositions. Even the laws of science, which look like significant propositions about the facts of the world, are not "propositions of natural science" (TLP 6.35). In the *Investigations*, by contrast, he does not draw a sharp distinction between empirical propositions and grammatical propositions.

For Wittgenstein, a proposition is not intrinsically grammatical or empirical in itself:⁹ whether it is grammatical or empirical depends on the language-game in which it is embedded. A proposition that functions in one language-game as a grammatical proposition may function in another as an empirical proposition. For example, a proposition stating an empirical fact (symptom) in one case may change into a definition (expressing a criterion). As Wittgenstein says regarding scientific definitions, "what today counts as an observed concomitant of a phenomenon will to-morrow be used to define it" (PI 79). Similarly in PI p.227e, he says:

"We all learn the same multiplication table." This might, no doubt, be a remark about the teaching of arithmetic in our schools, -- but also an observation about the concept of the multiplication table.

The sentence "We all learn the same multiplication table", if used as a remark about the actual teaching of arithmetic in schools, is an empirical proposition. It may be true or false and is thus contingent. On the other hand, if the sentence considered as an observation about the concept of the multiplication table, it functions as a grammatical proposition (if we did not all learn the same "multiplication table", multiplication would

not have the meaning it has for us). Just as “there is in general complete agreement in the judgments of colours made by those who have been diagnosed normal” (PI p.227e), there is also a complete agreement when calculating properly by those who have learnt arithmetic.¹⁰

The fact that the same sentence may be empirical or grammatical is often misunderstood. First of all, this flexibility does not destroy the distinction between the two kinds of proposition; there is still a categorical difference between them (cf. OC 97, 308). As Wittgenstein puts it at PI 354:

The fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms. We say, for example, “Experience teaches that there is rain when the barometer falls, but it also teaches that there is rain when we have certain sensations of wet and cold, or such-and-such visual impressions.” In defence of this one says that these sense-impressions can deceive us. But here one fails to reflect that the fact that the false appearance is precisely one of rain is founded on a definition.

The false appearance of rain does not mean we do not rely on some criterion for judging it as false. Rather, the very fact that we say such-and-such is a false appearance is based upon a definition of, or a criterion for, what counts as true and what counts as a false appearance.

Secondly, Wittgenstein does not hold that a sentence can be a grammatical proposition and an empirical proposition at the same time or in a single language-game. If a sentence functions as a grammatical proposition in a specific language-game, it cannot also function as an empirical one, and vice versa. This is clearly shown when Wittgenstein distinguishes “means of representation” from “representations” (PI 50), “criteria” from “symptoms” (PI 79), “frame from what is in the framework” (PI 210), “method of representation” from “result of measurement” (PI 242), “grammatical

movement” from “quasi-physical phenomenon” (PI 401), “the form of expression” from “a statement” (PI 402).

Thirdly, Wittgenstein never claims that all grammatical propositions can change into empirical propositions and vice versa. In normal situations, sentences that express logical ‘truths’, mathematical propositions, etc. do not change into empirical propositions. Indeed, for Wittgenstein, conflating a grammatical proposition with a factual one often leads to philosophical confusions.

Philosophical investigations: conceptual investigations. The essential thing about metaphysics: that the difference between factual and conceptual investigations is not clear to it. A metaphysical question is always in appearance a factual one, although the problem is a conceptual one (Z, 458).

Thus the disputes between Idealists, Solipsists and Realists can be seen as one in which “one part [Idealists, Solipsists] attacks the normal form of expression as they were attacking a statement; the others [Realists] defend it, as if they were stating facts recognizing by every reasonable human being” (PI 402).

A third discontinuity regarding Wittgenstein’s transition from non-significant propositions to grammatical propositions is this. While in the *Tractatus* part of non-significant propositions (i.e., propositions of logic and mathematical propositions) show the hidden structure of the world (TLP 6.124, 6.22), in the *Investigations* grammatical propositions describe the ways we use language, which are not hidden but lie in plain view. Regarding this feature, I take PI 89 to be particularly important. Besides diagnosing the main problems concerning Tractarian logic, it points to Wittgenstein’s new understanding of logic.

In what sense is logic something sublime?

For there seemed to pertain to logic a peculiar depth—a universal significance. Logic lay, it seemed, at the bottom [*Grunde*] of all the sciences.—For logical investigations explore the nature of all things. It seeks to see the bottom [*Grunde*] of things and is not meant to concern itself whether what actually happens is this or that.—It takes its rise, not from an interest in the facts of nature, nor from a need to grasp causal connexions: but from an urge to understand the basis [*Fundament*], or essence, of everything empirical. Not, however, as if to this end we had to hunt out new facts; it is, rather, of the essence of our investigation that we do not seek to learn anything *new* by it. We want to *understand* something that is already in plain view. For *this* is what we seem in some sense not to understand (PI 89).

Part of this passage summarizes three main Tractarian ideas about logic.¹¹ (1) Logic has a “peculiar depth”; it lies at “the bottom of all the sciences” and explores “the nature of all things.”¹² (2) Logic is not about “the facts of nature” and “causal connexions” in the world; it does not concern “whether what actually happens is this or that.” (3) Logic is not about “new facts” (i.e. about facts that are different from contingent facts). On the other hand, the passage also diagnoses the problems in the Tractarian conception of logic. Logic as Wittgenstein understands it in the *Tractatus* arises from an “urge to understand the basis [*Fundament*], or essence, of everything empirical”. Although the urge itself is not wrong, when trying to understand the basis of everything empirical, the author of the *Tractatus* wrongly takes the basis (that is, logic) to be something hidden in the depth and at the bottom of all the sciences. What the author of the *Tractatus* failed to understand is “something that is already in plain view”. This “something” points to Wittgenstein’s new understanding of logic.

The passage shows that in both the *Tractatus* and the *Investigations* logic is not about “the facts of nature” or “causal connexions”. This reflects Wittgenstein’s continuing belief that science and philosophy are distinct and that what is empirical must not be confused with what is a priori. What has changed is that in the *Tractatus*

Wittgenstein took logic to be something hidden, something that has “a peculiar depth” and lies at the bottom of all the sciences, while in the *Investigations* he believes that logic is “something that is already in plain view.”¹³

Here it is important to notice the difference between “bottom” [*Grunde*] and “basis” [*Fundament*]. In the *Tractatus* Wittgenstein treated logic as something lying at the bottom of all the sciences, as if an independent something (other than facts or causal connexions) that supports all the sciences. In the *Investigations*, by contrast, he regards logic as the basis of everything empirical, which means that the way our language is used determines how we talk about facts. The way we use language is shown in our actual use of it, and it is not something hidden in reality. In short, while Wittgenstein still holds that logic is not about facts and causal connexions, he questions the idea that logic is hidden.

This interpretation is supported by remarks around PI 89. At PI 92 Wittgenstein implies that logic in the *Tractatus* is “something *beneath* the surface,” “something that lies within, which we see when we look *into* the thing, and which an analysis digs out.” And at PI 90 he implies that the *Tractatus* treated language “as if there were something hidden in them [our usual forms of expression] that had to be brought to light.” The logic in the *Investigations*, by contrast, is something that already lies open to view and becomes surveyable by rearrangement (PI 92).

Wittgenstein observes in PI 92 that we seem in some sense not to understand something that is in plain view. But in what sense do “we seem not to understand” this something?¹⁴ To answer the first question, let us consider PI 101:

We want to say that there can't be any vagueness in logic. The idea now absorbs us, that the ideal '*must*' be found in reality. Meanwhile we do not as yet see *how* it occurs there, nor do we understand the nature of this

“must”. We think it must be in reality; for we think we already see it there.
(PI 101)

Part of the target in this passage, I think, is the Tractarian conception of logic. Although logic is not about facts or causal connexions, it (together with its necessity) still seems to be *in* reality, and it shows the common structure of the world and language (TLP 6.12, 6.124). But the problem with this conception of logic is that we think logic must be in reality, and we think we already see it there. However “we do not yet see *how* it occurs there”. The author of the *Tractatus* urges us to accept as “true” that propositions of logic show the structure of the world. What Wittgenstein now wants to do is to clarify this logical “must” without falling back on the idea that propositions of logic present the structure of the world. In the *Investigations*, the new way Wittgenstein offers us to understand the necessity of propositions of logic (and the rest of non-significant propositions) is to see their role as expressing grammatical rules.

Why are certain propositions necessary? In the history of philosophy, various explanations have been given. One view, Frege’s, is that they are necessary because propositions of mathematics refer to abstract entities. A second view, promoted by Mill, is that propositions are empirical generalizations. Thirdly, psychologism takes mathematical propositions and the laws of logic as general psychological principles concerning the workings of the human mind. Wittgenstein’s ideas on the status of mathematical propositions as well as other grammatical propositions are radically different from these views. For him, grammatical propositions are necessary in the sense that they play a special role in our language (different from the role of empirical propositions), that they express rules of our language. Their necessity is shown in various language games in our form of life. The necessity of grammar lies within language itself;

grammar is autonomous.¹⁵ The necessity of grammatical propositions is to be seen or shown but not justified. For Wittgenstein, all the three views just mentioned about the necessity of logic fail because they try to justify it.

Moreover, if an empirical proposition is negated, we get another empirical proposition. But if we “negate” a grammatical proposition, we either abandon a rule expressed by a grammatical proposition, or say something ungrammatical or nonsensical.¹⁶ While the truth-functional form of a logical proposition shows its necessity, the necessity of a grammatical proposition lies in its role in our language. “The only correlate in language to an intrinsic necessity is an arbitrary rule. It is the only thing which one can milk out of this intrinsic necessity into a proposition.” (PI 372)

In the *Tractatus*, Wittgenstein maintains that to apply a mechanical truth-function operation to significant propositions can show the necessity of propositions of logic. But he also holds that propositions of logic show the structure of the world. This makes him sound more like Russell than he intended.¹⁷ In the *Investigations*, by contrast, grammatical propositions do not correspond to reality, nor do they show the structure of the world, nor are they grounded in an abstract realm or anything else. Rather, they describe our use of language. Rather than think of grammar as justified, Wittgenstein stresses that it is arbitrary.

One is tempted to justify rules of grammar by sentences like ‘But there really are four primary colours’. And the saying that the rules of grammar are arbitrary is directed against the possibility of this justification, which is construed on the model of justifying a sentence by pointing to what verifies it. (Z 357)

In saying that grammar is arbitrary, Wittgenstein does not mean that grammar is just a matter of free choice.

Is [grammar] arbitrary?—It is not every sentence-like formation that we know how to do something with, not every technique has an application in our life; and when we are tempted in philosophy to count some quite useless thing as a proposition, that is often because we have not considered its application sufficiently (PI 520).

When Wittgenstein speaks of the necessity of grammatical propositions, he is not suggesting that there are degrees of necessity, only that there are different kinds of necessity (certainty).¹⁸ Consider what he says on page 224 in the *Investigations*:

I can be as certain of someone else's sensation as of any fact. But this does not make the propositions "He is much depressed", " $25 \times 25 = 625$ " and "I am sixty years old" into similar instruments. The explanation suggests itself that the certainty is of a different kind. – This seems to point to a psychological difference. But the difference is a logical one.

"But, if you are *certain*, isn't it that you are shutting your eyes in face of doubt?"—They are shut."

Am I less certain that this man is in pain than that twice two is four? –Does this shew that the former to be mathematical certainty? – 'Mathematical certainty' is not a psychological concept. The kind of certainty is the kind of language-game.

In normal situations, we are certain of the propositions " $25 \times 25 = 625$ ", "I am sixty years old", and "He is much depressed", and these can all be called grammatical propositions. But it seems that there are different degrees of certainty in terms of these three propositions. While there is general agreement among us regarding " $25 \times 25 = 625$ " and "I am sixty years old", there may be little agreement regarding "He is much depressed." When I say, "He is much depressed", someone else may say, "He is not much depressed".

But Wittgenstein's point is not that there are degrees of certainty. The certainty with each of the three quoted sentences seems to point to "a psychological difference" (degree of difference), but it is actually of "a different kind" (cf. OC 447, 455, 567). We

cannot prove that “He is much depressed” from a facial expression, a tone of voice, or something else, and it is always possible to interpret the evidence—for example, a facial expression—differently. But this lack of general agreement does not mean that when I say, “He is much depressed”, I can doubt whether he is depressed. Otherwise, I would not be playing the language-game. I would say, “I doubt if he is much depressed”, instead of “He is much depressed”. Certainty is thus language-game relative. As Wittgenstein puts it at the end of the quote, “The kind of certainty is the kind of language-game”. Though, in normal situations, we are certain of all the three propositions (we shut our eyes in face of doubt), this does not mean that they are “similar instruments”. We use the three propositions for different purposes; “He is much depressed” and “I am sixty years old” are obviously not mathematically certain.

The continuity and discontinuity in Wittgenstein’s transition from non-significant propositions to grammatical propositions can be summarized as follows. The discontinuity is shown in the following aspects. (1) The domain of grammatical propositions is much greater than that of non-significant propositions. (2) Whereas there is a sharp distinction between significant and non-significant propositions, there is no general and sharp distinction between grammatical propositions and empirical propositions. (3) While propositions of logic understood in the *Tractatus* show the structure of the world and language, grammatical propositions construed in the *Investigations* lie in plain view in their roles in language games.

As for the continuity in the transition there are also three points to notice. (1) Like non-significant propositions, grammatical propositions say nothing empirical. (2) Just as logic in the *Tractatus* is self-contained, grammar is autonomous. It is no part of the

argument in the *Tractatus* that logic can be justified, and it is no part of the argument of the *Investigations* that grammar can be justified. (3) In the *Tractatus* Wittgenstein warns us not to conflate non-significant propositions with significant ones, and in the *Investigations* he warns us not to confuse grammatical propositions with empirical ones.

We are now also in a position to see how Wittgenstein's transition from non-significant propositions to grammatical propositions is connected with the differing yet continuous thrusts of the *Tractatus* and the *Investigations*.

Although Wittgenstein recognized "grave mistakes" in the *Tractatus*, he still thinks that the old ideas in the book should be published together with his new thoughts in the *Investigations*. He thinks his new thoughts can "be seen in the right light only by contrast with and against the background of [his] old way of thinking" (PI, preface, vi.). He never suggested the thoughts in the *Tractatus* are completely wrong. Rather, as he remarked to Elizabeth Anscombe, he believed the *Tractatus* is not *all* wrong: it is not like a bag of junk professing to be a clock, but like a clock that does not tell the right time.¹⁹ For him, the new thoughts are refinements of the old ones and he wanted us to compare them to see how much he has changed his thoughts and how much has remained.

In the *Tractatus*, Wittgenstein characterizes his philosophy this way:

Philosophy aims at the logical clarification of thoughts.

Philosophy is not a body of doctrine but an activity.

A philosophical work consists essentially of elucidations.

Philosophy does not result in 'philosophical propositions', but rather in the clarification of propositions.

Without philosophy thoughts are, as it were, cloudy and indistinct: its task is to make them clear and to give them sharp boundaries. (TLP 4.112)

Much of the idea stated here could be re-interpreted in accordance with the spirit of the *Investigations*. Let me show this in the light of my discussion of Wittgenstein's transition from talking about non-significant propositions to talking of grammatical propositions.

In the *Tractatus*, philosophical puzzles arise because we fail to understand the "logic of our language" (TLP preface, 4.003). In order to dissolve philosophical puzzles, we need to make clarifications and elucidations. Part of the elucidative activity consists in the clarification of the logical status of non-significant propositions; it helps philosophers avoid confusing non-significant propositions with significant ones, which makes thoughts "cloudy and indistinct." As mentioned in Chapter I, Russell, according to Wittgenstein, confuses logical laws (which is one kind of non-significant propositions) with empirical propositions (which are significant propositions), taking them to be super-empirical propositions about universals. By seeing logical propositions as truth-functions of elementary propositions, Wittgenstein can conclude that propositions of logic say nothing, and are thus sharply distinguished from significant propositions.

In the *Investigations*, Wittgenstein maintains that philosophical puzzles arise from "misunderstandings concerning the use of words" (PI 90) and to dissolve the puzzles, we have to pay close attention to how we use language in particular cases. Thus in terms of Wittgenstein's transition from the discussion of non-significant propositions to the discussion of grammatical propositions, much has changed, but his "grammatical investigation" (PI 90) or "description" (PI 109) of the logical status of grammatical propositions is still a therapeutic *activity*. This activity is intended to warn us not to confuse grammatical propositions with empirical ones. The main difference is that now we have to proceed case by case rather than in a systematic way.²⁰ A grammatical

investigation explores the confusion of “means of representation” with “representations” (PI 50), “criteria” with “symptoms” (PI 79), “frame from what is in the framework” (PI 210) and “method of representation” with “result of measurement” (PI 242), “grammatical movement” with “quasi-physical phenomenon” (PI 401), and “the form of expression” with “a statement” (PI 402). In this regard, it is reasonable to say that although Wittgenstein’s tactics towards dissolving philosophical problems have changed from the *Tractatus* to the *Investigations*, the general thrust of his philosophy has not changed. The philosophy of the *Investigations* is a refinement rather than a rejection of the philosophy of the *Tractatus*.

Endnotes:

¹ In the *Tractatus*, Wittgenstein used the word “grammar” only once—when he discussed logical syntax and logical grammar (TLP 3.325), and he identifies logical syntax with logical grammar.

² Wittgenstein talks about ‘grammar’ and ‘grammatical propositions’ in many passages of the *Investigations*, for example, 182, 257, 302, 371, 373, 392, 496, 497, 664, 520, etc.

³ Although the concept of logic is still used (PI 242, 345), it is used in the sense of grammar. For example, at PI 108 Wittgenstein compares logic with the rules of chess: “But we talk about it [logic] as we do about the pieces in chess when we are stating the rules of the games, not describing their physical properties.” Here “rule” is understood as “rule of grammar”.

⁴ Since Wittgenstein says his propositions serve as elucidations (TLP 6.54), such pseudo-propositions may have the function of elucidating (I am indebted to Professor Andrew Lugg for this point). But Wittgenstein also says these propositions are “nonsensical” and should be “thrown away” (TLP 6.54). In an ideal notation, such pseudo-propositions cannot be said.

⁵ I shall here focus on grammatical propositions discussed in the *Investigations*, though Wittgenstein also discusses them in other of his post-*Tractatus* works.

⁶ Consider PI 133: “It is not our aim to refine or complete the system of rules for the use of our words in unheard of ways.”

⁷ Here are some more examples of this kind of propositions in his post-*Tractatus* works:

“The class of lions is not a lion but the class of classes is a class” (RFM, p.182)

“White is lighter than black” (RFM, p30)

“Green and blue cannot be in the same place simultaneously” (BB, p.56)

⁸ It is possible to have a grammar or means of representation that is different from our ordinary usage. “We use the phrase ‘two books have the same colour’, but we could perfectly well say: ‘They can’t have the same colour, because, after all, this book has its own colour, and the other book has its own colour too’. This also would be stating a grammatical rule—a rule, incidentally, not in accordance with our ordinary usage” (BB, p. 55). The important thing is that usage in these cases different from our ordinary usage says nothing empirical, nor does it prove our ordinary usage wrong.

⁹ “Wittgenstein’s conception of a proposition of grammar does not mesh with the standard notion of an analytic truth. He did not argue that every proposition of grammar is a type-sentence which is either (an instance of) a law of logic or reducible to a law by the substitution of definitions for certain expressions. The analytic/synthetic distinction is framed in terms of the forms and constituents of type-sentences, whereas an utterance expressing a grammatical proposition depends not only on its form, but on its roles on occasions of utterances” (G. P. Baker & P. M. S. Hacker, *Wittgenstein: Rules, Grammar and Necessity—An analytical commentary on the Philosophical Investigations*, Basil Blackwell, p. 268.)

¹⁰ Wittgenstein’s observation concerning the fluctuation between a sentence’s functioning as a grammatical proposition and functioning as an empirical proposition anticipates his later remarks on the fluidity between “water” propositions and “sand” propositions (OC 99). I shall discuss this in Chapter III.

¹¹ PI 89-108 came from remarks 86-116 in PPI (1937 or 1938), so-called ‘Proto-Philosophical Investigations’ (TS. 220), a typescript of the first half of the pre-war version of the *Philosophical Investigations* (up to PI 189 of the final version, but with many differences). (See G. P. Baker & P. M. S. Hacker, *An analytical commentary on the Philosophical Investigations*, Volume 1: *Wittgenstein—Understanding and Meaning*, Oxford: Basil Blackwell, 1980, p. 451) According to Baker and Hacker, the earlier version of PI 89-133 in PPI is “explicitly directed against positions wittingly or unwittingly adopted

in TLP,” but the “pruning of PPI has increased its obscurity by removing so much of the original context and targets of many of the critical remarks.” (Ibid.)

¹² Logical propositions such as “Everything is what it is and not another thing” are usually assumed to refer to something that every science presupposes, and when we say that everything is what it is and not another thing, we seem to be saying something about “the nature of all things”—that each individual thing is essentially just what it is (see Andrew Lugg, *Wittgenstein's Investigations 1-133: A guide and interpretation*, (London and New York: Routledge) 2000, p. 153).

¹³ Commenting on PI 89, Hallett says: “Most of the points in the passage the later [Wittgenstein] might accept, but the sense would need to be altered. Each reappears, reinterpreted in subsequent paragraphs... This double reference, both forward and backward to the *Tractatus* confers a peculiar ambiguity on the whole paragraph.” (Garth Hallett, *A Companion to Wittgenstein's "Philosophical Investigations"*, (Ithaca and London: Cornell University Press) p. 170). According to my exegesis of the passage, it is not particularly ambiguous.

¹⁴ Perhaps ‘we’ here refers to Russell, Frege and the author of the *Tractatus*. All three failed to understand logic, but in different ways. Russell treated logical propositions as completely general truths about reality; Frege took logical truths as about abstract entities inhabiting a “third realm” beyond space and time, while the author of the *Tractatus* claimed logical propositions *show* the formal (logical) properties of the world (6.12) and presents the structure of the world (6.124).

¹⁵ Compare TLP 5.473: “Logic takes care of itself” and 5.551: “Our fundamental principle is that whatever a question can be decided by logic at all it must be possible to decide it without more ado.”

¹⁶ Wittgenstein does not explicitly say that grammatical propositions are “a priori”. When he speaks of “the negation of an a priori proposition”, he is not saying that grammatical propositions are a priori propositions. Rather he is reminding us of the connection and differences between grammatical propositions and a priori propositions. In fact, he uses “a priori” in a new sense: “But if it [a certain way of seeing ‘reading’] is a priori, that means that it is a form of accounting which is very convincing to us” (PI 158).

¹⁷ Compare Richard R. Brockhaus: “Wittgenstein’s claim that tautologies mirror the framework [*Gerüst*, Pears and McGuinness translate *Gerüst* as “scaffolding”] of the world is rooted in a deep conviction on his part. On one hand, he is clear that there can be no representatives for the logic of the world and that logical propositions therefore *say* nothing. On the other hand, his realistic tenets make repugnant the conventionalists’ view that logic is concerned *solely* with more or less arbitrary rules for symbol-manipulation. The result is his peculiar position that logic is not merely conventional but that its connection with the world cannot be represented.” (Richard R. Brockhaus, *Pulling Up the Ladder: The Metaphysical Roots of Wittgenstein's Tractatus Logico-Philosophicus*, Open Court, La Salle, Illinois, 1991, p. 203).

¹⁸ Wittgenstein seems to prefer to use “certainty” instead of “necessity” in talking about grammatical propositions. While he uses “necessity” only once in the *Investigations* (PI 372) where “necessity” means “arbitrary rule”, he uses “certainty” in many places. See PI 320, 324-5, 474, 607, pp. 224-6.

¹⁹ G. E. M. Anscombe, *An Introduction to Wittgenstein's Tractatus* (London: Hutchinson, 1971), p. 78.

²⁰ One major difference between the *Tractatus*’ elucidation and the *Investigations*’ description is this. The elucidation in the *Tractatus* involves a different understanding of our language (symbolism). Since language is essentially representational, a sentence employing a formal concept, e.g., “1 is a number” (TLP 4.1272), does not say anything and is thus nonsensical. The description construed in the *Investigations*, by contrast, is largely based upon our ordinary language in which representation (description) is not the only function (cf. PI 116). In ordinary language, the sentence “1 is a number” can have a use, namely teaching children that 1 (together with 2, 3, 4, etc.) is a number.

Chapter III

Moore-type Propositions in *On Certainty*

On Certainty comprises part of the notes Wittgenstein wrote during the last year and a half of his life.¹ Wittgenstein did not live to polish these notes, as he had done with the *Tractatus* and the *Investigations*. Nevertheless, *On Certainty* is a very important work among Wittgenstein's writings, and its importance has been more and more appreciated in Wittgenstein scholarship. Stroll takes *On Certainty* to be "a philosophical masterpiece comparable to the *Tractatus* and the *Philosophical Investigations*."² von Wright thinks that *On Certainty* "can be said to summarize some of the essential novelties of his thinking." "The book," Wright says, "opens new vistas on his philosophic achievement" and "possesses a thematic unity which makes it almost unique in Wittgenstein's whole literary output."³

Since the publication of *On Certainty* in 1969, quite a few books about it have been published and there have been many reviews and papers dealing with it as well.⁴ However, compared with the massive value of writings on the *Tractatus* and the *Investigations*, studies on *On Certainty*, though growing in number, are still rare. As Stroll points out, although some books on Wittgenstein devote some space to *On Certainty*, in general their focus is elsewhere.⁵ In addition many discussions interpret *On Certainty* in the light of the later Wittgenstein's approach in the *Investigations*, thus minimizing its originality. As for articles on *On Certainty*, these mostly focus on the notions of "world-picture," "certainty" and "hinge propositions" as they figure in *On Certainty*, not on the continuity and discontinuity between the book and Wittgenstein's other works.

Stroll's *Moore and Wittgenstein on Certainty* is the most recent book on *On Certainty*, and it goes into the book in considerable detail. Stroll admits that there is a considerable continuity in Wittgenstein's writings from the early to the late period and notes that sometimes where there appears to be continuity there is difference.⁶ But his book does not really focus on the continuity and difference. Rather, it focuses on a comparison between Moore and Wittgenstein. This is an interesting and significant way to read *On Certainty*, since Moore's essays "Defense of Common Sense" and "Proof of an External World" directly or indirectly triggered Wittgenstein's *On Certainty* notes.⁷ But the book can also be read with profit in the context of Wittgenstein's whole philosophy with an eye to its continuities and differences with the *Tractatus* and the *Investigations*. Many passages in *On Certainty*, including those commenting on Moore can be seen as developing Wittgenstein's idea about propositions that look like empirical propositions but function differently from them. Specifically, the discussion of Moore-type propositions can be seen as an extension of the discussion of non-significant propositions (in the *Tractatus*) and grammatical propositions (in the *Investigations*).

A major concern of *On Certainty* is Moore's defense of certain common sense propositions, that is, his claim that he *knows* a number of propositions for sure. Examples of such propositions are "Here is one hand, and here is another", "The earth existed for a long time before my birth", and "I have never been far from the earth's surface". According to Wittgenstein, these propositions have the form of empirical propositions, but do not function as empirical propositions proper. Nor are they straightforward grammatical propositions.⁸ Wittgenstein thinks that these propositions need a special treatment. And a large part of *On Certainty* is dedicated to the discussion of the logical

status of such propositions. Following McGinn,⁹ I shall call these propositions “Moore-type propositions”.¹⁰

In the present chapter I explore Wittgenstein’s ideas on the logical role of Moore-type propositions. I tease out from *On Certainty* the special features of such propositions, and compare them with non-significant propositions in the *Tractatus* (propositions of logic, mathematical propositions, etc.) and with grammatical propositions in the *Investigations*. My aim is to show the continuity between Wittgenstein’s first two books and *On Certainty* and how they differ. In the next chapter, I discuss the philosophical significance of such propositions, focusing on Wittgenstein’s criticism of Moore’s confused understanding of the logical status of these propositions (which he takes as evidence for realism).

The discussion of propositions of the form of empirical propositions has antecedents in Wittgenstein’s earlier work. In the *Investigations* he discussed “Every rod has a length” (PI 251). He even touched on such propositions as “I have two hands” and “The earth has existed in the last five minutes” (PI p. 221), which also appear (though slightly differently expressed) in *On Certainty*. What is new in *On Certainty* in this regard is that the logical role of such propositions is described in detail and at length. It is also new in *On Certainty* that such propositions are discussed in the light of a world-picture, rather than on their own.

At OC 136 Wittgenstein says:

What Moore says he *knows* such and such, he is really enumerating a lot of empirical propositions which we affirm without special testing; propositions, that is, which have a peculiar logical role in the system of our empirical propositions.

Here Wittgenstein calls the propositions Moore enumerated “empirical propositions” but qualifies them as propositions that “we affirm without special testing”. If empirical propositions are subject to testing, and if we affirm Moore-type propositions without special testing, why still call them “empirical propositions”? The reason is that they have the form of empirical propositions, that is to say, they have the same (or similar) surface grammar as empirical propositions proper (OC 401). For instance, the propositions “[At this distance from the sun] there is a planet” and “Here is a hand (my own hand)” have similar forms; they both seem to say something empirical about the world. They are, however, different in function. Despite its form, “Here is a hand (my own hand)” cannot be a hypothesis or an empirical proposition (OC 52). Therefore, such Moore-type propositions might be called “pseudo-empirical propositions”. They have the clothing of empirical propositions but do not do the work of this sort of proposition.¹¹ Although Moore-type propositions figure “in the system of our empirical propositions”.

Wittgenstein stresses that “they have a peculiar logical role.”¹² What does this consist in?

1. *In normal circumstances, Moore-type propositions are not doubted.* Particular empirical propositions can be doubted, but not Moore-type propositions. The latter are, Wittgenstein says, “all of such a kind that it is difficult to imagine *why* anyone should believe the contrary. E.g. the proposition that Moore has spent his whole life in close proximity to the earth” (OC 93). They are empirical propositions about which “no doubt can exist if making judgments is to be possible at all” (OC 308) and form part of the “foundation of all operating with thoughts (with language)” (OC 401). Thus, if they were doubted, we have to give up all judgment (OC 494). Indeed, if someone seriously doubts the proposition that he has spent his whole life in proximity to the earth, or if he seriously

doubts the proposition “All human beings have parents” (OC 240), he would not be considered a normal person (OC 155, 257, 281, 420, 647). “If someone doubted that the earth had existed a hundred years ago,” Wittgenstein says, “I should not understand, for *this* reason: I would not know what such a person would still allow to be counted as evidence and what not” (231). If we were to try to doubt such propositions, our doubt would be idle (OC 117), hollow (OC 312), senseless (OC 56, 310), illusory (OC 19), and “without consequence” (OC 338).

2. *Moore-type propositions describe our world-picture (Weltbild) and belong to our frame of reference.* Unlike empirical propositions proper, they do not describe particular facts of the world (OC 93, 94, 162, 167, 262).¹³ What is this world-picture? Wittgenstein says:

The propositions describing this world-picture might be part of a kind of mythology. And their role is like that of rules of a game; and the game can be learned purely practically, without learning any explicit rules (OC 95).¹⁴

In this passage Wittgenstein is suggesting several things. First, like a myth, our world-picture is not something we choose or invent (OC 167); it is rather a background we inherit (OC 94). Secondly, propositions describing our world picture are not propositions of science and cannot be said to be true or false. As he puts it, “I have a world-picture. Is it true or false? Above all it is the substratum of all my enquiring and asserting. The propositions describing it are not all equally subject to testing” (OC 162). Also, since such propositions are “like that of rules of a game”(OC 95), they must be different from empirical propositions, despite having the form of empirical propositions. Thirdly, a world-picture is usually not expressed in propositions, but exhibited in customs, rituals, and other activities. Just as the rules of a game may be implicit in the learning of the

game, the propositions describing the world-picture may be implicit in how we act in the world. This last point deserves some explanation.

Many Moore-type propositions are not learned but something assimilated.

Imagine that a child is told a story about someone climbing up a mountain many years ago. The child “doesn’t learn *at all* that that mountain has existed for a long time: that is, the question whether it is so doesn’t arise at all. [He] swallows this consequence down, so to speak, together with *what* [he] learns.” (OC 143, cf. 152) Similarly, I do not learn that my hands don’t disappear when I am not paying attention to them; no one ever taught me that (OC 153). Nor need Moore-type propositions be expressed or thought (OC 87). The story-teller and the child, in normal situations, do not think that the mountain has existed for a long time, let alone express it in a proposition. Similarly, the belief that one has great-grandparents and that the people who claimed to be my parents really were my parents need never have been expressed. Nor need the thought that I had great-grandparents ever have crossed my mind (OC 159).

Propositions describing the world picture are not empirical generalizations, nor are they hypotheses (OC 52, 402). Rather, they belong to our frame of reference (OC 83).¹⁵ They have a role similar to that of the laws of physics and the axioms of Newtonian mechanics as Wittgenstein characterizes them in the *Tractatus*. Indeed, the laws of physics can be regarded as “framework propositions.” But there is difference between the role of Moore-type propositions on the one hand and the laws of physics on the other. While the latter belong to science, the former are about our life in general. People who do not know Newtonian mechanics still hold fast propositions like “I have two hands” and “The earth has existed for a long time”. Our frame of reference expressed by Moore-type

propositions is fundamental and common to all normal persons. In normal circumstances reasonable persons share the world-picture when they make empirical judgements about particular facts of the world. This is quite unlike the laws of physics, which can be grasped only by persons with special education and training. Moreover, while Moore-type propositions are usually not expressed, the laws of physics are expressed.

3. *Moore-type propositions do not constitute a unified whole.* Propositions like “This is a hand (namely my own hand)” (OC 52), “I am called L.W.” (OC 657), “The earth has existed long before my birth” (OC 84), and “I am a human being” (OC 4), though all non-empirical, function in different ways. While “I am a human being” is “fossilized” (OC 657) just as a mathematical proposition is fossilized, “I am called L.W.” is not. (OC 657) A mathematical proposition is universal and not context-dependent, but at least some Moore-type propositions are context-dependent and not universal. In exceptional cases, “I am called L.W.” (spoken by Wittgenstein) may be an empirical proposition. In normal circumstances, however, it is incontrovertible.¹⁶

Wittgenstein compares empirical propositions proper and Moore-type propositions with the water in a river (which is fluid) and its bank or bed (OC 97, 99). He observes that “the bank of that river consists partly of hard rock, subject to no alternation or only to an imperceptible one, partly of sand, which now in one place now in another place gets washed away, or deposited” (OC 99). In accordance with this analogy, we might speak of “This is a hand (namely my own hand)”, and “I am called L.W.” as “sand” propositions, due to their possibility of changing from Moore-type propositions into empirical ones. And we might call “I am a human being” and “The earth has existed long time before my birth” “hard rock” propositions, because it is hard to imagine

circumstances (within our world picture) in which they could turn into empirical propositions.¹⁷

W. D. Hudson thinks that change “at the deepest bedrock level of fundamental propositions [i.e., Moore-type propositions] evidently does occur.” As an example he mentions a “philosopher who ceases to think, with Berkeley, that physical objects do not really exist and comes to think, with Moore, that they do.”¹⁸ What Hudson says here is inconsistent with Wittgenstein’s ideas on Moore-type propositions. Wittgenstein definitely would not take propositions “Physical objects do not really exist” and “Physical objects do exist” as Moore-type propositions. Rather he would take them as metaphysical propositions that have the form of empirical propositions but actually say nothing empirical. For him “There are physical objects” is nonsense (OC 35). Berkeley’s proposition—“Physical objects do not really exist”—is not a fundamental proposition at all, for it does not belong to “the foundations of all my beliefs” (OC 246) or “the rock-bottom of my convictions” (OC 248), even less counts as one of the “fundamental principle of human enquiry” (OC 670).

4. The Truth of Moore-type propositions is determined by their function, not their form.

The *truth* of Moore-type propositions cannot be recognized from their form or surface structure. The reason is twofold. First, since Moore-type propositions have the form of empirical propositions, we cannot find anything distinctive in their surface structure to distinguish them from empirical propositions proper. Secondly, some sentences in normal circumstances have the function of describing the world-picture, while in exceptional cases these same sentences function as empirical propositions proper. “[T]he same proposition may get treated as at one time as something to test by experience, at another

as a rule of testing” (OC 98). For instance, “I have two hands”, spoken by normal people in normal circumstances, is a Moore-type proposition, but if spoken by a person whose hands are injured in a car accident, the same sentence may express an empirical proposition proper.

Wittgenstein holds that there is a categorical difference between an empirical proposition and a Moore-type proposition. In asking the question “Is it that rule and empirical proposition merge into one another?” (OC 309), he seems to imply that in terms of sentence-form, since a sentence with the form of empirical propositions can function as a rule and an empirical proposition at different times and in different contexts, “rule and empirical proposition merge into one another.”¹⁹ But, in terms of application, a rule and an empirical proposition are categorically different (OC 308); so they do not merge into one another. In other words, while the distinction between empirical propositions and rules is not sharp in terms of sentence-type, it is sharp in terms of their application.

5. Wittgenstein does not propose a general theory about the changeability of role of some propositions with an empirical form. Wittgenstein’s aim is to describe how we use Moore-type propositions in special cases as empirical propositions though normally as rules. He says: “There are *countless* [not all—my addition] empirical propositions that count as certain for us.” (OC 273) At OC 96 he uses an analogy to illustrate his point:

It might be imagined that some propositions, of the form of empirical propositions, were hardened and functioned as channels for such empirical propositions as were not hardened but fluid; and that this relation altered with time, in that fluid propositions hardened, and hard ones becomes fluid.

Some “fluid” empirical propositions can be turned into “hard channel” propositions.

Later he adds: “not everything that has the form of an empirical proposition *is* one” (OC

308);²⁰ “our ‘empirical propositions’ do not form a homogeneous mass” (OC 213).

Moreover he maintains that “our empirical propositions do not all have the same status, since one can lay down such a proposition and turn it into a norm of description.” (OC 167) (One cannot do that in the *Tractatus*.) “That the earth is round,” for example, while once an empirical discovery, is now accepted without doubt, and the proposition “The earth is round” is accepted as a “hard” proposition (“We are satisfied that the earth is round” (OC 299)). Conversely, “hard channel” propositions can change into “fluid” empirical propositions. But these changes occur only in a particular language-game. This might happen, for instance, when a driver (whose hands are injured in a car accident) reports the accident and utters the sentence “I have two hands”. The sentence would then change from a rule-expression into an empirical proposition. Another example is “It is impossible to climb up to the moon” (OC 106), which at the time Wittgenstein wrote the remark in *On Certainty* was believed to be a ‘hard channel’ proposition. As time went on, however, with the fact that astronauts do “climb up” to the moon, people adopted a new expression--“It is possible to climb up to the moon” –and the old proposition “It is impossible to climb up to the moon” was regarded as empirically false.²¹ What Wittgenstein says here reminds us of what he says in the *Investigations*, when he notes that a criterion in one situation can change into a symptom in another (PI 354). He is recognizing that the same sentence can be an empirical proposition in one case and a grammatical proposition in another. In his view there is in general no sharp distinction between empirical propositions and grammatical propositions.

Notice that Wittgenstein does not say that *all* empirical propositions can be transformed into rules. At OC 321 he remarks

Isn't what I am saying: any empirical proposition can be transformed into a postulate—and then becomes a norm of description. But I am suspicious even of this. The sentence is too general. One almost wants to say “any empirical proposition can, theoretically, be transformed...”, but what does “theoretically” mean here? It sounds too reminiscent of the *Tractatus*.

Wittgenstein's mentioning of the *Tractatus* indicates that he is comparing his ideas in that book with what he is thinking now in *On Certainty*. In the early book, he holds a sharp distinction between significant propositions and non-significant ones. The laws of physics, for instance, are never empirical propositions; they are always forms of description. But Wittgenstein no longer thinks a sharp distinction can be drawn.

Nor does Wittgenstein say that *all* rules can be changed into empirical propositions. Since some propositions that function as rules in normal circumstances can change into empirical propositions in special cases, it is tempting to generalize and to claim that “logic too is an empirical science.” But Wittgenstein thinks this is wrong (OC 98); he would probably say that it is just as wrong as the claim that all empirical propositions can be transformed into rules (OC 321). However, he does not explain why it is wrong. He straightforwardly maintains that “the same proposition may get treated at one time as something to test by experience, at another as a rule of description” (OC 98). What Wittgenstein says here is extremely compressed, but if we connect it with what he have said about the fluctuation in grammar between criteria and symptoms in the *Investigations* (PI 354), we can see what he is getting at. At PI 354 he says

The fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms. We say, for example: “Experience teaches that there is rain when the barometer falls, but it also teaches that there is rain when we have certain sensations of wet and cold, or such-and-such visual impressions.” In defence of this one says that these sense-impressions can deceive us. But here one fails to reflect that the fact that the false appearance is precisely one of rain is founded on a definition.

The false appearance of rain does not mean we do not rely on some criterion for judging it as false. Rather the very fact that we say such-and-such is a false appearance is based upon a definition of or a criterion for what is true and what is mere appearance. Similarly, although “the same propositions may get treated at one time as something to test by experience, at another as a rule of description,” this does not mean that no proposition functions as a rule of description and all propositions are empirical.

John Cook misunderstands Wittgenstein when he interprets him as having a theory of hinge propositions²². Cook says: “It is not, then, a person’s circumstances that determine whether a proposition is a ‘hinge proposition’. On the contrary, we must be able to recognize hinge propositions without considering circumstances at all. We must be able to recognize a hinge proposition by considering merely what it says. Indeed, this is what is *meant* by saying a *proposition* that is exempt from doubt.”²³ This badly misrepresents what Wittgenstein is saying. As Jon Dorbolo points out, “The hinges which stand in particular circumstances are not subject to doubts, questions, and disputes that arise in those circumstances. It does not follow from this observation that what functions as a hinge in a particular circumstance has a general immunity from doubt in all circumstances.”²⁴

Cook takes hinge propositions to be exactly like the propositions of logic and mathematics as understood in the *Tractatus*. He assumes we need only see the symbols in such propositions in order to recognize their truth and he ignores that after the *Tractatus* Wittgenstein recognized that many propositions that seem as certain as propositions of logic and mathematics are language-game dependent. True, Wittgenstein admits that there are “hard rock” propositions that are subject to “no alternation or only to an

imperceptible one” (99), but, as I noted earlier, he does not say that all hinge propositions are “hard rock” propositions. For Wittgenstein, there are also many “sand” propositions that are context-dependent propositions. The mistake Cook makes is to consider sentences themselves and forget their practice or their application. He forgets that Wittgenstein warns that:

There is always the danger of wanting to find an expression’s meaning by contemplating the expression itself, and the frame of mind in which one uses it, instead of always thinking of the practice. That is why one repeats the expression to oneself so often, because it is as if one must see what one is looking for in the expression and in the feeling it gives one. (OC 601)

One might think that without a theory (or a general claim about the role of such propositions) we would not be able to describe the logic of our language. That is, the changeability of the role of some empirical propositions puts us into a situation in which we cannot really say what the real role of such a proposition is. But that is not the case. Not only can we see that what the role of such a proposition has in a particular context, we may also know that in a particular context it functions as an empirical proposition proper and hence does not function as a Moore-type proposition or a rule. For example, “I have two hands,” said by a driver who was involved in a car accident, may be an empirical proposition.

Since the logical status of some Moore-type propositions is context dependent, in order to describe their status we have to describe various cases in which such propositions are used. We cannot give a general description of their role common to all the various cases in which they are used. As Morawetz rightly puts it:

Because the logical status of some propositions is context dependent, a complete logic-book would have to be a complete account of those contexts in which such propositions are held fast and those contexts in which they are investigable. But then a logic-book would have to describe

every possible move in every possible linguistic practice. Logic in this view is not a set of principles but a complete account of every practice involving language. To do logic is to be self-conscious about all the possible uses of language.²⁵

It is not that logic, the way we use language, cannot be described. Rather it is that it cannot be described exhaustively. I think this is what Wittgenstein is driving at in OC 501:

Am I getting closer and closer to saying that in the end logic cannot be described? You must look at the practice of language, then you will see it. (cf. OC 308, 309)

6. *The logical status of Moore-type propositions can be clarified by comparing them with mathematical propositions.* In the *Tractatus* no significant propositions are necessary in the sense that mathematical propositions are necessary. In the *Investigations*, by contrast, Wittgenstein maintains that he can be as certain of non-mathematical propositions such as “He is much depressed” and “I am sixty years old” as he is of “ $25 \times 25 = 625$ ” (PI p. 224). And it is in *On Certainty* where he compares Moore-type propositions with mathematical propositions.²⁶

Wittgenstein both notes that Moore-type propositions and mathematical propositions are similar in terms of certainty and insists that they are different because they have different uses. With regard to the first point, Wittgenstein remarks, “We know, with the same certainty with which we believe *any* mathematical propositions, how the letters A and B are pronounced, what the colour of human blood is called, that other human beings have blood and call it ‘blood’.” (OC 340) Indeed he even goes so far as to say: “the physical game is just as certain as the arithmetical” (OC 447) and later he adds that if “the proposition $12 \times 12 = 144$ is exempt from doubt, then so too must non-

mathematical propositions be.”²⁷ (OC 653) Since non-mathematical propositions also rest on our senses not deceiving us, if we take mathematical propositions to be special in that they rest on “our not miscounting or miscalculating and on our senses not deceiving us as we calculate” (OC 447), we cannot distinguish mathematical propositions from non-mathematical ones. On the other hand, if we argue that non-mathematical propositions lack certainty and mathematical propositions have certainty, then we cannot do so since both non-mathematical propositions and mathematical propositions are “liable to forgetfulness, oversight and illusion...in the same degree” (OC 651). As Wittgenstein puts it, “If one doesn’t marvel at the fact that the propositions of arithmetic (e.g. the multiplication tables) are “absolutely certain”, then why should one be astonished that the proposition ‘This is my hand’ is so equally?” (OC 448)

In saying that mathematical propositions are as certain as non-mathematical propositions, Wittgenstein is not trying to blur the distinction between them. He does not believe they are similar instruments (cf. PI, p. 224). For him, a mathematical proposition “ $12 \times 12 = 144$ ” and a Moore-type proposition “Here is a hand (namely my own hand)” play different roles in our language. Whereas we make use of the mathematical proposition “in inferences from propositions that do not belong to mathematics to others that likewise do not belong to mathematics” (TLP 6.211), we may use the Moore-type proposition “Here is a hand” to teach people (children in this case) a new concept “hand”. Moreover, while “Here is a hand”, normally being a Moore-type proposition, in special cases may function as an empirical proposition, the mathematical proposition “ $12 \times 12 = 144$ ” can never change into an empirical proposition.

Wittgenstein's view of the affinity between mathematical propositions and non-mathematical propositions in terms of certainty seems to be a response to Moore. Moore takes common-sense propositions (Moore-type propositions) to be "contingent" and explicitly says that he does "not wish to deny" that the sense in which "necessary truths", "a priori propositions", "tautologies" can be "certain" and "known to be true" "must be different from the sense (if any) in which contingent propositions are sometimes 'certain' and 'known to be true.'"28 The reason, according to Moore, is that whenever a necessary truth is negated, we get a contradiction, e.g. "Not all bachelors are unmarried", but common-sense propositions can be negated without contradiction.²⁹ In short, Moore still wants to distinguish common-sense propositions from propositions of logic and mathematics in terms of certainty, and he still seems to hold that the propositions of logic and mathematics are more certain than common-sense propositions.

According to Wittgenstein, Moore's view is deeply confused. He thinks that although we do not end up with a contradiction when we negate a common sense proposition like "the earth has existed for a long time" (and get "the earth does not exist at all."), we do end up with something absurd. In real life, common sense propositions are not doubted any more than propositions of logic and mathematics are. While admitting that common sense propositions are different from propositions of logic, Wittgenstein wants us to see their affinity: "propositions of the form of empirical propositions, and not only propositions of logic, form the foundation of all operating with thoughts (with language)." (OC 401) "We are interested in the fact that about certain empirical propositions no doubt can exist if making judgments is to be possible at all." (OC 308)

In a sense, it is even more absurd to doubt Moore-type propositions than it is to doubt a grammatical proposition, e.g. “Every rod has a length” (PI 251). One may doubt this grammatical proposition prior to adopting a different way of using the concepts “rod” and “length”. The case is similar with a mathematical proposition. Such a doubt is only local. A person who doubts a mathematical proposition, “ $(a + b) \times (c + d) = ac + ad + bc + bd$ ” has not really learned algebra. But he or she can still be a normal person. By contrast, it would amount to the annihilation of all “yardsticks” (OC 492) if Moore-type propositions were doubted. Imagine someone who seriously doubted the proposition “I am a human being”. Such a person would not be regarded as normal.³⁰

7. Moore-type propositions are not like axioms in mathematics or suppressed premises.

In *Principia Mathematica*, axioms serve as foundations of theorems, since the theorems are derived from the axioms by application of principles of inference, such as *modus ponens* or *modus tollens*. The axioms are independent of the theorems; they form the starting point of inferences. For example, if “If p then q”, and p are axioms, we can derive q. The axioms serve as a starting point of the argument. But Moore-type propositions are not starting points of arguments or inferences.

All testing, all confirmation and disconfirmation of a hypothesis takes place already within a system. And this system is not a more or less arbitrary and doubtful point of departure for our arguments: no, it belongs to the essence of what we call an argument. The system is not so much the point of departure, as the element in which arguments have their life. (OC 105)³¹

Instead of holding that hinge propositions (Moore-type propositions) are implied in respective language games, Wittgenstein seems to be insisting that they be presupposed in language games.

Wittgenstein's use of "presupposition" not only differs from our normal usage of "implication", but also differs from our normal usage of "presupposition". For him, a presupposition is not a suppressed premise to make an argument valid; it rather belongs to "the element in which arguments have their life." (OC 105)

In ordinary discourse, when we say one thing (A) is implied in another thing (B), (A) is a state of affairs. For example, a complex question "Have you stopped beating your wife?" implies that you beat your wife in the past. Also, if one apologizes, the apology implies that one did something wrong. "You beat your wife in the past" and "He did something wrong" describe states of affairs. By contrast, Moore-type propositions are presupposed but do not represent states of affairs.

If Moore-type propositions were suppressed premises, then when we say "Close the door", we would have to first think of a suppressed premise "The door exists". For Wittgenstein, Moore-type propositions define the boundaries within which we raise questions, make investigations, conjecture, verify, reason, but they are not part of these activities. "Much seems to be fixed, and it is removed from the traffic. It is so to speak shunted onto an unused siding." (OC 210)

8. *Moore-type propositions are different from logical propositions.* Wittgenstein seems to make this distinction at OC 401, where he states that "propositions of logic, together with propositions of the form of empirical propositions," "form the foundation of all operating with thoughts (with language)." (OC 401) The "propositions of the form of empirical propositions" refers to "Moore-type propositions", and while they are similar to propositions of logic in forming "the foundation of all operating with thoughts (with language)", they are not themselves propositions of logic. A logical proposition,

according to Wittgenstein, “describes the conceptual (linguistic) situation” (OC 51), and “everything descriptive of a language-game is part of logic.” (OC 56, cf. 82, 628) An example is: “We *cannot* have miscalculated in $12 \times 12 = 144$ ” (OC 43) or “What could a mistake here be like!” (I think what Wittgenstein says here amounts to “It is impossible for a mistake to exist here!”)(OC 51)³²

Whether Moore-type propositions are logical propositions can be clarified by considering OC 319:

But wouldn't one have to say then, that there is no sharp boundary between propositions of logic and empirical propositions? The lack of sharpness *is* that of the boundary between *rule* and empirical proposition.

Notice that Wittgenstein does not explicitly say “there is no sharp boundary between propositions of logic and empirical propositions”. He says: “the lack of sharpness *is* that of the boundary between *rule* and empirical proposition.” I think Wittgenstein takes propositions of logic to be different from rules. It seems to me that he restricts “logical propositions” to propositions of the form “We cannot doubt about (or be mistaken in) ‘...’[a proposition]” (OC 43, 51, 494), i.e. propositions that are metapropositions (i.e., propositions about some other propositions). Consider the following remarks in *On Certainty*:

51. What sort of proposition is: “What could a mistake here be like!”? It would have to be a logical proposition. But it is a logic that is not used, because what it tells us is not learned through propositions. – It is a logical proposition; for it does describe the conceptual (linguistic) situation.

52. This situation is thus not the same for a proposition like “At this distance from the sun there is a planet” and “Here is a hand” (namely my own hand). The second can't be called a hypothesis. But there isn't a sharp boundary line between them.

In these two passages, Wittgenstein discusses three propositions:

(1) “What could a mistake here be like!” [i.e., “It is impossible for a mistake to exist here.”]

(2) “At this distance from the sun there is a planet.”

(3) “Here is a hand” (namely my own hand).

According to Wittgenstein, proposition (1) is a logical proposition. Clearly proposition (2) is an empirical proposition and proposition (3) is not a hypothesis. At OC 319 Wittgenstein remarks “The lack of sharpness *is* that of the boundary between *rule* and empirical proposition”, and at OC 52 he says there isn’t a sharp boundary line between propositions (2) and (3). It is possible to think that he takes proposition (3) as expressing a rule, but given his conception of a logical proposition as a proposition that describes conceptual situation, it seems that (3) is not a logical proposition. Likewise, “I am called L.W.” (a Moore-type proposition) does not seem to be a logical proposition because it does not describe a language game.³³

Henry Le Roy Finch interprets Wittgenstein in *On Certainty* as extending the a priori character of logical and arithmetical propositions to the certainty of framework propositions. He claims that the “*a priori* character, which Wittgenstein’s early philosophy attributed to absolutely simply logical structures, shows up again here at the end as belonging to the working certainties of everyday life.”³⁴ But while there are similarities between logical and mathematical propositions and framework propositions (Moore-type propositions), Wittgenstein did not use the term “a priori” to characterize Moore-type propositions. Instead of speaking of Moore-type propositions as “a priori”, McGinn is more cautious when she states that the status of Moore-type propositions “is analogous to that which the propositions of logic and mathematics play *vis-à-vis* our

practice of inference and calculation.”³⁵ What McGinn says here seems to me correctly to capture the connection between Moore-type propositions on the one hand and propositions of logic and mathematics on the other.

So far I have tried to explain the main features of Moore-type propositions as Wittgenstein sees them. These can be summarized as follows. Moore-type propositions have the form of empirical propositions but play a role different from that of empirical propositions. They are recognized in terms of function rather than form and belong to our frame of reference or world-picture. They are not suppressed premises or hypotheses that can be doubted but are presupposed in our arguments and everyday activities. They are different from and also analogous to mathematical propositions and logical propositions. The question that now arises is: Why does Wittgenstein spend so much time clarifying the logical status of Moore-type propositions? What is the philosophical significance in his doing this? In the next chapter I shall try to answer this question.

Endnotes:

¹ These notes are not the only things Wittgenstein wrote during this period. He also wrote a fair amount on colour-concepts (Editors' preface of *On Certainty*, vi.).

² Stroll, *Moore and Wittgenstein on Certainty*, 1994, p. 10.

³ Wright, "Wittgenstein on Certainty", *Problems in the Theory of Knowledge*, The Hague, 1972, p. 47.

⁴ See Avrum Stroll's, *Moore and Wittgenstein on Certainty* (1994), Marie McGinn's *Sense and Certainty* (1989), Oswald Hanfling's *Wittgenstein's Later Philosophy* (1989), Gunnar Svensson's *On Doubting the Reality of Reality: Moore and Wittgenstein on Sceptical Doubts* (1981), Thomas Morawetz's *Wittgenstein and Knowledge* (1978), Elizabeth Wolgast's *Paradoxes of Knowledge* (1977), Carolyn Wilde's *Certainty: A Discussion of Wittgenstein's Notes in On Certainty* (1976), and Helge Margren's *Intentionality and Knowledge: Studies in the Philosophy of G.E. Moore and Ludwig Wittgenstein* (1971). Also see Michael Kober's "Certainties of a world-picture: The epistemological investigations of *On Certainty*" (in *The Cambridge Companion to Wittgenstein*, ed. Hans Sluga & David G. Stern, Cambridge University Press, 1996, pp. 411-441), Henry Le Roy Finch's "Wittgenstein's Last Word: Ordinary Certainty" (*International Philosophical Quarterly*, 15, 1975, pp. 383-395), John Churchill's "Wittgenstein: the Certainty of Worldpictures" (*Philosophical Investigations*, Jan. 1988), John Cook's "The Metaphysics of Wittgenstein's *On Certainty*" (*Philosophical Investigations*, Apr. 1985), Jerry H. Gill's "Saying and Showing: Radical Themes in Wittgenstein's *On Certainty*" (*Religious Studies*, 10, pp. 279-290), Rudolf Haller, "Justification and Praxeological Foundationalism" (*Inquiry*, 31, 1988, pp. 335-345), W. D. Hudson's "Wittgenstein on Fundamental Propositions" (*South-West Journal of Philosophy*, 8, pp. 7-21) and "Language-games and Presuppositions" (*Philosophy*, 53, 1978, pp. 94-99), Deborah Jane Orr's "Did Wittgenstein have a Theory of Hinge Propositions?" (*Philosophical Investigations*, Apr. 1989), Avrum Stroll's "Context-Independent Propositions" (*Wittgenstein: Towards a Re-Evaluation*, Vol. 14, International Wittgenstein Symposiums.), etc.

⁵ Stroll, *Ibid*, p. 5.

⁶ Stroll, *Ibid*, p. 8.

⁷ The editors of *On Certainty* seems to believe that Moore's essays directly triggered the notes (Editors' preface). Michael Kober argues, to the contrary, that it was Wittgenstein and Norman Malcolm's discussions on the latter's paper "Defending Common Sense" (N. Malcolm, *Philosophical Review* 58, 1949, pp. 201-22), not Wittgenstein's reading of Moore's essays, that directly caused Wittgenstein's writing of the notes (we are not even sure whether Wittgenstein actually read Moore's essays) (Michael Kober, "Certainties of a world-picture: The epistemological investigations of *On Certainty*", *The Cambridge Companion to Wittgenstein*, 1996, pp. 411-12). But since a large number of passages in *On Certainty* refer to Moore, and there are no reference to Malcolm, it is reasonable to say that it is Moore's attempts to refute or reject idealism and/or skepticism that triggered Wittgenstein's notes if only through his discussions with Malcolm.

⁸ It is not immediately clear that such propositions can be seen as grammatical propositions. For example, "I am a human being" (OC 4) is not a straightforward grammatical proposition in the sense that from the grammar of the word "human being" I can understand the sentence "I am a human being." Similarly, it seems unlikely that from the grammars of "my birth" and "the earth" we can form the proposition "The earth existed long before my birth" (OC 84). This is probably why Wittgenstein does not call these propositions "grammatical propositions".

⁹ Marie McGinn, *Sense and Certainty: A Dissolution of Skepticism*, Basil Blackwell, 1989.

¹⁰ Wittgenstein himself does not use the term of “Moore-type proposition” in *On Certainty*. Instead he talks about “logical propositions” (OC 43, 51, 56, 82, 319, 350, 401, 628), what have come to be known as “hinge propositions” (see OC 341, 343, 655, cf. 340), “mathematical propositions” (OC 38, 340, 350, 651, 654, 655), “grammatical propositions” (OC 57, 58; cf. 393, 433) and “methodological propositions” (OC 318). Since I use the notion of “Moore-type propositions” to refer to propositions that have the form of empirical propositions but do not function as empirical propositions (they are non-empirical), they are mostly concerned with “methodological propositions” and so-called “hinge propositions”. In normal cases, “mathematical propositions” and “logical propositions” do not have the form of empirical propositions, and thus neither belong to Moore-type propositions. Also it is worth noting that Wittgenstein uses many examples (that is, propositions) not mentioned by Moore (for example, OC 10, 70, 101, 104, 218, 234, 240, 274, 279, 282, 327, 340, 398, 416, 420, 431, 486, 552, 555). But he seems to believe that they have a status similar to that of the examples mentioned by Moore in “Defense of Common Sense” and “A Proof of an External World”. Indeed Wittgenstein says there are countless such sort of proposition (OC 273). (See Alan R. White, “Common Sense: Moore and Wittgenstein”, *Revue Internationale De Philosophie*, 1986, 40, pp. 313-14).

¹¹ Compare TPL 4.0031: “All philosophy is a ‘critique of language’...It was Russell who performed the service of showing that the apparent logical form [i.e., the clothing or surface grammar] of a proposition need not be its real one.”

¹² This reminds us of TLP 6.113 where Wittgenstein says logical propositions have “the peculiar mark”, namely, “one can recognize that they are true from the symbol alone.” It also reminds us of PI 251 where he says a grammatical proposition plays “a quite different role” from an empirical proposition.

¹³ The concept of “world-picture” occurs neither in the *Tractatus* nor in the *Investigations*. Compare TPL 6.45: “To view the world sub specie aeterni is to view it as a whole—a limited whole. Feeling the world as a limited whole—it is this that is mystical.”

¹⁴ Notice that Wittgenstein never says that one single proposition can describe a complete world-picture.

¹⁵ Finch calls these propositions “framework facts” for “in some ways they are like other facts, though in other ways they are not like other facts.” (Henry Le Roy Finch, “Wittgenstein’s Last Word: Ordinary Certainty”, *International Philosophical Quarterly*, 15, 1975, p. 383). But to call Moore-type propositions “framework facts” is misleading. It suggests that there are super-facts corresponding to Moore-type propositions, just as there are facts corresponding to empirical propositions. Indeed, Finch says “we can get an idea of what Wittgenstein thinks of these *framework facts* by looking at them as what replace the *atomic facts* or absolutely simple facts of the *Tractatus*” (ibid, p. 384). Finch goes on: “Such facts do not tell us anything about the ultimate nature of the world, for it is this picture of an ultimate nature which has been rejected.” (ibid.) Still it seems to me odd to say something is a fact that says nothing about the world. I think it better, following Wittgenstein, to take Moore-type propositions to constitute a “frame of reference” or “framework” (to use Finch’s word), and drop “facts”.

¹⁶ McGinn takes Moore-type propositions to be “not context-free or universally shared in the way that the propositions of logic and mathematics are, but they are still in the vital sense, propositions that are, in a given context, solid for us—they form a background which we either share automatically or which we are acquire without question” (Marie McGinn, *Sense and Certainty*, p.142). But notice at OC 99 Wittgenstein seems to suggest that some Moore-type propositions be universally shared and context free (see below).

¹⁷ “It isn’t difficult to think of usages [sic] for ‘I know that this is a hand’; it is more difficult for ‘I know that the earth has existed for many years’; it is still more difficult for ‘I know that I am a human being.’...Moore’s propositions—‘I know that I am a human being’, ‘I know that the earth has existed for many years’, etc.—have this characteristic, that it is impossible to think of circumstances in which we should allow that we have evidence against them.” (N. Malcolm, *Ludwig Wittgenstein: A Memoir*, p.73)

¹⁸ W. D. Hudson, "Wittgenstein on Fundamental Propositions", *Southwestern Journal of Philosophy*, 8, 1977, p.17. Actually Berkeley doesn't deny the existence of physical objects—he takes them to be ideas.

¹⁹ But the same sentence-form is not essential. Compare TPL 5.4733: "...the symbols ['identical' as a sign for identity and imaginably as a sign for a property] have only the sign in common, and that is an accident," and PI 561: "...One would like to say that these two kinds of use ['is' as a copula and as the sign of equality] do not yield a *single* meaning; the union under one head is an accident, a mere inessential."

²⁰ Compare PI 251: "Something whose form makes it look like an empirical proposition...is really a grammatical one." For example, "I can't imagine the opposite of this [my images are private]."

²¹ But this does not mean that it is an empirical proposition and it was false at the time when Wittgenstein wrote *On Certainty*.

²² Wittgenstein's use of the "hinge" metaphor seems to be associated with both Moore-type propositions (OC 341, cf. 340) and mathematical propositions (OC 655). Cook here is talking Moore-type propositions, instead of mathematical propositions.

²³ John Cook, "The Metaphysics of Wittgenstein's *On Certainty*", *Philosophical Investigations*, 8:2, April, 1985, p.89.

²⁴ Jon Dorbolo, "What Turns on Hinges?" *Philosophical Investigations*, 11:2 April 1988.

²⁵ Thomas Morawetz, *Wittgenstein & Knowledge: the Importance of On Certainty*, The University of Massachusetts Press, 1978, p. 51.

²⁶ As Juliet Floyd correctly points out, Stroll remains "silent on the matter of how Wittgenstein's writings on logic and mathematics, that is, on questions of necessary truth, shape his work in *On Certainty*" (Juliet Floyd, "Moore and Wittgenstein on Certainty". Book Review, *The Philosophy Quarterly*, 1999).

²⁷ By "non-mathematical propositions" Wittgenstein is referring to Moore-type propositions (pseudo-empirical propositions), not to empirical propositions proper. The latter propositions can be doubted.

²⁸ G. E. Moore, "Certainty", *Philosophical Papers*, London, 1959, p.237.

²⁹ *Ibid.*, p. 234.

³⁰ But this does not mean that for Wittgenstein certainty is a matter of degree. Rather we have different kinds of certainty (OC 56, 185, 338, 386, 415). I will leave this issue for Chapter VI where I compare Wittgenstein and Quine.

³¹ This remark seems inconsistent with OC 209: "The existence of the earth is rather part of the whole picture which forms the starting-point of belief for me." But they are not inconsistent. OC 209 does not say that "the existence of the earth" is a starting-point for our arguments. Rather it says something similar to what OC 160 says: "The child learns by believing the adult. Doubt comes *after* belief."

³² The concept of "logical propositions" here is different from the concept of "propositions of logic" in the *Tractatus*, namely, tautologies (TLP 6.1, 6.12, 6.124, 6.126, 6.127, 6.22, etc.). Rather it is similar to the concept of "grammatical propositions" in the *Investigations* (PI 251, 295, 458). It is worth noticing that Wittgenstein seems to shun the concept of "logical propositions" or "propositions of logic" in the *Investigations*; presumably the concept would remind people of the *Tractatus* concept of "propositions of logic" (tautologies).

³³ Wittgenstein observes that the proposition, "I am called L.W.", "does not seem at all like something that one could establish at once beyond doubt. One would not think that it is one of the indubitable truths."

(470) Following this remark, he adds in square brackets: "Here there is still a big gap in my thinking. And I doubt whether it will be filled now." What is unique about "I am called L.W." is that it is not doubted only when one person, namely, L.W. speaks it (470), whereas "The earth has existed for a long time" is universal to any normal person. "I am called L. W." might be called a rule, but the puzzle is that only one person (i.e., Wittgenstein) follows it. Presumably Wittgenstein thinks this important and is unable to make up his mind about what to say.

³⁴ Finch, "Wittgenstein's Last Words: Ordinary Certainty", *International Philosophical Quarterly*, 15, 1975, p.393.

³⁵ Marie McGinn, *Sense and Certainty*, Basil Blackwell, 1989, p.142.

Chapter IV

The Status of Moore-type Propositions: Wittgenstein's Criticisms of Moore

A major issue in *On Certainty* is Wittgenstein's criticism of Moore's claims to know propositions like "The earth had existed for many years before my body was born," "I am a human being," and "Here is one hand and here is another." While Moore uses such propositions to express paradigms of knowledge to refute skepticism and idealism, Wittgenstein takes Moore's effort to be misfiring and futile (OC 37). In particular, he takes Moore to be making a mistake to counter the skeptical assertion that one cannot know that [e.g. there's a tree in front of him] by saying "I do know it" (OC 521, cf. 498, 520).

But, surprisingly, in some passages Wittgenstein also says he *knows* Moore's propositions and propositions that seem similar to Moore's propositions.¹ He says, for instance, "I know...that the earth existed long before my birth" (OC 288), "I know that my name is L.W." (OC 328), and "I KNOW that this is my foot" (OC 360). There seems to be a contradiction here.²

In this chapter, I argue that what looks like a contradiction is only apparent. In cases where Wittgenstein claims to know Moore-type propositions, he does not use it in the same way as Moore uses it. First, Wittgenstein distinguishes the philosophical use of "I know" (Moore's use) from its uses in ordinary life (OC 233, 407, 408). While Moore uses "I know" to make knowledge claims to refute skepticism and idealism, Wittgenstein imagines circumstances under which "I know that p (p being a Moore-type proposition)" may be used as an exclamation (OC 360, 468), a grammatical explanation (OC 412, 433), etc.

Secondly, Wittgenstein also takes Moore-type propositions to be normally expressions of groundless belief rather than knowledge claims as Moore takes them to be. These beliefs are

groundless in the sense that they express our world-picture and they do not need justification.

Moreover, for Wittgenstein, such beliefs are intimately connected with people's actions. Contrary to Moore, he thinks that to understand Moore-type propositions is neither to see them as immediately true (OC 133, 204) nor to assert them out of particular contexts (OC 466). Whether they are actually formulated or not, they are shown in our actions (OC 7, 285, 397, 426, 427). Thus, they are not to be doubted, nor do they have to be defended, and Moore's defence of them is as idle as the skeptic's doubt about them.

Moore tries to refute skepticism and idealism by claiming to know with certainty sentences of common sense, such as "The earth had existed for many years before my body was born," "I am a human being," and "Here is one hand and here is another". In response to Moore, Wittgenstein points out that Moore's utterance of "I know that *p*" is mistaken. "Moore's mistake," he says, "lies in this--countering the assertion that one cannot know that, by saying 'I do know it'" (OC 521; also see 498, 520). He diagnoses Moore's utterance as mistaken in several ways. First, he points out that from someone's saying "I know that *p*", it does not follow that he does know *p*. It does not follow from Moore's saying "I know that *p*" that he knows *p* and that *p* is true.

Even if the most trustworthy of men assures me that he *knows* things are thus and so, this by itself cannot satisfy me that he does know. Only that he believes he knows. That is why Moore's assurance that he knows...does not interest us...(OC 137)

If Moore is attacking those who say that one cannot really know such a thing [i.e. there is a tree in front of him], he can't do it by assuring them that *he* knows this and that. For one need not believe him. (OC 520)

Secondly, Wittgenstein observes, "The truths which Moore says he knows, are such as, roughly

speaking, all of us know, if he knows them.” (OC 100) Thus, regarding such propositions, it is useless for Moore to say he knows them (see OC 84, 288, 325). (Moore certainly thinks his utterances of “I know that *p*” are very useful in defending *p* and in refuting skepticism and idealism. But we shall see that for Wittgenstein these propositions are normally expressions of belief that we do not doubt; and if they were doubted, we would not be sure of anything. Hence they are not to be defended.) Indeed, Wittgenstein imagines Moore’s “I know that *p*” to be a grammatical proposition in which the “I” is unimportant, since the proposition

properly means “There is no such thing as a doubt in this case” or “The expression ‘I do not know’ makes no sense in this case”. And of course it follows from this that “I *know*” makes no sense either. (OC 58)

Thirdly and more generally, Wittgenstein criticizes Moore for failing to use the phrase “I know” in any of its ordinary ways. According to Wittgenstein, we may use the expression “I know” (in “I know that *p*”) in many different ways. One common way is that we use “I know” when we are “ready to give compelling grounds” (OC 243; also see 18, 91, 111, 307, 432, 438, 483-4, 550, 564). Or to put it differently, when “I know” is used, the question of “How do you know?” must be capable of being answered (OC 550; also see 484). This is not how Moore uses the expression “I know”, however. Although he claims regarding his “I know that *p*” that “we must have had evidence for them,” he admits that “we do not know *how* we know them, i.e., we do not know what the evidence was.”³ This means that Moore cannot give compelling grounds for his utterances, or he cannot answer the question “How do you know?”

To be sure, there are also cases in which one claims to know something without being able to give any evidence. An example Norman Malcolm mentions is this:

It is said that professional “chicken sexers” can accurately distinguish the sex of

newly born chicks, without being able to point out any differences in physical characteristics. In response to the question “Are you sure *this* chick is male?” a trained chicken sexer would be entitled to reply, “I *know* it’s male,” without being able to give any proof or evidence.⁴

A trained chicken sexer claims to know a chicken’s sex without being able to give evidence, in a somewhat similar way, Moore claims to know *p* without being able to give evidence or proof.

But Moore’s claim (e.g. “I know I am a human being”) is still very different from a trained chicken sexer’s claim. The chicken sexer’s repeated correct judgments can justify his use of “I know”, but there is nothing like repeated correct judgments in Moore’s case.

Another way we use “I know” in ordinary life is to make a point or to serve a certain purpose (OC 553, 575; also see 359, 374, 403, 413-4, 445-6, 448-9, 504, 553, 575). In this connection, Wittgenstein stresses that “I know” should be used in proper circumstances (OC 441, 423, 553-4). Apparently, Moore’s claims have a point or purpose (i.e., refuting the skeptic) and they are used in a ‘proper’ context (namely, arguing against the skeptic).⁵ Wittgenstein thinks that Moore’s claims could not accomplish its intended purpose and that they are not used in a proper context. For him a philosophical employment of the phrase “I know” is problematic.

Wittgenstein distinguishes the philosophical use of the expression “I know” from our ordinary uses of it (OC 406-7). He questions Moore’s philosophical employment of “I know” (see OC 520, 622). Here are two passages from *On Certainty* where Wittgenstein does this.

What I am aiming at is also found in the difference between the causal observation “I know that that’s a...”, as it might be used in ordinary life, and the same utterance when a philosopher makes it. (OC 406)

For when Moore says “I know that that’s...” I want to reply “you don’t *know* anything!”—and yet I would not say that to anyone who was speaking without philosophical intention. That is, I feel (rightly?) that these two mean to say something different. (OC 407)

Wittgenstein (with a slight hesitation) takes Moore's use of "I know" to be different from its ordinary uses. While Moore's use has a philosophical connotation (e.g., the expression "I know" is used in the sense that if one says "I know that *p*" then *p* must be true), our ordinary uses of the expression do not. The following passages are particularly important in this regard:

Moore has every right to say he knows there's a tree there in front of him. Naturally he may be wrong. (For it is *not* the same as with the utterance "I believe there is a tree there".) But whether he is right or wrong in this case is of no philosophical importance. (OC 520)

Then why don't I simply say with Moore "I *know* that I am in England"? Saying this is meaningful *in particular circumstances*, which I can imagine. But when I utter the sentence outside these circumstances, as an example to shew that I can know truths of this kind with certainty, then it at once strikes me as fishy.—Ought it to? (OC 423)

Wittgenstein's point is that as long as Moore utters "I know that *p*" in particular circumstances, he has every right to use "I know". But in particular circumstances he may be wrong--what he claims to know (*p*) may be false. In that case, he cannot achieve what he intends to achieve, namely affirming he knows such and such with no possibility of being wrong. According to him, each of Moore's utterances of "I know that *p*" can be turned into a move in one of our language-games, but if it is turned into a move in a language-game, it loses its philosophical force. That is to say, it will not state a truth with absolute certainty, and thus it cannot be used to refute skepticism and idealism.

But now it is also correct to use "I know" in the contexts which Moore mentioned, at least *in particular circumstances*. (Indeed, I do not know what "I know that I am a human being" means. But even that might be given a sense.) For each one of these sentences I can imagine circumstances that turn it into a move in one of our language-games, and by that it loses everything that is philosophically astonishing. (OC 622)

At OC 433 Wittgenstein discusses how an example of “I know that *p*” (“I know that that’s a tree”) can be turned into a move in one of our language-games.

So if I say to someone “I *know* that that’s a tree”, it is as if I told him “that is a tree; you can absolutely rely on it; there is no doubt about it”. And a philosopher could only use the statement to show that this form of speech is actually used. But if his use of it is not to be merely an observation about English grammar, he must give the circumstances in which this expression functions. (OC 433)

He imagines the sentence “I know that that’s a tree” being uttered as an assurance or conviction. That is, the sentence may be used in a way similar to the sentence “That is a tree; you can rely on it; there is no doubt about it.” He insists that when a philosopher uses the sentence “I know that that’s a tree” he or she could only be showing that “this form of speech is actually used,” and he does not think that the sentence expresses a truth with certainty.

In trying to make clear the difference between the philosophical use of “I know” and its uses in ordinary life, Wittgenstein invites us to consider the following situation. If a child asked me whether the earth was already there before my birth, I may answer: “I know it was there long, long before my birth.” If he continued to ask how do I know, I might say, “I read a lot of books” and perhaps add: “You will know that when you grow up.” In answering the question I am “imparting a picture of the world” to the child (OC 233). Normally the child will accept what I say. By contrast, if a skeptic asked me the same question, and if I answered it the same way, he/she will not be satisfied. Indeed, the skeptic will doubt whatever answer I give to the question “Do you know if the earth was already there before your birth?”

Wittgenstein’s own use of the phrase “I know” is completely different from Moore’s use of it. When Wittgenstein uses “I know” in “I know that *p*” (*p* being a Moore-type proposition), he is imagining how the expression “I know that *p*” could be used in non-philosophical contexts.

Consider the following passages where he uses the phrase: “I know”:

I know, not just that the earth existed long before my birth, but also that it is a large body, that this has been established, that I and the rest of mankind have forebears, that there are books about all this, that such books don't lie, etc. etc. etc... (OC 288).

I know that my name is L. W. (OC 328)

I KNOW that this is my foot. I could not accept any experience as proof to the contrary.--That may be an exclamation; but what *follows* from it? At least that I shall act with a certainty that knows no doubt, in accordance with my belief. (OC 360)

Some commentators take the propositions, “The earth existed long before my birth”, “My name is L.W.”, and “This is my foot” in these three passages to be true independent of how they are used in particular language-games. John Cook, for example, has taken these quoted remarks as evidence that Wittgenstein has a propositional view about Moore-type propositions. This alleged view is that “any such well-formed sentence presents to those whose speak the language a definite ‘sense’ or ‘proposition’ which, even in the absence of a larger story, we can compare with the world to see whether it is true.”⁶ But I believe it is wrong to attribute to Wittgenstein such a view.

It is true that Wittgenstein did not provide a context for his remark “I know that my name is L. W.” (OC 328). But this does not mean that he does not think that such a context is needed. The utterance of “I know” in OC 288, 328 and 360 is not intended to convey knowledge or truth. Rather it serves to emphasize what is being said or to signal that a grammatical explanation is in the offing. The utterance “I know that this is my foot”, for example, may function as an exclamation. (OC 360) Similarly, the sentences “I know that this is my hand” and “I know that that's a tree” may be intended to explain the words “my hands” and “tree” or to utter

exclamations rather than to serves as knowledge-claims.

Anyone who is unable to imagine a case in which one might say “I know that this is my hand” (and such cases are certainly rare) might say that these words were nonsense. True, he might also say “Of course I know—how could I not know?” but then he would possibly be taking the sentence “this is my hand” as an *explanation* of the words “my hand”. (OC 412)

So if I say to someone “I *know* that that’s a tree”, it is as if I told him “that is a tree; you can absolutely rely on it; there is no doubt about it”. And a philosopher could only use the statement to show that this form of speech is actually used. But if his use of it is not to be merely an observation about English grammar, he must give the circumstances in which this expression functions. (OC 433)

Someone says irrelevantly “That’s a tree”. He might say this sentence because he remembers having heard it in a similar situation; or he was suddenly struck by the tree’s beauty and the sentence was an exclamation; or he was pronouncing the sentence to himself as a grammatical example; etc., etc. And now I ask him “How did you mean that?” and he replies “It was a piece of information directed at you”. Shouldn’t I be at liberty to assume that he doesn’t know what he is saying, if he is insane enough to want to give me this information? (OC 468)

To illustrate Wittgenstein’s point about the sentence “I know that this is my hand”. let us imagine that a doctor is suspecting that Wittgenstein is faint and asks him the question “Do you know your name?” as a test. In this event it would be right and proper for Wittgenstein to answer “I know my name is L. W.” Although cases like this are rare, they are still possible. Moreover, in this case Wittgenstein’s answer is not a knowledge claim; it is rather an exclamation. It would be strange if the doctor asked Wittgenstein “How do you know?”⁷

While most of the time in everyday life, Wittgenstein would not say “I know that my name is L. W.,” this does not mean that he does not know his name. As Wittgenstein puts it, “It goes *without saying* that I know my name, only because, like anyone else, I use it over and over again” (OC 568; my emphasis). Regarding such propositions, Wittgenstein says, “it seems to me that I have known something the whole time, and yet there is no meaning in saying so, in uttering

this truth" (OC 466). His point is that this "something" cannot be uttered as a truth "*outside a particular language-game*" (compare PI 47), not that it can never be said.

Wittgenstein maintains that Moore-type propositions, if formulated, are normally expressions of belief, not claims of knowledge as Moore takes them to be, and he mainly prefers to use "I believe" rather than "I know" in speaking of Moore-type propositions. In a number of passages he uses "I believe" (a Moore-type propositions) to replace "I know".⁸

I know, not just that the earth existed long before my birth, but also that it is a large body, that this has been established, that I and the rest of mankind have forebears, that there are books about all this, that such books don't lie, etc. etc. etc. And I know all this? I believe it. This body of knowledge has been handed on to me and I have no grounds for doubting it, but, on the contrary, all sorts of confirmation. (OC 288)

We know that the earth is round. We have definitively ascertained that it is round.
We shall stick to this opinion, unless our whole way of seeing nature changes. "How do you know that?"—I believe it. (OC 291)
(See also 289, 299, and 520.)

When Wittgenstein makes these remarks, he is not urging Moore to replace "I know" with "I believe", since even if Moore did so, he would not really be able to counter the skeptic's position. Imagine that the skeptic asks Moore, "How do you know that you have two hands?" In response, Moore replies: "I believe I have two hands." The skeptic could then retort: "But I am asking you how you know that, not whether you believe it." Moore would be stuck, as he is stuck when he cannot answer the skeptic's question: "You said you know such and such, but how do you know?" According to Wittgenstein, "If [Moore's] opponents had asserted that one could not *believe* this and that, then he could have replied: 'I believe it'" (OC 520). But Moore's opponents did not assert that one could not believe this, consequently Moore cannot reply "I believe it." In short, it would

not do if Moore replaced “I know” by “I believe” when arguing against the skeptic and Wittgenstein is not just urging him to do so.

To see why Wittgenstein uses “I believe” to replace “I know”, let’s consider Wittgenstein’s following remark:

If someone believes something, we needn’t always be able to answer the question ‘why he believes it’; but if he knows something, then the question “how does he know?” must be capable of being answered. (OC 550)

In the case where I say “I believe my friend John is going to come for dinner” one may ask me “Why do you believe it?” and I may answer “He told me so.” In the case where I say “I believe the earth existed long before my birth”, the question “Why do you believe it?” is usually inappropriate. On the other hand, in the case where one says “I know...” (intending to convey knowledge), one must normally be capable of answering the question “How do you know?” For Wittgenstein, since Moore-type propositions, as normally formulated and used, are expressions of belief (rather than knowledge), they do not need justification. In other words, such beliefs are groundless. They express certainties--we hold them fast (OC 116, 125, 144, 151, 152, 173, 225, 234, 235). They are part of our world picture or frame of reference (OC 83). For example, my belief that “The earth existed long before my birth” is groundless, as opposed to my grounded belief that “John will come to dinner (because he told me)”. In the second case what I believe may turn out to be false, but in the first case what I believe (in our world picture) cannot (logically) be otherwise.

Moore, by contrast, does not take Moore-type propositions to be beliefs. Nor does he accept that beliefs can be groundless. On the contrary, he tries hard to argue against philosophers who have spoken of such propositions as “beliefs of Common Sense”, that is, as matter of Faith,

not of Knowledge.⁹ The reason is that if they are matters of Faith, nothing else can be known with certainty, and Moore could not use them to refute the skeptic. For him, certainty and knowledge are inseparably tied together. He says:

It is, indeed, obvious that a thing can't be certain, unless it is *known*: this is one obvious point that distinguishes the use of the word 'certain' from that of the word 'true'; a thing that nobody knows may quite well be true, but cannot possibly be certain.¹⁰

For him, some of the contingent propositions, i.e., propositions whose negation are not self-contradictory, including Moore-type propositions, are certain if known. All necessary propositions, i.e., propositions whose negation are self-contradictory, are also certain if known.

Conversely, for Wittgenstein, when Moore discusses certainty, he conflates two different categories: 'knowledge' and 'certainty' (OC 308). Wittgenstein holds the view that if something is known, it must be possible to doubt it, and hence it cannot be objectively certain. For him "subjective certainty" is very different from "objective certainty". While subjective certainty allows for a mistake, objective certainty excludes all possible mistake (OC 194). Thus, it is confusing to take Moore-type propositions to be knowledge claims as Moore did.

Wittgenstein also directs Moore and us to see how people's basic beliefs expressed by Moore-type propositions are intimately tied with their actions. First, consider the connection between others' basic beliefs and their actions. We can see from others' actions that they firmly believe certain things, even if they never express this belief (by uttering "I know that *p*" or "I believe that *p*").

People have killed animals since the earliest times, used the fur, bones etc. etc. for various purposes; they have counted definitely on finding similar parts in any similar beast.

They have always learnt from experience; and we can see from their

actions that they believe certain things definitely, whether they express this belief or not. By this I naturally do not want to say that men *should* behave like this, but only they do behave like this. (OC 284)

Wittgenstein does not want to say that men *should* behave in a certain way by providing evidence or reasons. Rather, he implies that their actions in question are groundless.

Secondly, consider the connection between our basic beliefs and our actions. We show that we know or believe certain things in the way we act and in the way we speak about the things in question. For example, that “I tell a friend e.g. ‘Take that chair over there’, ‘Shut the door’, etc. etc.” shows that “I know or am certain that there is a chair over there, or a door, and so on.” (OC 7)

“I know all that.” And that will come out in the way I act and in the way I speak about the things in question. (OC 395) (Also see (OC 204, 232, 331, 360, 402, 409, 431; see also 87, 110, 148, 196, 287, 368, 411, 414, 603, 606, 608, 651).

Such basic beliefs are often tacit and not formulated or thought.

As children we learn facts; e.g., that every human being has a brain, and we take them on trust. I believe that there is an island, Australia, of such-and-such a shape, and so on and so on; I believe that I had great-grandparents, that the people who gave themselves out as my parents really were my parents, etc. This belief may never have been expressed; even the thought that it was so, never thought. (OC 159, see also 87, 88)

There are indeed cases where these beliefs are formulated, for example, they are prefixed with “I believe”. But in those cases, they are uttered in particular circumstances to teach someone a picture of the world (OC 233), to make an exclamation (OC 360, 468), or to give a grammatical explanation (OC 412, 433), etc. They are not used to state truth or knowledge.

Wittgenstein does not think that we can understand these beliefs simply by seeing them.

As he puts it, “[g]iving grounds, however, justifying the evidence, comes to an end;--but the end

is not certain propositions' striking us immediately as true, i.e. it is not a kind of *seeing* on our part; it is our *acting* which lies at the bottom of the language game" (OC 204). I think the target of this remark is Moore's view that Moore-type propositions are immediately true or self-evident.

When we understand such beliefs in virtue of our actions, we shall not question them (as the skeptic would do). If they were questioned, or if they were not held fast, our whole world-picture will be shattered. Nor would we need to defend them (as Moore tries to do). Thus, Moore's utterances are just as idle as the skeptic's question.

In conclusion, Wittgenstein's criticism of Moore's claims to know Moore-type propositions and his own utterances of "I know that p (p being a Moore-type proposition)" are not inconsistent. The difference between them is that one involves a philosophical use of "I know", the other does not. In his criticism of Moore, Wittgenstein tries to expose how Moore-type propositions are intimately tied to our actions and life in general. He tries to show that no clear and interesting question about them can be asked, and there is no need to defend them either: They are there--like our life.

Endnotes:

1. Wittgenstein uses many examples of other propositions (for example, OC 10, 70, 101, 104, 2218, 274, 282, 327, 340, 398, 416, 420, 431, 552, 555) that are not mentioned by Moore, whose status he believes to be the same—indeed, he says there are countless such (OC 273). (See, Alan R. White, “Common Sense: Moore and Wittgenstein”, *Revue Internationale de Philosophie*, 1986, 40, pp. 313-314).

2. This tension has been noted by John W. Cook (“Notes on Wittgenstein’s *On Certainty*”, *Philosophical Investigations*, Fall, 1980), Philip W. Bennett (“Wittgenstein’s Theory of Knowledge in *On Certainty*”, *Philosophical Investigations*, Fall, 1980), and Oswald Hanfling (“On the Meaning and Use of “I Know””, *Philosophical Investigations*, July 1982).

³ “Defense of Common Sense”, *G. E. Moore: Selected Writings*, ed. Thomas Baldwin, Routledge, 1993, p. 118.

⁴ Norman Malcolm, “Moore and Wittgenstein on the Sense of ‘I know’”, in his book, “Thought and Knowledge”, Cornell University Press, Ithaca and London, 1977, pp. 181-182.

⁵ In a letter to Malcolm, Moore insists that he was using the utterance “I know that *p*” (*p* being a Moore-type proposition) “with a purpose—the purpose of disproving a general proposition which many philosophers have made; so that I was not only using them in their usual sense, but also under circumstances where they might possibly serve a useful purpose, though not a purpose for which they would commonly be used.” (Letter to Malcolm, *G. E. Moore: Selected Writings*, ed. Thomas Baldwin, London and New York: Routledge, 1993, p. 216.)

6. John W. Cook, *ibid.* p. 15.

7. It should be noted that Wittgenstein does not think that utterances of Moore-type propositions in particular contexts (whether as exclamations, grammatical explanations, or something else) only have uses but no meanings. Wittgenstein’s utterance, “I know my name is L. W.”, not being a knowledge claim, is still meaningful.

8. In some passages Wittgenstein also tend to replace “I know” with “I am certain” (OC 409), “It is certain” (OC 582). But I shall focus on passages where Wittgenstein replaces “I know” by “I believe”.

9. “A Defense of Common Sense”, in *G. E. Moore: Selected Writings*, ed. Thomas Baldwin, London and New York: Routledge, 1993, pp. 116-117.

10. “Certainty”, in *G. E. Moore: Selected Writings*, ed. Thomas Baldwin, London and New York: Routledge, 1993, p. 184.

Chapter V Foundations and Grounds in *On Certainty*¹

Many remarks in *On Certainty* focus on the issues of foundations and grounds.² In some remarks Wittgenstein says that our language-games and some of our beliefs and propositions are not grounded.³ But in others, he speaks of these groundless beliefs and propositions as foundations of our language-games.⁴ The idea underlying these remarks is complex; at first glance it seems puzzling that our language-games can be groundless yet still have foundations. Facing this complexity, some commentators have cited Wittgenstein's remarks on grounds and foundations and interpreted him as defending foundationalism—in the sense that our actions make our language-games and knowledge possible.⁵ Others have referred to Wittgenstein's remarks on foundations and argued that Wittgenstein holds foundationalism in the sense that our basic (groundless) beliefs and propositions, while standing outside of our language games and other beliefs, nevertheless support the latter and make them possible.⁶

In this chapter I argue that Wittgenstein does not subscribe to foundationalism in any interesting sense. First, the grounds [*Grund*] for our language-games, if there are any, are supposed to give reasons and justification for our language games, and Wittgenstein explicitly denies there are such grounds. It is wrong to read Wittgenstein as holding the idea that our actions are grounds for our language-games. Secondly, the foundations [*Fundament* or *Grundlage*] of language-games, i.e. our basic beliefs, do not offer reasons and justification for language-games. They do not stand outside of and make possible our language-games and the rest of our beliefs. Wittgenstein's remarks on grounds and

foundations only describe and remind us of how we play language-games and how we treat certain beliefs and propositions that stand fast—he does not put forward a theory.

In *On Certainty* Wittgenstein has the idea that our language-games are not grounded.⁷ He remarks:

You must bear in mind that the language-game is so to say something unpredictable. I mean: it is not based on grounds [*Es ist nicht begründet*]. It is not reasonable (or unreasonable). It is there—like our life. (OC 559)

Language did not emerge from some kind of ratiocination. (OC 475)

I take Wittgenstein to be saying that our language-games are not grounded or based on reasons, and that nothing stands *outside* of language games and justifies them. But this does not mean that there is no explanation (i.e., giving reasons) within a particular language game. Consider a language game of promising. A man promises to a woman that he was going to marry her the next month. If he does not go through with it, the woman would expect an explanation or justification. If the man gives her a reason or explanation—say he did not have enough money or he had to travel on business—the explanation or justification would be internal to this language-game of promising. But if someone were to ask for an explanation or justification why this language-game is played like that, and in particular why the woman asked for an explanation, no explanation could be given. One could only say that this is the way the language-game is played. It is in this sense that Wittgenstein says our language-games are not based on grounds.

This idea of the groundlessness of our language-games echoes Wittgenstein's idea in the *Investigations* that language-games are part of our natural history (PI 25) and 'proto-phenomena' (PI 654) that need no explanation or justification. In *On Certainty* Wittgenstein expands on this idea.

Wittgenstein anticipates two lines of argument a philosopher might use to defend the idea that our language-games are grounded. The first is that one may argue that experience is the ground for a particular language-game. To the question “Why is the above language-game of promising played that way?” One might reply, “Because the woman and the man have seen other people playing a language-game of promising like that”. Past experience gives them the reason to play the language-game that way. This reply does not justify the language-game, however. It does not explain why people in the past, in similar circumstances, played a language-game of promising that way; it only pushes the problem one step back. In the end it only amounts to saying that they have learned the language-game.

Take another example—a language-game of judging. Wittgenstein imagines his interlocutor asking: “[I]sn’t it experience that teaches us to judge like *this*, that is to say, that it is correct to judge like this?” (OC 130) The assumption behind this question is that experience gives us reasons for judging in a certain way. In response, Wittgenstein makes two points. First, he notes that experience does not prove that our judging in a certain way is correct. He asks, “how does experience *teach* us, then? *We* may derive it from [past] experience, but experience does not direct us to derive anything from experience.” (OC 130) That is to say: past experience does not prove our so judging correct or incorrect, reasonable or unreasonable. We simply learn to judge in a certain way (OC 129). In learning a language-game, the question of justification does not arise. Secondly, Wittgenstein stresses that experience may be the cause for our judging as we do, not the ground or reason. “If [experience] is the *ground* of our judging like this, and not just the cause,” says Wittgenstein, “still we do not have a ground for seeing this in turn as a ground.” (OC 130) If experience is the reason for how we judge then why (by what

reasons or grounds) it is taken as the reason for our judging in that way? No appeal to take experience as the reason for judging can stop the infinite regress.⁸

Alternatively one may argue that the usefulness or success of a language-game is the ground for it (OC 131). But this is also problematic. Children are trained to play language games, and later find that a particular language-game is useful in a certain situation. For example, a child may find that it is useful to say “Milk” if he wants to drink some. But while the usefulness of a particular language-game may be the cause for the playing of it later, it is not the reason for his accepting it. When the child *learns* to say “Milk”, he does not first think that it is useful and then accept it. The outstanding success of a game of judging, Wittgenstein claims, is not the ground for the game of judging. (OC 131) When one says that “[t]his game proves its worth,” he says, “[t]hat may be the cause of its being played, but it is not the ground.” (OC 474)

What is puzzling in understanding Wittgenstein’s idea that our language-games are not grounded is that he sometimes suggests our language-games are grounded.

Consider the following remarks from *On Certainty*:

Giving grounds [*Begrundung*], however, justifying the evidence, comes to an end;--but the end is not certain propositions’ striking us immediately as true, i.e. it is not a kind of *seeing* on our part; it is our *acting* which lies at the bottom [*Grund*] of the language game (OC 204).

As if giving grounds did not come to an end sometime. But the end is not an ungrounded presupposition: it is an ungrounded way of acting (OC 110)

Why do I not satisfy myself that I have two feet when I want to get up from a chair? There is no why. I simply don’t. This is how I act” (OC 148)
Sure evidence is what we *accept* as sure, it is evidence that we go by in *acting* surely, acting without any doubt (OC 196)

It is tempting to read Wittgenstein as saying in these remarks that acting *is* the final reason for our language-games. Haller, for example, reads them this way when he interprets Wittgenstein as holding a “praxeological foundationalism”.⁹

Here is Haller’s interpretation:

Wittgenstein points to the fact that our giving grounds ends as a fact of our way of acting...In order to reach ultimate justification, we have to look where we actually stop in justifying something. And the clearest case is when we turn to that very ground of beliefs which is not to be found in these beliefs themselves or in others supporting them, but in the praxis of language. Therefore, we have to turn to action.¹⁰

In addition Haller claims that for Wittgenstein, it is

the action, which justifies the use, and it is the use which finally justifies the true belief.¹¹

In Haller’s interpretation, Wittgenstein is proposing a line of justification: action justifies use and use justifies belief. But this interpretation, I think, is misleading. A careful examination shows that it is not what Wittgenstein says in OC 204. What he actually says there is that acting *puts an end* to justification; he does not say acting is the final justification. There are two important points to note in this connection.

In the first place, although the German word ‘*Grund*’ is usually rendered into English as ‘ground’ (or ‘reason’), it can also be rendered as ‘bottom’ (or ‘basis’), and this is how Wittgenstein uses it in OC 204. According to Wittgenstein, our actions *show* that some beliefs stand fast for us; they do not justify the use and the truth of these beliefs. As he puts it: “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 that chair over there”, “Shut the door”, etc. etc.” (OC 6)

Secondly, Haller’s interpretation is open to criticism since he reads OC 204 as a theoretical remark—he takes Wittgenstein to be making a thesis—whereas the passage is

actually only a grammatical remark or reminder. In saying “it is our *acting* which lies at the bottom of the language-game”, Wittgenstein is reminding us that our language-games are interwoven with our actions (See PI 7). A linguistic expression in a language-game is not to be understood separately from the actions involved. The acting at the ‘bottom’ is an important part of our language-games,¹² but it is not the ground or the reason for the linguistic expression. For Wittgenstein, a verbal expression of an action like a shudder is not justified by the wordless shuddering (See PI p.174). Rather, the verbal expression of a shudder is an extension of the shudder (See Z 545).

In a similar way, PI 217 might be read as providing evidence for the claim that Wittgenstein holds foundationalism. In PI 217 Wittgenstein says “If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: ‘This is simply what I do.’” But this should not be misinterpreted as saying that “what I do” (acting) is the final reason or justification for a particular language-game. For Wittgenstein explicitly says that the justifications have been exhausted, and he does not intend “what I do” to be taken as the final justification. In short, Wittgenstein does not hold foundationalism in the sense that acting is the ground or reason for our language-games.¹³

At this point, one may think that Wittgenstein must be defending anti-foundationalism in the sense that our language is totally arbitrary since he explicitly says that our language-games are not based on grounds. In my view this is wrong. First, when Wittgenstein says that our language-games are not based on grounds or are not reasonable, he also says that they are not unreasonable, and they are there—like our life (OC 559). To say our language-games are not grounded is not to say that anything goes: it is not to deny that we play language-games in the way we do and that we follow rules

in playing them. To the question “Is our language (grammar) arbitrary?” Wittgenstein replies, “It is not every sentence-like formation that we know how to do something with, not every technique has an application in our life”¹⁴ (PI 520). Secondly, to think that Wittgenstein holds anti-foundationalism is to think he holds a theoretical position regarding our language-games. But that runs counter to the strictly descriptive method referred to in OC 559: Our language games are there—like our life.

Although Wittgenstein rejects the idea that our language-games are based on grounds, he holds the idea that there are foundations of our language-games. Many passages in *On Certainty* speak of our basic beliefs or convictions as foundations of our language games.¹⁵ Here are some examples:

My belief that I have two hands is a foundation [*Grundlage*] of all my beliefs (See OC 246).

To say of man, in Moore’s sense, that he *knows* something; that what he says is therefore unconditionally true, seems wrong to me.—It is the truth only inasmuch as it is an unmoving foundation [*Grundlage*] of his language-games (OC 403).

Our belief that “the earth has existed for many years past” belongs to the foundations [*Fundament*] of the entire system of our language-games” (OC 411).

Our belief that water boils and does not freeze under such-and-such circumstances is fused into the foundations [*Fundament*] of our language games (OC 558).

Propositions of the form of empirical propositions, and not only propositions of logic, form the foundation [*Fundament*] of all operating with thoughts (with language) (OC 401).

The general idea underlying these remarks seems to be that some of our beliefs and propositions are basic or fundamental in our language-games, and they function as foundations that support the rest of our beliefs and propositions. This sounds close to foundationalism¹⁶—the doctrine that some of the knowledge we possess is more

fundamental or basic than the rest. While the basic knowledge claims are self-evident or self-justifying, the rest have to be justified or made possible by the basic ones. The idea is that the base (basic knowledge) supports the mansion (the rest of our knowledge).

Although Wittgenstein does not take these basic beliefs and propositions to be knowledge claims, but to be something certain or standing fast for us (OC 308), he seems still to hold the foundationalist metaphor of a base supporting the mansion. Thus, it is not very surprising to hear Stroll claim that in *On Certainty* Wittgenstein develops “a highly original form of foundationalism”.¹⁷

Wittgenstein’s remarks about foundations, according to Stroll, amount to foundationalism because Wittgenstein still holds the foundationalist idea that the foundations of our language-games stand “*outside of and yet support*” the language games.¹⁸ They stand outside of language-games because they are not “subject to justification, proof, the adducing of evidence, or doubt and [are] neither true nor false.”¹⁹ They support the language-games because they make them possible. “The earth is very old”, for example, is a proposition not subject to justification but underlies all historical, anthropological, geological, and etymological hypotheses and make them possible. The reason Wittgenstein’s foundationalism is highly original is that for him the base is not knowledge but something certain.²⁰

No doubt Wittgenstein talks about foundations of language-games. But whether it follows from this that he defends foundationalism is another matter. It is true, as Stroll notices, that Wittgenstein takes what he calls foundations of language-games not to be knowledge claims but something certain. But is it also true that he holds the foundationalist paradigm and therefore holds a type of foundationalism? Before answering this question, we have to take a closer look at those passages where

Wittgenstein talks about the foundations of our language-games. The key issue is: In what sense does Wittgenstein use the word ‘foundation’ (*Fundament* or *Grundlage*)? Are such beliefs fundamental in the sense that they can justify other beliefs or our language-games? Are they external to (or outside of) what is based on them and make the latter possible?

Wittgenstein speaks of some beliefs and propositions as “standing fast” for us (OC 116, 125, 144, 151, 152, 234, 235) and he says we “hold them fast” (OC 173, 225; cf. 510, 511). But what does he mean when he says such and such stands fast? According to him, it means that it is not doubted, and that it is presupposed. On the one hand, our basic beliefs and propositions are not doubted because about them “no doubt can exist if making judgements is to be possible at all” (OC 308); and because they form part of the “foundation of all operating with thoughts (with language)” (OC 401). Thus, if they were doubted, we have to give up all judgement (OC 494). Indeed, if someone were to doubt seriously one of our basic convictions, say, “The earth has existed for many years”. he or she would not be considered a normal person (OC 155, 257, 281, 420, 647). Also, if we doubted such a basic belief, our doubt is idle (OC 117) or hollow (OC 312), senseless (OC 56, 310), illusory (OC 19), without consequence (OC 338). On the other hand, our basic beliefs are presupposed in our language games because they form our world-picture (OC 93, 94, 162, 167, 262), our inherited background (OC 94), and they belong to our frame of reference (OC 83).

Our basic beliefs or convictions are presupposed and not doubted. In this sense, they are different from empirical propositions and the rest of our beliefs. This does not, however, mean, as Stroll thinks, they stand outside of the rest of our beliefs and make the latter possible. As I shall now show, Wittgenstein should not be thought of as thinking it

follows from the fact that our basic beliefs are different from the rest of our beliefs that they stand outside of our language-games (and the rest of our beliefs) and make the latter possible.

Let us first consider what might be called Wittgenstein's "foundation-walls metaphor": "I have arrived at the rock bottom of my convictions. And one might almost say that these foundation-walls [*Grundmauer*] are carried by the whole house" (OC 248). In the metaphor, walls are called "foundations" of the house, but they belong to the house, they are not external to it. Similarly, Wittgenstein wants to say that we can call basic beliefs the "foundations" of our language-games and other beliefs, but they are not external to them. "The substratum of all my enquiring and asserting", as my world picture, should not be understood as independently and meaningfully standing outside of all my enquiring and asserting (OC 162). The proposition "The earth is very old", though different from a hypothesis of history, geology, etc., is presupposed *in* all such hypotheses. Basic beliefs in use do not lie outside our *use* of non-basic propositions. In the use and the playing of our language-games, what stands fast is presupposed in what does not stand fast, and what stands fast gets sense only from what does not stand fast. "No one ever taught me that my hands don't disappear when I am not paying attention to them. Nor can I be said to presuppose the truth of this proposition in my assertions etc.. (as if they *rested on* it) while it only *gets sense* from the rest of our procedure of asserting." (OC 153, my emphasis) Basic propositions are not immediately true and convincing by themselves (OC 144, 204).²¹ They make sense only in contrast with non-basic propositions. It is tempting to say that the basic proposition "The earth is very old" is immediately true and is thus logically prior to the hypotheses of history, geology, etc. But Wittgenstein is not arguing that one is logically or temporally prior to the other. We

do not first learn the proposition “The earth is very old”, then learn the hypotheses of history, geology, and so on. We learn the hypotheses and swallow down the proposition “The earth is very old” along with them (cf. OC 143). We play language-games with people’s names, and we swallow down the proposition that normally everyone knows his name. “It is *part of* the language-game with people’s names that everyone knows his name with the greatest certainty” (OC 579; my emphasis).²² Hence it is misleading to say that foundations lie outside of our language games.

But is what stands fast a necessary condition for what does not stand fast? For example, is it true that the basic proposition “The earth has existed for many years” supports (in the sense of “makes possible”) hypotheses of history, geology, etc.? It is tempting to give an affirmative answer, but I take Wittgenstein to give a negative one. “The earth exists” is not an assumption or hypothesis, which may turn out to be false. It stands fast for us and is part of our world-picture. The assumption that “the earth does not exist” does not affect our use of language in any practical sense. Were someone to say, “The earth does not exist”, under normal circumstances, we could not understand him. “[I]f anyone were to doubt it,” Wittgenstein asks, “how would his doubt come out in practice? And couldn’t we peacefully leave him to doubt it, since it makes no difference at all?” (OC 120)

The relation of this basic proposition ‘The earth exists’ to hypotheses of history, geology, etc. is completely different from the relation of oxygen to the burning of a piece of wood. Without oxygen, a piece of wood will not burn, but with all the necessary conditions for the burning of the wood, we can conclude or deduce that the wood will burn. In a sense, such necessary conditions are independent of the wood and make the burning of the wood possible. By contrast, as I said, for Wittgenstein, the basic

proposition “The earth exists” is not independent of our hypotheses of history, geology, etc. When we play language-games with hypotheses of history, geology, etc. this basic proposition is presupposed. But its being presupposed does not mean this or that hypothesis of history or geology is justified by or deduced from it. “The earth exists” does not, e.g., logically imply the geological hypothesis that in a certain place at a certain time such and such an earthquake occurred.

It is helpful to compare Wittgenstein with Descartes on this point. What Descartes takes to be the foundation, “I think, therefore I am”, is an Archimedean point that supports the rest of his knowledge. From this foundation, Descartes attempts to derive all other knowledge, but the foundation itself is independently known and meaningful.²³ For Wittgenstein, by contrast, a basic proposition, such as “The earth exists.” is neither independently true nor in any sense an Archimedean point. First of all, what Wittgenstein calls fundamental is not a single proposition. “What I hold fast to is not *one* proposition but a nest of propositions.” (OC 225) Moreover, it makes sense to take the proposition “The earth exists” as *true* and as standing fast only in contrast with hypotheses of history, geology, etc.—what may not be true and what does not stand fast. Basic propositions do not function as suppressed premises. Rather they express a system which “is not a more or less arbitrary and doubtful point of departure [that is, suppressed premises] for all our arguments: no, it belongs to the essence of what we call an argument. The system is not so much the point of departure, as the element in which arguments have their life” (OC 105).

However, OC 105 seems to stand in contradiction with OC 209: “The existence of the earth is rather part of the whole *picture* which forms the *starting-point* [my emphasis] of belief for me.” Wittgenstein’s use of ‘starting-point’ is misleading, for it suggests the

idea of a hierarchy of beliefs in which from some basic beliefs (e.g. "The earth exists") other beliefs are derived and justified. But notice by 'starting-point' Wittgenstein refers to a world-picture that forms the inherited background (OC 94) and this is a kind of mythology (OC 95). The so-called starting point, for Wittgenstein, does not refer to beliefs from which other beliefs can be derived and justified.

In sum, basic propositions are not isolated from the other propositions and their actual use in our language. Only in contrast with non-basic propositions can basic propositions be understood. There is a mutual and dynamic dependence between basic propositions and non-basic propositions. The evidence for this theme is substantial. Here are some important passages:

It is not single axioms that strike me as obvious, it is a system in which consequences and premises give one another *mutual* support. (OC 142)

What stands fast does so, not because it is intrinsically obvious or convincing; it is rather held fast by what lies around it. (OC 144)

I do not explicitly learn the propositions that stand fast for me. I can *discover* them subsequently like the axis around which a body rotates. This axis is not fixed in the sense that anything holds it fast, but the movement around it determines its immobility. (OC 151)

No one ever taught me that my hands don't disappear when I am not paying attention to them. Nor can I be said to presuppose the truth of this proposition in my assertions etc., (as if they rested on it) while it only gets sense from the rest of our procedure of asserting. (OC 153)

It might seem that there is a difficulty here. In OC 144 Wittgenstein says "what stands fast... is rather held fast by what lies around it", while in OC 151, he says, it is "not fixed in the sense that anything holds it fast."²⁴ But I think the contradiction is only apparent. In OC 144 Wittgenstein is suggesting that only in contrast with what is mobile can what stands fast be understood. By contrast, in OC 151 he is saying that what stands fast (the axis) is not fixed by some other thing, something that is not movable, as a board

is fixed on a wall by a screw. Rather what stands fast is understood in contrast with what is movable: “the movement around it (the axis or what stands fast) determines its immobility.” The general idea in both remarks is the same—basic propositions and non-basic ones are mutually and dynamically interdependent.

So Wittgenstein does not hold that what stands fast (a basic proposition) makes what does not stand fast (non-basic propositions) possible and not the other way around. He does not defend foundationalism. Neither does he defend Coherentism. Coherentism is the doctrine that ultimately every statement is related by valid principles of inference to (that is to say “coheres with”) certain other statements. But Wittgenstein does not hold that every statement can be logically inferred from certain other statements. He does not say that from basic beliefs we can *logically derive* non-basic beliefs, neither does he say that from non-basic beliefs we can *logically infer* basic beliefs.²⁵ For Wittgenstein, as we have seen, basic beliefs and non-basic beliefs get *sense* from each other.

So far we have seen that, for Wittgenstein, our language-games are not grounded and language-games have foundations. These foundations are basic beliefs that stand fast for us or we hold fast to. But how can Wittgenstein hold both that our language-games are not grounded and that they still have foundations?

Wittgenstein is speaking of two different things when he talks about the foundations of our language-games and when he talks about the groundlessness of our language-games. When he says that our language-games are not based on grounds or reasons, he means that our language-games do not have to be justified. But when he says that our basic beliefs are the foundations of our language-games, he means that when we play our language-games we hold fast to these basic beliefs. They are fundamental in the sense that we do not doubt them, and we do not have to change them (OC 512).

Wittgenstein does not mean that these basic beliefs are the reasons for our language-games. For him, there is a big difference between his use of “foundation” (*Fundament* or *Grundlage*) and his use of “ground” (*Grund*, translated also as “reason”). The difference is especially clear in passages where Wittgenstein explicitly or implicitly contrasts “ground” and “foundation”:

Moore does not have grounds for his conviction that the earth existed. (See OC 91)

I have no grounds for doubting it [that the earth existed long before my birth. etc.] (OC 288)

What reason have I, now, when I cannot see my toes, to assume that I have five toes on each foot? (OC 429)

We do not have reason for our belief of the ‘law of induction’ (See OC 499).

What kind of grounds have I for trusting text-books of experimental physics? I have no grounds for not trusting them. And I trust them (OC 600).

In these remarks Wittgenstein mentions four beliefs: (1) that the earth existed long before my birth; (2) that I have five toes; (3) that the law of induction is true; and (4) that test-books of experimental physics are to be trusted. These beliefs are basic beliefs and they are what Wittgenstein calls foundations of our language-games. But, as he explicitly notes, they are not grounded. Abnormal situations aside, we do not have grounds for doubting them, nor do we have grounds to believe them. We simply believe them. If one tries to give grounds for these basic beliefs, then any such ground will be no surer than the original beliefs. For example, Wittgenstein says, “I am not ready to let anything count as a disproof of this proposition [“I have two hands”] (OC 245), and “My having two hands is, in normal circumstances, as certain as anything that I could produce in evidence for it.” (OC 250)

It is also worth noting that Wittgenstein thinks we can have evidence that we hold these basic beliefs. He remarks: “Everything that I have seen or heard gives me the conviction that no man has ever been far from the earth and nothing in my picture of the world speaks in favor of the opposite” (OC 93); “Everything I regard as evidence indicates that the earth already existed long before my birth” (OC 203); “What we call historical evidence points to the existence of the earth a long time before my birth;—the opposite hypothesis has *nothing* on its side” (OC 190).

While these remarks seem to indicate that basic beliefs are grounded, they are better understood as indicating that experience *shows* that such beliefs are fundamental. In these remarks Wittgenstein uses “give”, “indicate”, “point to” rather than “justify”, “prove”. The words “giving”, “indicating” and “pointing to” are not like “justifying” or “proving”; they are more like “showing”. (cf. OC 7) When we justify and prove something we give reasons; when we try to show something no reasons are involved.

Moreover, the “evidence” Wittgenstein talked about in OC 190 and OC 203 does not mean “scientific evidence”. Scientific evidence (or indication) of a disease does not necessarily presuppose the existence of the disease; it may or may not prove or justify the existence of the disease. In contrast, the earth’s having existed long before my birth (OC 203) is already presupposed in any evidence (or better, any case) we could talk about.

There is yet another issue in connection with Wittgenstein’s ideas on foundations that needs to be clarified. In some remarks Wittgenstein says that there is no further basis or foundation for action. “In the beginning was the deed”, (OC 402) and our “acting lies at the bottom [*Grund*] of the language-game.” (OC 204) But he also often speaks of the basis of action and of foundations for action. For example, he says, “the earth has existed for many years past” belongs to the foundations [*Fundament*] of the entire system of our

language-games, and “forms the basis [*Grundlage*] of action, and therefore, naturally of thought.” (OC 411) My belief that I have two hands is likewise deemed to be a foundation [*Grundlage*] for my actions (OC 414). This apparent contradiction makes it hard to understand and appreciate Wittgenstein’s discussion of foundations.

I have noted that in OC 204 when Wittgenstein says that our acting lies at the bottom [*Grund*] of the language-game, he does not use the German word ‘*Grund*’ in the sense of ‘reason’ or ‘justification’. For Wittgenstein, nothing justifies action (cf. OC 402). The difficulty here is it is hard to see how he can say nothing justifies action while insisting that my belief that I have two hands is a foundation [*Grundlage*] for all my action (OC 414).

The German word ‘*Grund*’ is generally rendered into English as ‘ground’ or ‘reason’. Wittgenstein’s use of the German word ‘*Grundlage*’, however, does not seem to mean ‘ground’ (or ‘reason’). As I noted earlier, an important idea in *On Certainty* is that language-games are not grounded (i.e. based on reasons). If that rendering is not plausible, in what sense is my belief that I have two hands a *Grundlage* of all my action?

My suggestion is that when Wittgenstein says that there is no ground for our acting or our language-games, he means that there is no reason or justification for them. When he says the belief that “the earth has existed for many years past” forms the basis [*Grundlage*] of action, and my belief that I have two hands is a foundation [*Grundlage*], he is saying that when we act we hold these beliefs fast. He is not saying that these beliefs are reasons for our action.

For Wittgenstein, to call something a *Fundament* or a *Grundlage* is not to call it a *Grund* (reason or justification). If we carefully examine Wittgenstein’s remarks on foundations and grounds, what seems puzzling when Wittgenstein says both that our

language-games are not grounded and that there are foundations of our language- games turns out to be easily understood.

To conclude, in speaking of groundlessness of our language-games and the foundations of our language-games, Wittgenstein means different things. For him, while our language-games are not grounded, they have foundations, foundations for which there are no grounds or reasons. Even when he speaks of the groundlessness of our language-games, he is not defending anti-foundationalism. Still, what he calls the foundations of our language-games are simply our basic beliefs that can only be understood in contrast with the rest of our beliefs—neither is logically prior to the other.

Endnotes:

¹ The substance of this chapter was presented at the Western Canadian Philosophical Conference (Oct. 6-8, 2000). I would like to thank Andrew Lugg, Paul Forster, and Philip Dwyer for their helpful comments on earlier versions. This chapter also grew out of a paper "Is Wittgenstein A Foundationalist in *On Certainty*?" published in *Contemporary Philosophy*, Vol. XXI, No. 1 & 2, 1999, pp. 9-15.

² The word 'foundation' in the English text is mostly a rendition of two German words 'Fundament' (OC 401, 402, 411, 558) and 'Grundlage' (OC 167, 246, 403, 411, 414, 449, 614). In a few remarks it is also used to render the German words 'Grund' (OC 248, 253), 'Grundsatz' (OC 87) and 'Begründung' (OC 296). The word 'ground' in the English text is a rendition of the German word 'Grund' and some of its grammatical variations (OC 4, 18, 74, 91, 92, 107, 110, 111, 122, 123, 130, 131, 166, 171, 173, 200, 205, 206, 235, 243, 264, 265, 270, 271, 275, 282, 288, 307, 322, 323, 336, 373, 429, 431, 458, 474, 492, 499, 516, 559, 563, 574, 599, 600, 606, 608).

³ For the idea that language-games are not grounded, see OC 130-131, 204, 474, 475, 559; for the idea that some beliefs are not grounded, see OC 91, 171, 173, 206, 243, 275, 282, 288, 307, 322, 429, 499, 599, 600.

⁴ See OC 87, 167, 246, 248, 253, 296, 401, 402, 403, 411, 414, 449, 558, 614.

⁵ See Rudolf Haller, "Justification and Praxeological Foundationalism", *Inquiry*, 31, 1988, pp.335-345.

⁶ See Avrum Stroll, *Moore and Wittgenstein on Certainty*, Oxford University Press, 1994, Chapter 9: "Wittgenstein's Foundationalism", pp. 138-159.

⁷ A similar idea also appears in Wittgenstein's writings before *On Certainty*. In both *Philosophical Investigations* and *Zettel*, Wittgenstein emphasizes that our language-games are extensions of primitive behavior (Z 545), and thus implies that there are no grounds or reasons for our language games. For example, when a child learns linguistic expressions of pain, he learns 'new pain-behavior' (PI 244), and no ground or reason is involved. Wittgenstein has been taken to hold that "[t]he learned verbal expressions of pain are no more due to thinking or reasoning than are the instinctive preverbal behaviors." (Norman Malcolm, "Wittgenstein: The Relation of Language to Instinctive Behavior", *Wittgensteinian Themes: Essays 1978-1989*, ed. Georg H. von Wright, Cornell University Press, p. 66.

⁸ The same idea, though with less explication, is expressed in PI 655: "The question is not one of explaining a language game by our experiences, but of observing a language game."

⁹ Haller, *Ibid.*, p.335

¹⁰ Haller, *Ibid.*, p.340

¹¹ Haller, *Ibid.*, p.339

¹² Why do actions lie at the *bottom* of our language games? Perhaps without words or linguistic expressions, human beings can still communicate by noticing each other's actions (what we now call "body language"). But without primitive behaviors and more complicated actions, mere linguistic expressions are lifeless and meaningless.

¹³ Regarding Wittgenstein's remarks on acting, Roger A. Shiner takes Wittgenstein to be holding what he calls an "activist theory of knowledge". Referring to OC 110, 148, 204, 342, 534 etc., Shiner interprets Wittgenstein as holding that knowledge is essentially connected with acting. In particular he interprets OC 534 as follows: "To say of a child that has mastered a language game that it *knows* certain things is essentially to repeat oneself." Roger A. Shiner, "Wittgenstein and the Foundations of Knowledge," *Aristotelian Society Proceedings*, 1977-78, pp. 105-106. Shiner's interpretation is, I believe, mistaken. For Wittgenstein, acting is essentially connected with certainty rather than knowledge (OC 331, 360); and 'knowledge' and 'certainty' belong to different categories (OC 308). In OC 534 as well as in OC 395, 414,

431, 608, Wittgenstein is combating the idea of taking our basic beliefs (i.e., what we hold fast or certainty) to be knowledge claims.

¹⁴ See also PI 372, 497, 508, 520, 530, p. 230.

¹⁵ Wittgenstein tends to use the terms 'belief' and 'conviction' in a logical sense rather than the more familiar psychological sense.

¹⁶ One may think these remarks contradict PI 124 where Wittgenstein seems to say there is no foundation for our language games: "Philosophy may in no way interfere with the actual use of language; it can in the end only describe it. For it cannot give it any foundation [*begrunde*] either. It leaves everything as it is." But the sentence "*Denn sie kann ihn auch nicht begrunden*" in the German text can be equally translated as "For it cannot be grounded." It turns out that the idea in PI 124 is close to Wittgenstein's idea that our language games are not grounded, which I discussed in section I.

¹⁷ Stroll, *Ibid.* p. 138.

¹⁸ Stroll, *Ibid.*

¹⁹ Stroll, *Ibid.*

²⁰ Stroll, *Ibid.*, p. 145.

²¹ Compare Wittgenstein's criticism of Frege's and Russell's notion of "self-evident":
It is remarkable that a thinker so exact as Frege should have appealed to the degree of self-evidence as the criterion of a logical sentence. (TLP 6.1271)

If the truth of a sentence does not *follow* from its being self-evident to us, then its self-evidence in no way justifies our belief in its truth. (TLP 5.1363)

The 'self evidence' of which Russell has talked so much can only be dispensed with in logic if language itself prevents any logical mistake. And it is clear that that 'self-evidence' is and always was wholly deceptive. (TLP 5.4731; NB p.4; cf. NB p.3)

²² This remark seems to generalize more than Wittgenstein may really have intended. Not everyone must know his name with the greatest certainty. At OC 628, we see that Wittgenstein really wants to say that "the majority of people [know] their names."

²³ "In the *Rules* the examples of foundational self-evident propositions are mathematical, while in the *Meditations* and the *Principles* they are metaphysical [a priori knowledge of the existence of the self and of a God]; but both the mathematical and the philosophical propositions share this central feature—evidence or self-evidence—which makes them candidates for the role of being foundational." (Graciela De Pierris, "The Constitutive A Priori", *Return of the a priori*, ed. Philip Hanson and Bruce Hunter, *Canadian Journal of Philosophy*, Supplementary Volume 18, 1992, The University of Calgary Press, Calgary, Alberta, Canada, p. 205.

²⁴ I am indebted to Paul Forster for this reference.

²⁵ Although non-fundamental beliefs *indicate* or *point to* that we hold fast fundamental beliefs (OC 203, 190).

Chapter VI

Quine, Wittgenstein and the Analytic/Synthetic Distinction

The comparison between Wittgenstein and Quine has been accorded a certain amount of attention in the last two decades.¹ This chapter, in comparing Wittgenstein and Quine, focuses on the problem of the distinguishing between analytic and synthetic sentences. I take the problem to be tied up with Wittgenstein's distinction between empirical propositions and non-empirical (nonsignificant) propositions. My comparison is intended to clarify Wittgenstein's distinction, and to make clear in terms of the analytic/synthetic distinction how Wittgenstein's philosophy is radically different from Quine's despite their apparent affinities.

Quine attacks Carnap's analytic/synthetic distinction. Quine still uses the terms "analytic" and "synthetic", and distinguishes the analytic from the synthetic,² but he redefines them in naturalistic terms. Wittgenstein, on the other hand, tends to avoid the terms "analytic" and "synthetic".³ Nevertheless, when he points out that empirical (significant) propositions are different from non-empirical (significant) propositions,⁴ he seems to be insisting that there is a distinction similar to the analytic/synthetic distinction. On the surface, Wittgenstein (in the *Investigations* and in *On Certainty*) seems to agree with Quine that there is no sharp (theoretical) distinction between two kinds of proposition (sentence),⁵ specifically, the analytic and the synthetic sentences for Quine. grammatical propositions and Moore-type propositions as opposed to empirical propositions for Wittgenstein. Also, both thinkers agree that some propositions or sentences (e.g., mathematical sentences) are normally not doubted.

In spite of such apparent similarities, Wittgenstein and Quine see matters radically differently. They do not construe propositions, be these so-called analytic propositions such as “A bachelor is an unmarried man,” or so-called synthetic propositions such as “It is raining”, in anywhere near the same way. Their differences derive from their divergent philosophical concerns and their distinctive methods for dealing with philosophical questions. Wittgenstein is concerned with philosophical confusions caused by failing to understand the logic or grammar (use) of our language (TLP 4.003, PI 90), notably the distinction between empirical propositions and non-empirical propositions. Wittgenstein thinks that pointing out differences among propositions can help philosophers to dissolve philosophical confusions.

Quine’s main concern, by contrast, is the question of how we proceed from stimulus to science. Unlike Wittgenstein who finds it urgent to clear up the ground of language (PI 118), Quine aims to build up a scientific-cum-philosophical system. In this system, all sentences are either true or false, no matter whether they are logical laws, or mathematical sentences, what Quine called analytic sentences, or synthetic sentences. According to Quine, logical laws, mathematical sentences, and Quinian analytic sentences have no philosophically special properties that differentiate them from synthetic propositions. For Quine’s purposes, it is impossible to draw the distinction in the way philosophers would like.

In the balance of this chapter I shall do three things. First, I shall discuss Quine’s rejection of Carnap’s analytic/synthetic distinction and his redefinition of the terms “analytic” and “synthetic”. Secondly, I shall talk about Wittgenstein’s distinction between empirical propositions and non-empirical propositions. These two discussions

are essential background for a comparison between Wittgenstein and Quine. Thirdly, I shall argue that in spite of their superficial similarities they are radically different. This does not, however, mean that one is right and the other is wrong.

Let me start with Quine's denial of the analytic/synthetic distinction and his redefinition of the terms "analytic" and "synthetic". According to Quine, Carnap holds that there are two kinds of analytic propositions: logical propositions and propositions that can be transformed into logical propositions by replacing synonyms in the propositions. "A bachelor is a bachelor" is a logical proposition, and "A bachelor is an unmarried man" is a proposition that can be transformed into a logical proposition by replacing "unmarried man" by "bachelor". Carnap calls both kinds of propositions "analytic propositions", and claims that they are true, not because they correspond to fact of the world, but in virtue of the meanings of their words. An analytic proposition is true "purely by meaning and independently of collateral information: thus 'No bachelor is married', 'Pigs are pigs', and by some accounts, '2+2=4'." (*Word and Object*, WO for short hereafter, 65) The "analytic sentences (or propositions) are the true ones that lack factual content." (WO, 247; also see *Pursuit of Truth* (PT), 21) In consequence. Quine takes Carnap to be suggesting there is "some fundamental cleavage between truths which are *analytic*, or grounded in meanings independently of matters of fact, and truths which are *synthetic*, or grounded in fact" (*From Logical Point of View*, (FLPV), 20).

Quine believes that this account of the distinction is problematic. In terms of analytical statements that are not logical truths (that can be changed into logical truths by replacing synonyms), he argues that Carnap either provides no clear account of synonymy or his definition is circular. We cannot simply transform such analytic

statements into logical propositions. As for analytic propositions that are logical truths, Quine argues, from his holism, that no statement (even logical laws and mathematical sentences) can be disconfirmed in isolation. In his own words, he argues that any statement “can be held true come what may, if we make drastic enough adjustments elsewhere in the system” (*Two Dogmas of Empiricism* (TD), 43).⁶ On the other hand, “no statement [even a law of logic] is immune to revision’ (TD 43).

The underlying problem with Carnap’s account of analytic propositions, according to Quine, is that it presupposes the existence of meanings lying hidden behind words. That is, he takes Carnap to believe there are “intrinsic meanings to be teased out” (PT, 55). For Quine this is “the myth of a museum in which the exhibits are meanings and the words are labels” (*Ontological Relativity* (OR) 27). Since Carnap offers no non-mythical account of meanings, he is not justified in saying that analytic propositions are true just in virtue of the meanings of the words involved.⁷

Although Quine criticizes Carnap’s analytic/synthetic distinction, he did not abandon the terms “analytic” and “synthetic”. Rather, he redefined them. In his view, we all have an intuition that some sentences are necessarily true. “The intuitions are blameless in their way,” he says, “but it would be a mistake to look to them for a sweeping epistemological dichotomy between analytic truths as by-products of language and synthetic truths as reports on the world. I suspect that the notion of such a dichotomy only encourages confused impressions of how language relates to the world.” (WO, 67) Quine believes that he can explain analyticity without relying on mythical meanings of words.⁸

In later years analyticity served Carnap well, especially in his philosophy of mathematics. In particular, he invoked it to explain how mathematics could be meaningful despite lacking empirical content and why it is necessarily true. However, for Quine, holism settles both questions without appeal to Carnap's conception of analyticity. Holism lets mathematics share empirical content where it is applied, and it accounts for mathematical necessity by freedom of selection and the maxim of minimum mutilation.⁹ (PT, 56)

Quine redefines "analyticity" in terms of "detectable features of verbal behavior" rather than meanings (WO, 66). For Quine, the meaning of a word should be "externalized" (PT, 55), that is, we should look for its stimulus meanings in our overt linguistic behavior. At an individual level, Quine calls "a sentence *stimulus-analytic* for a subject if he would assent to it, or nothing, after every stimulation (within the modulus)" (WO, 55). For him: "The analytic sentences are those that we are prepared to affirm come what may...[i.e.] come what stimulation may" (WO, 66). This Quine takes to be the definition of stimulus analyticity (WO, 66).

At a social level, Quine calls "socially stimulus-analytic just the sentences that are stimulus-analytic for almost everybody" (WO, 66), for example, "There have been black dogs", " $2 + 2 = 4$ " and "No bachelor is married". But our socialized stimulus analyticity is "still not behavioristic reconstruction of intuitive semantics, but only a behavioristic ersatz" (WO, 66).

Quine believes that his new account of analyticity can account for both kinds of analytic propositions Carnap discusses. As he puts it: "This accounts for such paradigms of analyticity as 'No bachelor is married', and also for the analyticity of many elementary

logical truths. The concept can be adjusted to cover also the truths derivable from analytic truths by analytic steps” (PT, 55).¹⁰

In short, Quine directly attacks Carnap’s analytic/synthetic distinction and radically redefines “analytic” and “synthetic”. He also holds that if a sentence is true, it is true. There are no truths that are true by virtue solely of the meanings of words involved.

Let me now turn to Wittgenstein’s distinction between empirical propositions and non-empirical propositions. As already noted, unlike Quine who still uses the terms “analytic” and “synthetic” but redefines them, Wittgenstein most of the time avoids using the terms “analytic” and “synthetic” in his writings. But he still talks about the distinction between what seems to be analytic propositions (logical propositions, mathematical propositions, grammatical propositions, and Moore-type propositions) and empirical propositions. Before answering the question of whether Wittgenstein’s distinction is really like the analytic/synthetic distinction, let me take up the question of why Wittgenstein avoided using the terms “analytic” and “synthetic”. Hacker says:

This [Wittgenstein’s avoidance of these terms] may be due to partly to a distaste for received jargon, partly to radical disagreement with the construal of such truths by the Vienna Circle and others, and partly to the fact that the concept of analyticity employed by his predecessors and contemporaries, no matter whether Kant, Frege or Carnap, does not serve to explain the distinctions that most concerned him, and hence, in his view, does not serve to explain or elucidate what it is for a proposition to be a ‘necessary truth’.¹¹

All these reasons may be relevant and very possibly true. But I think the crucial reason may be that the distinction given by Carnap is sharp and theoretical, whereas what Wittgenstein had in mind in the *Investigations* and in *On Certainty* was not sharp and not theoretical at all.

In the *Tractatus*, Wittgenstein drew a sharp distinction between logical and mathematical propositions on the one hand, and significant propositions on the other hand. But as I showed earlier, he did not think that logical and mathematical propositions are true in virtue of the meanings of their words.¹² In the *Investigations*, Wittgenstein distinguishes grammatical propositions from empirical propositions. For example, the grammatical proposition, “Every rod has a length”, is different from the empirical proposition, “This table has the same length as the one over there” (PI, 251). Moreover, mathematical propositions are to be distinguished from non-mathematical ones. “Twice two is four” is different from the non-mathematical proposition “Human beings believe that twice two is four.” In both cases, however, the distinction is drawn in terms of the roles and uses these propositions play (PI 251; PI p. 226).

Wittgenstein in the *Investigations* proposes no sweeping epistemological dichotomy between empirical propositions and non-empirical propositions. He thinks there is fluctuation in grammar between criteria (that are usually expressed in grammatical propositions) and symptoms (that are expressed in empirical propositions). (PI 354) “The fluctuation of scientific definitions: what to-day counts as an observed concomitant of a phenomenon will to-morrow be used to define it” (PI 79). And the sentence “That is blue” can be used in one case as an empirical proposition about an object, and at another time as a grammatical proposition explaining the word “blue” (PI p. 18, fn.). So, unlike Carnap, Wittgenstein insists that whether a sentence is grammatical or not is not based on its sentence-type, but on its role in particular cases. “‘War is war’ is not typically used to express the law of identity.” (PI p. 221)

Similarly, in *On Certainty*, Wittgenstein does not embrace a sweeping distinction between empirical propositions and Moore-type propositions. He uses a metaphor to show the difference between empirical propositions and non-empirical ones: empirical propositions are like waters on the river-bed and non-empirical propositions are like the river-bed. While it is possible to “distinguish between the movement of the waters on the river-bed and the shift of the bed itself,” he insists, “there is no sharp division of the one from the other” (OC 97; also see OC 57, 318, 319, 320).

When Wittgenstein talks about the distinction between empirical and non-empirical propositions, he is not trying to defend a general, theoretical distinction, nor is he directly attacking (by means of arguments rather examples) any such distinction. He has a radically different view from Carnap, who insists on the analytic/synthetic distinction. In a sense, Wittgenstein and Quine are on the same side: neither of them wants to draw a sweeping distinction between propositions (sentences). Wittgenstein only wants to draw “local” distinctions — distinctions in particular language-games— to clarify how language works, and to show how metaphysical illusions arise from misuse or misunderstanding of language. He is not interested in a theoretical distinction *per se*. But Quine and Wittgenstein are still very different. Wittgenstein takes these local distinctions to be philosophically important whereas Quine takes such distinctions (even when admitted) to be philosophically uninteresting.¹³

In sum, Wittgenstein distinguishes empirical propositions and non-empirical propositions, but, unlike Carnap, his distinction is not based on the meanings of words involved and is not sharp. It is thus hard even to say that Wittgenstein has something similar to the analytic/synthetic distinction.

So much for stage-setting: Quine thinks that there is no sharp distinction between “analytic sentences” and “synthetic sentences”, and Wittgenstein thinks that there is no sharp distinction between empirical propositions and non-empirical ones. Quine criticizes Carnap’s conception of the “meaning” of a word as mystical, and Wittgenstein agrees.¹⁴ Moreover, both thinkers believe that some sentences are not doubted. But underlying these similarities, there are huge differences.

It is striking how often people who compare Wittgenstein and Quine fail to consider their respective philosophical approaches. For example, Michael Hymers claims that Wittgenstein “allows a distinction between the analytic and the synthetic, and he does so in a way that is compatible with Quine’s critique [of the distinction], except where that critique is led off the rails by Quine’s scientific outlook.”¹⁵ There are serious problems with Hymers’ claim. First, without his “scientific outlook,” Quine would not be Quine. Secondly, as I noted, Wittgenstein avoids using the terms “analytic” and “synthetic”, and it is hard to ascribe to him an analytic/synthetic distinction. To say that Wittgenstein “allows a distinction between the analytic and the synthetic”. as Hymers does, is already to misread Wittgenstein. When comparing Quine and Wittgenstein, we have to put them in their philosophical settings, rather than isolate some superficial similarities for the purpose of comparison.

In order to bring out Wittgenstein’s and Quine’s divergent philosophical concerns, let me start with their understanding of sentences (propositions). For Quine, a sentence is true or false, whether it is a mathematical sentence, a logical sentence, or an observation sentence. Mathematical sentences and logical propositions are different from

observation sentences in the sense that the former is further from experience and the latter closer to it. But the difference between them is merely a difference of degree.

For Wittgenstein, although there is not a theoretical, sharp distinction between empirical propositions and non-empirical ones, in a particular language game, a proposition has to be either empirical or non-empirical (grammatical, mathematical or logical, etc.). For example, "That is blue" in one context (language game) may be a statement about the object, i.e., an empirical proposition, and in another context be an explanation of the word 'blue', i.e., a grammatical proposition. But it is always one or the other. Take another example, "I have two hands". We can imagine situations where it is used as an empirical proposition (imagine somebody who was involved in a car accident and whose hands are injured), but normally, if we say it at all, the proposition counts as a grammatical proposition. In this sense, the distinction is sharp. No one would deny that the statement, "That is blue", plays different roles as a statement about the object and as an explanation of the word "blue". Quine, I think, would agree that the statement does play different roles in different situations. But for him, that is philosophically uninteresting. He would say that the statement is true in both cases. Truth is truth and that is the end of the story.

This difference between Wittgenstein and Quine stems from their different philosophical concerns. Wittgenstein is interested in metaphysical problems, and Quine is not.¹⁶ For Wittgenstein, one major source of metaphysical illusions comes from the conflation of empirical propositions with non-empirical propositions, and for the purpose of therapy we need to make clear that they are different. Consider Moore's view that the proposition "I have two hands" (normally a non-empirical proposition) is both empirical

and certain, and his use of this to prove the existence of the external world. But Moore cannot take the proposition to be empirical, nor can the skeptic doubt the proposition. As Wittgenstein stresses, if both Moore and the skeptic pay close attention to how the proposition functions in our language, and hence see the distinction between it functioning as an empirical proposition and functioning as a non-empirical one, they would stop debating among themselves.

For Quine, the story is different. Science (or rather Quine's notion of science) is all that matters. Philosophy is continuous with science, and philosophy of science is philosophy enough (*The Ways of Paradox and Other Essays* (WP), 151). When we are doing science, we are in search of truth, i.e. true sentences, no matter whether they are directly empirical or not. This in turn prompts Quine to discard or reformulate many traditional metaphysical questions. But he does not do this by pointing to the distinction Wittgenstein exploits; rather he points out that these questions have nothing to do with his project of science even indirectly (and they are not questions of poetry, politics, or other sorts of discourse either).¹⁷

The distinction between an empirical proposition and a grammatical proposition is crucial to Wittgenstein's philosophy, while the determination not to make any philosophical (theoretical) distinctions between sentences is central to Quine's philosophical project. For Quine, we do not need to appeal to Wittgenstein's distinction for scientific purposes, and it is not a flaw in his practice of science that he eschews it. In his view, we learn nothing about scientific rationality, about how theories are based upon experience, about the differences between mathematics and empirical science and the

like, by offering general explanations using this distinction. There is no philosophical benefit to listing or describing analytic truths, or to specifying “framework principles”.

Having noted that Wittgenstein and Quine have different philosophical concerns, we are now in a position to see in what particular aspects Quine and Wittgenstein are different.

First, Quine makes general theoretical claims when he says both that “[a]ny statement can be held true come what may” and that “no statement is immune to revision”:

Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kinds called logical laws. Conversely, by the same token, no statement is immune to revision”¹⁸ (TD, 42).

Wittgenstein, by contrast, does not make such general theoretical claims. He thinks that some non-mathematical propositions (for example, Moore-type propositions) are exempt from doubt, as mathematical propositions are (OC 653-657). In normal circumstances, we simply do not doubt mathematical propositions and they are immune to revision. The same is true with some other non-mathematical propositions, for example, propositions with the form of empirical propositions but without functioning as empirical propositions like: “I have two hands”, “The earth has existed for a long time”. and “Every rod has a length.” (Of course, when “I have two hands” is used as an empirical proposition, it may be true or false). But Wittgenstein never says that *all* propositions can be exempt from doubt or can be held true come what may. Moreover, according to Wittgenstein, although both mathematical propositions and empirical

propositions are “in the same degree liable to forgetfulness, oversight and illusion” (OC 651), this is no reason to say that they are all immune to revision.

Rather than making theoretical claims about the status of propositions in general, Wittgenstein describes how particular propositions are used under specific circumstances.

He uses an analogy of river-bank to make his point:

And the bank of that river consists partly of hard rock, subject to no alternation or only to an imperceptible one, partly of sand, which now in one place now in another gets washed away, or deposited (OC 99).

Here Wittgenstein is saying that some propositions are “hard rock” propositions, some are “sand propositions”, and some are “river” propositions. But he does not give definitions to these kinds of proposition, nor does he think we can make an exhaustive list of each kind of these propositions.

Secondly, Quine thinks that sentences are different only in degree but not in kind. This is not how Wittgenstein understands propositions. For him, mathematical propositions (and Moore-type propositions) are different from empirical propositions in kind, not in degree.¹⁹ Mathematical propositions and Moore-type propositions are certain, while empirical propositions are not. But the former are not more certain than the latter. If we doubt mathematical propositions and Moore-type propositions (that is, if we take them to be more or less certain), then our doubt will lose sense: “Or are we to say that *certainty* is merely a constructed point to which some things approximate more, some less closely? No. Doubt gradually lose its sense.” (OC 56)

The idea that mathematical propositions (and others) are different in kind from empirical propositions can be also seen from the following remarks in *On Certainty*.

But if someone were to say ‘So logic is too an empirical science’ he would be wrong. Yet this is right: the same proposition may get treated at one time as something to test by experience, at another as a rule of testing. (OC 98)

That is to say, the *questions* that we raise and our *doubts* depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn. (OC 341)

That is to say, it belongs to the logic of our scientific investigations that certain things are *in deed* not doubted. (OC 342)

But it isn’t that the situation is like this: We just *can’t* investigate everything, and for that reason we are forced to rest content with assumption. If I want the door to turn, the hinges must stay put. (OC 343)

It is clear from OC 98 that Wittgenstein does not see logical propositions in the same way as he sees empirical propositions. For him, the hinge of a door functions differently from the door (OC 341, 343, 655). The hinges stand fast; so-called hinge propositions are not doubted. In our form of life, it would be absurd to doubt (practically or in principle) a so-called hinge proposition (e.g., “ $2 + 2 = 4$ ”, or “The earth has existed for a long time.”).

Roger Gibson has suggested that “one similarity [between Wittgenstein and Quine] is that virtually every proposition is up for revision, but not equally so.”²⁰ I think this is wrong since it amounts to saying that Wittgenstein does not hold the idea that mathematical propositions (and others) are different in kind from empirical propositions. True, Wittgenstein doesn’t want to draw a sweeping distinction between empirical propositions and non-empirical propositions. But he does want to draw a “local” distinction—one that distinguishes a grammatical proposition from an empirical proposition in a particular context. For example, “Every rod has a length” (a grammatical proposition) is different in kind from “This rod has the same length as that one over there” (an empirical proposition). Moreover, unlike Quine, Wittgenstein does not hold

that virtually every proposition is up for revision, only that some propositions are (OC 99).

For Quine, by contrast, sentences are different only in degree: mathematical sentences and logical laws lie further from experience, but they do not have any special features that exempt them from revision. Although Quine holds that mathematical sentences are among the last to be doubted, he does not hold they are exempt from revision in principle. In "Truth by Convention", he says that "we shall never reject what we take to be truths of mathematics since they are too central to our conceptual scheme." (WP, 77-106, especially 106) We do not reject basic theorems of mathematics, since this would disturb too much. It is the *economy* of thought that keep the so-called analytic statements fixed, not the fact that they have a special nature.

For Wittgenstein, even if we *could* make drastic enough adjustments elsewhere in the system in order to hold a statement true, we will not do it. We simply do not make drastic adjustments to hold the proposition " $2 \times 2 = 5$ ". This is just like that even if we could doubt everything, but we in fact do not doubt.

But Wittgenstein and Quine offer different reasons for not doubting some sentences (e.g., mathematical propositions). For Wittgenstein, it is a fact that mathematical propositions are not doubted, one that lies in our forms of life: "What has to be accepted, the given, is—so one could say—*forms of life*." (PI, p. 226) What Wittgenstein is saying here is not that we cannot have new language games or new rules (PI, 23, p.224); he allows we can have new language games even in mathematics (PI 23). It is not his view that "men will never throw over the present arithmetical propositions." (OC 652), only that we simply do not introduce new language games or rules arbitrarily.

On the other hand, for Quine, there is a scientific or genetic explanation for why we do not revise mathematics (though sometimes we can and do). As he puts it:

If asked why he spares mathematics, the scientist will perhaps say that its laws are necessarily true; but I think we have here an explanation, rather, of mathematical necessity itself. It resides in our unstated policy of shielding mathematics by exercising our freedom to reject other beliefs instead.

For him:

The maxim [of minimum mutilation] constrains us...to safeguard any purely mathematical truth; for mathematics infiltrates all branches of our system of the world, and its disruption would reverberate intolerably. (PT, 15)

From Quine's point of view, Wittgenstein is not doing philosophy (in Quine's sense). He is not going to offer us more truths, at least not directly. According to Quine, "Wittgenstein and his followers, mainly at Oxford, found a residual philosophical vocation in therapy: in curing philosophers of the delusion that there were epistemological problems." (OR, 82) This may not be an exact characterization of what Wittgenstein and his followers were doing, but it shows how Quine sees Wittgenstein. Quine continues: "But I think that at this point it may be more useful to say rather that epistemology still goes on, though in a new setting and a clarified status. Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science." (OR, 82) In Quine's view, then, Wittgenstein is doing something philosophically not very interesting, there being something more important and more interesting for philosophers to do, i.e., search for truths. But he never says that Wittgenstein is doing something wrong.

Wittgenstein could accuse Quine of doing something illegitimate when he says truth is truth. From Wittgenstein's perspective, Quine fails to pay attention to the "local" distinction and places himself outside particular languages (and hence proceeds metaphysically). But Quine could argue that he is not standing outside particular language-games; he could say that he is working from within contemporary science and the language-game of science. Besides, Quine thinks that his idea that all sentences are true or false is simpler and it is useful in explaining how we proceed from stimulus to science. Were Wittgenstein to argue that science is one thing and philosophy is another, Quine would retort that he does not see that they are different. In fact, he thinks it is better to see them as of a whole piece. At this point, Wittgenstein and Quine are insisting on two different approaches for doing philosophy, and it is difficult to see how one could be said to be right and the other wrong.²¹ To clarify this, let me give a simple example:

Consider the sentence "It is raining". For Quine, it is an example of an observation sentence, where "an observation sentence for a community is an occasion sentence on which members of the community can agree outright on witnessing the occasion." (PT, 6) In this definition or criterion of an observation sentence, Quine disregards how in particular cases in everyday life we may use the sentence "It's raining." In Quine's view, if a philosopher says "It's raining", he does not say it to a particular person in a particular situation. He is not saying the sentence to his wife at home, nor to his wife while they are walking in the pouring rain, nor to his son who has just started to speak, but to the community generally. In this situation, members of the community who mastered the language can agree (affirm or negate) outright on

witnessing the particular occasion. If it is raining, all the members will affirm “It’s raining”; if it is not raining, they will deny it.

In everyday life, however, it seems to be trivial and even absurd for a philosopher to say “It’s raining” to the community in general. That would not bother Quine. In reality, the philosopher does not go around to ask every member of the community in order to decide whether a sentence like “It’s raining” is an observation sentence. His point is that if the philosopher did ask every member of the community, all normal people in the community would agree on whether to affirm the sentence or not. For Quine to see the sentence this way is very important because the sentence is an observation sentence and observation sentences link observation and theory. “What brought us to an examination of observation sentences was our quest for the link between observation and theory. The observation sentence is the means of verbalizing the prediction that checks a theory. The requirement that it command a verdict outright is what makes it a final checkpoint.” (PT 4-5) “Observation sentences are the link between language, scientific or not, and the real world that the language is all about.” (PT, 5)

What would Wittgenstein say about Quine’s observation sentences? I think Wittgenstein would say the following: If you come back home and tell your wife (who stays at home without knowing what is happening outside) “It’s raining”, the sentence makes perfect sense, since you are telling her something that she did not know. On the other hand, if you and your wife are walking outside in a pouring rain, and you say “It’s raining” to her, she may be puzzled. Your utterance seems to say something to her where there is no need to say it. Finally, if you and your son are walking in the pouring rain, and you tell him (imagining he is two years old and just starting to speak), “It’s raining”. you

are teaching him a new language game. In the first case, you are using “It’s raining” as an empirical proposition, and in the third case, as a grammatical proposition. In the second case, other things being equal, you are simply misusing the sentence.

For Quine the existence of our different uses of a sentence in ordinary language could hardly be more trivial and is of no philosophical interest. We learn little about scientific rationality, about how theories are based upon experience, by examining such differences. To notice different uses of a sentence contributes nothing to explaining how we obtain science from stimuli. For Wittgenstein it is important because it helps us to see that philosophers confuse these different uses and as a result become trapped in metaphysical illusion.

I am suggesting there is no clear common ground to judge who is right and who is wrong. But some scholars, in comparing Wittgenstein and Quine, do not agree. Glock, for example, argues that in terms of analyticity Wittgenstein can get around or undermine Quine’s position: Wittgenstein’s “way of distinguishing between necessary and contingent truths in terms of norms and (empirical) propositions does not fall prey to Quine’s attack, but helps to undermine the latter’s position.”²² Glock has several arguments for his conclusion.

First, Glock argues, when Quine assimilates necessary and empirical propositions, he denies the normative aspects of language and that leads to the self-refuting conclusion that there is no such thing as linguistic meaning or understanding. Glock argues that for Wittgenstein by contrast the distinction between normative and descriptive uses of language is indispensable (Glock, p. 180). Though there may be fluctuation between normative and descriptive uses, the difference between the two roles—for example, the

role of the ruler of the object measured and the role of the object measured—still remains. As Glock explains it: “Of course, in another context the ruler may itself be the object of measure, e.g. by a laser beam. But again we can and must hold apart the normative role of the laser beam from the role of what is now no longer a rod. For inasmuch as it is used to measure other objects, a measuring rod is not what is being measured (PI 50)” (Glock, p. 171).

This argument would not bother Quine, since he does not see a particular sentence as in a particular language game in Wittgenstein’s sense. He sees sentences as part of the “scientific language game”—his great scientific project. As a layman, even as a scientist in a particular field, he would agree that there is a distinction between the ruler and the object measured. But as a philosopher, he does not think the distinction is of much philosophical importance. For him, empirical discovery can lead to change of mathematics and logic, and in that sense they have empirical content.

Instead of talking about normativity of language, Quine talks about norms of science. For example, the principle of simplicity (*From Stimulus to Science* (SS), 49; PT, 20, 98, 99), the maxim of minimum mutilation. (PT, 14, 15, 56; SS, 49) etc. For Quine, normative standards are grounded in our genetic inheritance or, presumably, in our scientific training. They are operative in science and hence crucial for the growth of scientific knowledge.

Glock’s second argument — “Quine’s holistic fallibilism shows only that there is no absolute necessity to adopt a certain grammar, not that rules are on the same footing as empirical propositions” (Glock, p. 172) — also involves a misunderstanding. Quine need not claim that rules and empirical propositions are on a different footing. While for

Wittgenstein rules and empirical propositions are different in kind, for Quine the rules and empirical propositions are different at most in degree; they are both based ultimately on sense stimulation. There is only a difference of degree between the beliefs in the center and those at the periphery. While the latter are directly responsible to experience, the former are more firmly entrenched, i.e. less easily revised.

Glock argues finally that “without some sentences having a distinct, normative role, there could be no logical connection between beliefs.” (Glock, p. 177) “Unless certain relations had a special status as logical or internal, there would be no web of beliefs adapting to ‘recalcitrant experience’ (FLPV, 43), since observational sentences at the periphery would not be logically linked to theories closer to the center.” (Glock, p. 172) This too is wrong. Quine can argue that by observation categorical we do relate theories to observation sentences. To see this, consider the following:

- (1) ‘A willow grows at the water’s edge’, and ‘The willow leans over the water.’
- (2) ‘When a willow grows at the water’s edge, it leans over the water’.
- (3) ‘A willow root nourishes mainly its own side of the tree’ (PT, 10-11)

Quine calls the sentences of (1) ‘observation sentences’, (2) an ‘observation categorical’, and (3) a ‘hypothesis’. According to Quine, the process from (1) to (2) and then (3) is a process in which a chance observation prompts us to conjecture a new observation categorical, and we may invent a theoretical hypothesis to explain it. And conversely, the process from (3) to (2) and then (1) is one in which we go from a hypothesis to an observation categorical, and then to observation sentences. The first process serves to propose new hypotheses and the second to test hypotheses.

To say that a given hypothesis implies an observation categorical is to say that it implies it with the help of a backlog of accepted scientific theory—i.e., other theoretical

sentences, many common-sense platitudes, arithmetic and other parts of mathematics, etc. The conjunction of all these sentences (including the given hypothesis and other accepted sentences) implies the observation categorical. In this holistic picture of science, observation sentences at the periphery are linked to theories closer to the center.

So whereas Glock relies on the normativity of language to criticize Quine, Quine would not deny that in ordinary language some sentences have a distinct, normative role. If this is right, it might be reasonable to say that Wittgenstein, while affirming some sentences have a distinct, normative role, is not in direct opposition with Quine. In this sense, I do not think we can say that Wittgenstein is right and Quine is wrong.

In conclusion, when comparing Wittgenstein and Quine, what is more important falls not on their similarity but on their difference. In my opinion, their philosophies are incommensurable: It is hard to see how one could justifiably say that either of Quine and Wittgenstein is right and the other is wrong. The interesting thing is to see how they handle their respective philosophical concerns.

Endnotes:

¹ See R. Rorty, *Philosophy and the Mirror of Nature* (1980), pp.169, 265; C. Hookway, *Quine* (1988), p. 47; C. Wright, *Wittgenstein on the Foundations of Mathematics* (1980), pp.358ff.; S. Kripke, *Wittgenstein on Rules and Private language* (1982), pp.55-58. I. Dilman, *Quine on Ontology, Necessity and Experience* (London: Macmillan, 1984); G. D. Romanos, *Quine and Analytic Philosophy* (Cambridge: MIT Press, 1983); Jane Heal, *Fact and Meaning: Quine and Wittgenstein on Philosophy of Language* (Basil Blackwell, 1989), Introduction. P. M. S. Hacker, *Wittgenstein's Place in Twenty Century Analytic Philosophy* (Blackwell, 1996), Chapter 7, sections 2 and 5; Robert L. Arrington and Hans-Johann Glock, ed. *Wittgenstein and Quine* (London and New York: Routledge, 1996).

² For example, Quine distinguishes an analytic observation categorical from a synthetic one (SS, 45; PT, 16) and differentiates an analytic sentence from a synthetic one (PT, 55).

³ The concept 'analytic' appeared only once in the *Tractatus* when he talked about the propositions of logic, i.e. tautologies (TLP 6.11). The concept 'synthetic' does not appear in the *Tractatus* or the *Philosophical Investigations* or *On Certainty*. Wittgenstein once remarked ironically that if anything is a candidate for being synthetic a priori, it is mathematical propositions (RFM 246).

⁴ I use "non-empirical propositions" to cover Wittgenstein's notions of logical propositions, mathematical propositions (in the *Tractatus*) and grammatical propositions (in the *Philosophical Investigations*), Moore-type propositions (in *On Certainty*).

⁵ Quine would not use "propositions"; for him, the term has the implication that there are meanings hidden behind the words.

⁶ According to Quine "[o]ur system of statements has such a thick cushion of indeterminacy, in relation to experience, that vast domains of law can easily be held immune to revision in principle. We can always turn to other quarters of the system when revisions are called for by unexpected experiences. Mathematics and logic, central as they are to the conceptual scheme, tend to be accorded such immunity, in view of the conservative preference for revisions which disturb the system least; and herein, perhaps, lies the 'necessity' which the laws of mathematics and logic are felt to enjoy." (*Methods of Logic, Introduction*. 1950)

⁷ In a recent conversation, Quine said when he was deploring the notion of analyticity in "Two Dogmas of Empiricism", he was inquiring into what a definition of analyticity could be, a definition which would be suitable for referring to what would count as analytic in the domain of theoretical science. He was not maintaining that an adequate definition was impossible, just that one had not yet been given, and he viewed it was unlikely that one would be given at all. ("In Conversation W. V. Quine", *Philosophy International*, p. 18; this is how it is reported, not verbatim.)

⁸ Nevertheless, Quine pointed out that his definition is useless in higher scientific theory. (Ibid. p. 8)

⁹ According to Quine, even those parts of mathematics that never get applied in natural science are still true or false: "What now of those parts of mathematics that share no empirical meaning, because of never getting applied in natural science? What of the higher reaches of set theory? We see them as meaningful because they are couched in the same grammar and vocabulary that generate the applied parts of mathematics. We are just sparing ourselves the unnatural gerrymandering of grammar that would be needed to exclude them. On our two-valued approach they then qualify as true or false, albeit inscrutably." (PT, 94)

¹⁰ Hacker mentions that "having ejected the Carnapian conception of analyticity through the front door, [Quine] later let in by the back door its explication in austere Quinean behaviourist terms via the concept of the analyticity of an 'observational categorical', which is analytic if the affirmative stimulus meaning of the consequent is included in that of the antecedent, as in 'If there are three sticks, then there are two sticks' or 'If it is a robin, then it is a bird'. Quine's 'analyticity of an observational categorical' is, as he notes,

reminiscent of Kant's conception of analyticity (a judgement whose subject contains the predicate) (TI 10). This is striking *volte-face*, since in 'Two Dogmas' Quine had summarily rejected Kant's account of analyticity as mere metaphor. The account given in 'Three Indeterminacies' might even be said to be an explication of Kant's distinction. Carnap, one suspects, would have smiled.' (P. Hacker, *Wittgenstein's Place in Twentieth-Century Analytic Philosophy*, Blackwell, 1996, p.319 fn. 20) Well, not really. We should not forget that Quine redefines 'analyticity' in behavioral terms, and for him, there is a gradation between what is analytic and what is synthetic. Quine still differs radically from Kant and Carnap, who hold that the distinction is sharp. Also, notice that Quine's definition of analyticity is not intended to be a replacement for Carnap's; he does not think it possible to draw a clear distinction between the analytic and synthetic in higher science (See above fn. 5).

¹¹ P. M. S Hacker, "Wittgenstein and Quine: Proximity at great distance", in *Wittgenstein and Quine*, ed. Robert L. Arrington and Hans-Johann Glock, Routledge, 1996, p.19.

¹² Wittgenstein understands mathematical propositions differently from Carnap. For Carnap, mathematical propositions are analytic propositions, so they are true in virtue of the meanings of words involved. For Wittgenstein, they are true only in the sense that they are grammatical propositions that express rules. Unlike analytic propositions, grammatical propositions determine rather than follow from the meaning of words. In addition, many of the utterances Wittgenstein calls "grammatical propositions" do not fit into the most generous list of analytical truths. For example, neither "Nothing can be red and green all over" nor "'Above' has five letters" (BB 56, RFM 245ff, 336) does.

¹³ It should be noted that for Quine the difference between one of his philosophical sentences (theses) "To be is to be the value of a variable" and an ordinary sentence such as "There's a fly in my soup" is huge and philosophically very interesting.

¹⁴ Both Quine and Wittgenstein talk of "meaning as use". In his paper "Use and Its Place in Meaning" (in *Theories and Things*), Quine says: "Wittgenstein has stressed that the meaning of a word is to be sought in its use. This is where the empirical semanticist looks: to verbal behavior. John Dewey was urging this point in 1925. "Meaning," he wrote (p. 179) "...is primarily a property of behavior." And just what property of behavior might meaning then be? Well, we can take the behavior, the use, and let the meaning go."(TT, 46) Quine's notion of "meaning as use" is different from Wittgenstein's, however. Wittgenstein is not a behaviorist about meaning (PI 307-08).

¹⁵ Michael Hymers, "Internal Relations and Analyticity: Wittgenstein and Quine", *Canadian Journal of Philosophy*, Vol. 26, Number 4, Dec. 1996, p. 592.

¹⁶ Kripke also stresses Wittgenstein's and Quine's different philosophical concerns. "Quine bases his argument from the outset on behaviouristic premises. He would never emphasize introspective thought experiments in the way Wittgenstein does, and he does not think of views that posit a private inner world as in need of elaborate refutation. For Quine, the untenability of any such views should be obvious to anyone who accepts a modern scientific outlook." (S. Kripke, *Wittgenstein on Rules and Private Language*, p.56.)

¹⁷ For example, Quine sees the sentence "It is five o'clock on the sun" as meaningless, because we can prove on the basis of accepted scientific principles that there could not be any criterion by which to decide whether or not we should accept the sentence within our scientific theory, and this is enough for it to qualify as meaningless ("In Conversation W. V. Quine", p. 9). It should be noted that Quine's use of the concept "meaningless" is not a technical one. It means patently false and is thus very different from Wittgenstein's "nonsensical" (*unsinnig*).

¹⁸ There seems to be an inconsistency in Quine. On the one hand, he holds that if some set of S of purported truths, including other theoretical sentences, many common-sense platitudes, arithmetic and other parts of mathematics, jointly imply a false categorical, some one or more of the sentences are going to be rescinded. On the other hand, he maintains that "[w]e exempt some members of S from this threat on determining that the fateful implication still holds without their help. Any purely logical truth is thus exempted, since it adds

nothing to what S should logically imply anyway” (PT, 14) This seems to exclude logical truth from being rescinded. It also should be noticed that Quine here is not saying that we can revise everything at the same time. (“Reply to Herbert G. Bohnert”, “Quine on Analyticity”, in *The Philosophy of W. V. Quine*, Lewis Edwin and Paul Arthur Schilpp, Southern Illinois University—Carbondale, 1986, pp. 93-94.)

¹⁹ Wittgenstein insists that logical propositions, grammatical propositions and Moore-type propositions play special roles in contrast with empirical (or significant propositions). (See TLP 6.113, PI 251, OC 136).

²⁰ Roger F. Gibson, “Quine, Wittgenstein and Holism”, *Wittgenstein and Quine*, p.93. Gibson is not the only one who compares Wittgenstein and Quine in this respect. Heal also says: “[I]t is easy enough to read some of the epistemological remarks in *On Certainty* (for example, the image of the river and its shifting banks) as expressing a fallibilism and pragmatism similar to those famously espoused by Quine in ‘Two Dogmas of Empiricism’.” (Jane Heal, *Fact and Meaning: Quine and Wittgenstein on Philosophy of Language*, Introduction, p. 2)

²¹ I am following Burton Dreben on this point.

²² Hans-Glock, “Wittgenstein vs. Quine on Logical Necessity”, in *Wittgenstein and Contemporary Philosophy*, ed. Souren Tegrarian and Anthony Serafini, Longwood Academic, 1992, p.159.

Chapter VII

Conclusion: Continuity in Wittgenstein's Philosophy

While Wittgenstein says in the preface of the *Investigations* that there are “grave mistakes” in the *Tractatus* and in the body of the later work he rejects much of what he said earlier, there are important continuities in his philosophy. Wittgenstein thinks that the *Investigations* can “be seen in the right light only by contrast with and against the background of my old way of thinking” (PI preface vi.). Commenting on this, G. Hallett says: “The repeated distinction between views rejected and background of another sort suggests both continuity and discontinuity between Wittgenstein’s earlier and later thought. The continuity may be less evident, but it is there, and important.”¹ Based on what I have said in the previous chapters, I can now make clear one aspect of the continuity in Wittgenstein’s philosophy. To illustrate this aspect, let me start with K. T. Fann’s remarks about the continuity from the *Tractatus* to the *Investigations*. In Fann’s view:

there is an important continuity in Wittgenstein’s conception of the nature and tasks of philosophy. The view arrived at in the *Tractatus* (that philosophical problems arise from our misunderstandings of the logic of language, that philosophy is no science but an activity of elucidation and clarification, etc.) continued to serve as the leading thread in Wittgenstein’s later works. Thus, Wittgenstein’s later *conception* of the nature and tasks of philosophy can best be seen as a ‘development’ of his earlier views, while his later *method* [which Fann takes to be dialectical] should be regarded as the ‘negation’ of his earlier *method* [which Fann takes to be theoretical]. This, I think, is the key to a clear understanding of Wittgenstein’s philosophy as a whole.²

I think Fann’s characterization of the continuity in Wittgenstein’s philosophy is substantially correct. What I shall do is to flesh out one aspect of the continuity in terms of the distinction between empirical propositions and non-empirical propositions. I believe that failure to understand the distinction (which belongs to the logic or grammar

of our language) is for Wittgenstein a main source of philosophical illusions, and making clear the distinction (which is an activity of elucidation and clarification) serves as a therapy for such illusions. I shall also stress that this continuity appears not just between the *Tractatus* and the *Investigations* but also between the *Investigations* and *On Certainty*.³

Let me begin with the *Tractatus*. In general, there are two kinds of propositions in the *Tractatus*: significant propositions (sentences), which represent facts, and non-significant propositions (sentences), which do not represent facts. The first kind of proposition consists in elementary bipolar propositions and propositions that result from combinations of elementary propositions, while the second kind includes a variety of propositions (sentences): logical propositions, mathematical propositions, the laws of physics, sentences concerning internal relations, metaphysical propositions, Wittgenstein's own elucidations, etc. In chapter I, I discussed in some detail this latter kind of propositions. Now my purpose is to stress that for Wittgenstein these non-significant propositions, if taken as significant ones, become something metaphysical and nonsensical. For this purpose, I shall focus on sentences concerning internal relations and logical propositions.

In the *Tractatus* Wittgenstein distinguishes between internal relations (formal relations) and external relations (relations proper), since he believes that it is very widespread among philosophers to confuse them (TLP 4.122). By 'internal relations', he means necessary connections among objects, states of affairs or facts, relations that cannot be otherwise. By 'external relations', he means accidental relations that can be otherwise. "Whatever we can describe at all can be other than it is" (TLP 5.632).⁴ For

example, a speck in the visual field must have some colour. This is an internal relation between speck and color. It is impossible that a speck does not have some color. On the other hand, a particular speck in the visual field may happen to be red but that is only accidental. It could be blue (TLP 2.0131).

While external relations are stated in propositions, internal relations cannot be. The proposition 'This speck is red', for example, represents the fact that the speck is red, but the sentence 'A speck must have some color' does not represent any fact. The reason for this is that internal relations are not relations on a par with external relations; they do not stand alongside external relations. They are 'within' external relations in the sense that they are shown to be significant propositions. We can talk about internal relations in this sense, but it is impossible "to assert by means of propositions that such internal properties and relations obtain" (TLP 4.122).

When Wittgenstein speaks of the sentences, "a spatial object must be situated in infinite space", "a speck in the visual field must have some color", "notes must have *some* pitch", and "objects of the sense must have *some* degree of hardness" (TLP 2.0131), he is not stating propositions that represent facts. For him such sentences do not belong to language, since "the totality of [significant] propositions is language" (TLP 4.001). To an ordinary speaker and to Wittgenstein in the *Investigations*, to say these sentences do not belong to language is absurd. But given the conception of language as the totality of significant propositions in the *Tractatus*, what such sentences aim to say can only be shown, and there is no problem to say that they are not part of language.⁵

Like sentences concerning internal relations, the sentences of logic and mathematics are not significant propositions, and neither of them say (represent) anything

about the world.⁶ If they tend to say something about the world, it seems that, following the picture theory of language, we should abandon them as nonsense. According to Wittgenstein, however, they are not nonsense. The propositions of logic are tautologies (TLP 6.1). They are not nonsensical because they are part of the symbolism, much as '0' is part of the symbolism of arithmetic (TLP 4.4611). Propositions of mathematics are equations and since they are pseudo-propositions (TLP 6.2), they do not express thoughts (TLP 6.21). Rather they are rules for substituting one expression for another (TLP 6.24). Propositions of logic and mathematics must not be confused with genuine propositions any more than sentences concerning internal relations must be confused with sentences concerning external relations. Since the propositions of logic "have no 'subject-matter'" (TLP 6.124)⁷ and say nothing (TLP 6.11), they can neither be confirmed nor refuted by experience (TLP 6.1222). Hence: "All theories that make a proposition of logic appear to have content are false...Indeed, the logical proposition acquires all the characteristics of a proposition of natural science and this is the sure sign that it has been construed wrongly" (TLP 6.111).⁸ According to Wittgenstein, both Frege and Russell treat logical propositions as significant propositions, and thus conflate propositions about logical propositions with significant propositions. For Frege the necessity and objectivity of logical propositions is secured by Platonic abstract entities and their relations, while for Russell logical propositions are completely general truths about the most pervasive traits of reality. The problem with Frege's position is that to assume abstract entities inhabiting a "third realm" beyond space and time makes them seem mystical. The problem with Russell's position is that he has to posit general facts besides particular facts. In Wittgenstein's view, both philosophers err because they posit something to correspond to

logical propositions. Wittgenstein thinks that both are doing metaphysics. For him, since logic is shown in significant propositions, there is no need to posit anything to explain it.

A typical example of conflating significant and non-significant propositions in the *Tractatus* is noted at 5.1362: “*A* knows that *p* is the case” (where *p* is a tautology). This sentence involves a double conflation. First, if *p* is a tautology, then to say “*p* is the case” is absurd. The sentence seems to be a proposition representing an accidental fact, since it says that something *is the case*. However since *p* is a tautology, “that *p* is the case” does not assert any fact. It is true that tautologies are not nonsensical insofar as they are part of the symbolism (TLP 4.4611). Nevertheless, they say nothing (TLP 4.461, 5.142).

Someone asserts “*p* is the case” and thinks that by this he or she is representing a fact in the world but actually he or she is not affirming any fact at all. The sentence “That it is either raining or not raining is the case” tells us nothing about the weather at all (TLP 4.461). Secondly, the sentence “*A* knows that *p* is the case” (where *p* is a tautology) suggests that *A* knows something about the world, some accidental fact. But when *p* is a tautology, *A* knows nothing about the world. “I know nothing about the weather when I know that it is either raining or not raining” (TLP 4.461). On the other hand, neither “That it is raining or not raining is not the case” nor “I don’t know that it is either raining or not raining” can be said. For both sentences seem to deny some fact, but nothing is being denied.

According to Wittgenstein, conflating significant and non-significant propositions is a main source of philosophical illusions. He deals with this problem not only in the *Tractatus* but also in the *Investigations* and in *On Certainty*. As we shall see, the sentence

“I know I have two hands” discussed in both the *Investigations* and *On Certainty* has a remarkable similarity with the sentences we are discussing here.

It is true that Wittgenstein drops the idea of internal and external relations in the *Investigations*.⁹ But the idea of necessary connection as opposed to accidental connection is still there. Our means of representation, expressed by grammatical propositions, are not representations, which are expressed by empirical propositions. While empirical propositions are contingent (and can be meaningfully negated), grammatical propositions are necessary (and cannot be negated, at least not in the same sense as empirical propositions can be). For example, “Every rod has a length” is a grammatical proposition, and it shows what is called “the length of a rod”, while “This table has the same length as the one over there” is an empirical proposition. The negation of this last empirical proposition is still meaningful, but the negation of the grammatical proposition “Every rod has a length” (i.e. “Every rod has no length”) is absurd. If we negate an empirical proposition, we get another empirical proposition, but if we negate a grammatical proposition, we drop a particular means of representation (see PI 251).

With this new understanding of necessary connection, what Wittgenstein said at 2.0131 in the *Tractatus* (“[A] spatial object must be situated in infinite space”. “A speck in the visual field must have some colour”, “Notes must have some pitch”, and “Objects of the sense must have some degree of hardness”) can be read as a discussion of grammatical propositions. In terms of propositions that express necessary relations, however, there is an enormous difference between the *Tractatus* and the *Investigations*. First, sentences concerning internal relations are not, strictly speaking, in language, because “[t]he totality of proposition is language” (TLP 4.001). In the *Investigations*, by

contrast, grammatical propositions are within language. Secondly, in the *Tractatus* the logic of our language, though without subject matter, seems to show the scaffolding of the world, and thus seems to be determined by some underlying reality, while in the *Investigations* Wittgenstein rejects the idea that the grammar of language is determined by any underlying reality.¹⁰

In the *Investigations* Wittgenstein extends his discussion about the confusion between necessary connections and accidental connections in the *Tractatus* to the confusion between the means of representation and the representations themselves and correlatively the confusion between grammatical propositions and empirical propositions. These confusions may occur in various forms. First, philosophers may treat a grammatical proposition as a very general empirical proposition. In doing so, they try to find or imagine a very general empirical fact corresponding to the proposition. Impressed by the surface grammar of the sentences “Every rod has a length” and “This table has the same length as the one over there”, they try to find a general fact corresponding to “Every rod has a length”. They “predicate of the thing what lies in the method of representing it. Impressed by the possibility of a comparison, [they] think [they] are perceiving a state of affairs of the highest generality.” (PI 104) This, however, will not do: “Now can I imagine ‘every rod having a length’? Well, I simply imagine a rod” (PI 251).¹¹

A second form of the confusion arises when the grammatical and the empirical are conflated in one sentence. Consider the sentence (A) “This body has extension” (PI 252). In comparison with the sentence (B) “Every body has extension”, which is clearly a grammatical proposition defining what is called “the extension of a body”. (A) purports to say something about a particular body, therefore looks empirical and contingent. In

fact, however, it says nothing empirical about that particular object. While it is tempting to think that (A) (in contrast to (B)) says something empirical because it mentions a particular object, it does not. It only has the same surface grammar as a sentence like (C) “This body has the same extension as that box over there.” On the other hand, insofar as (A) uses the concept of ‘extension’ (what Wittgenstein calls a formal concept in the *Tractatus*) without specifying what the extension is, (A) looks like a grammatical proposition. Thus, (A) straddles between a grammatical proposition and an empirical one. If we take it as an empirical proposition, we find it says nothing empirical, and it is nonsensical to say it. If we take it as a grammatical proposition, we find it says something true; it is not just true for this body, but for all bodies (PI 252).

The idea of the distinction between the grammatical and the empirical has an application in analyzing our use of psychological terms.¹² We tend to believe that propositions concerning sensations are empirical propositions describing one’s own inner psychological states. For example, “I am in pain” is used to describe a personal inner experience, but it is also necessary. And we tend to say: “Only I can know whether I am really in pain; another man can only surmise it.” (PI 246) But, according to Wittgenstein, this involves confusion. First, “I am in pain” is not an empirical proposition describing my inner state. It is rather an expression of my pain.¹³ The speaker who utters the sentence “I am in pain” does not verify whether he or she is in pain. Of course, he or she may pretend to be in pain, and wrongly say “I am in pain”. And others may observe and believe (or not believe) him or her. Still, the proposition does not describe this person’s inner state. In this sense, the status of the proposition “I am in pain” is like the status of a

grammatical proposition, “Sensations are private” or “One plays patience by oneself” (PI 248).

Secondly, when someone says “Only I can know I am in pain”, the phrase “I know” suggests what is known is an empirical fact which may be otherwise, something like a state of affairs. But “I am in pain” is not a bipolar description at all. The sentence “Only I can know I am in pain” involves a conflation between the grammatical (“I am in pain”) and the empirical (“Only I can know...”). And in this sense, to say “Only I can know I am in pain” is to say something nonsensical. The sentence attempts to express a necessary proposition whereas it is only capable of expressing a contingent proposition. The use of the word “know” here is problematic since others may know when I am in pain, too. In this sense, to say “Only I can know I am in pain” is wrong. The sentence “Only I can know I am in pain” is in one way similar and in another way different from the sentence “This body has extension”. They are different since the former sentence is often wrong and the latter is not to be said wrong. The latter sentence may be taken as a grammatical reminder that stresses how the speaker talks about this (and any other) body. They are similar since “This body has extension” might be regarded as nonsensical: it misleads us into thinking that it provides information about this particular body (PI 252).

The idea that there are propositions expressing necessary connection has many ramifications and much of the second part of the *Investigations* can be seen as dealing with this issue. When philosophers (not ordinary persons) say “I know what I want, wish, believe, feel,…” (and so on through all the psychological verbs), they think they are saying something empirical. For the word “know” can lead us into this thought. According to Wittgenstein, however, “I know what I want, wish, believe, feel…” is either

philosophical nonsense or at any rate *not* a judgment *a priori* (PI part II, p.221e). It is nonsense insofar as it involves a confusion between what is grammatical and what is empirical. Philosophers tend to take “I know what I want...” to be both empirical and necessarily true.¹⁴ Moreover, it is not an *a priori* judgment; if a proposition is *a priori*, it will not be a judgment. For Wittgenstein there is no such thing as an *a priori* judgments.

Take another example, the proposition “I have two hands”. This is not normally an empirical proposition, despite the fact that it has the same grammatical structure as the proposition “My hands have the same size as yours”. True, it is “possible to imagine a case in which I *could* find out that I had two hands” (PI 221e), in which case it would be an empirical proposition. Normally, however, it is not. The reason is that if I treat “I have two hands” in normal situations as an empirical proposition, I would be able to doubt it. But if “I am in doubt whether I have two hands, I need not believe my eyes either.” (PI 221e). In *On Certainty* Wittgenstein develops this idea in more detail.

When Moore says “I know I have two hands”, he is regarding the proposition “I have two hands” as an empirical proposition (he calls it a “contingent proposition”). For Wittgenstein, however, it is a hinge proposition; it normally does not function as an empirical proposition at all. The proposition belongs to our frame of reference and it describes part of our world-picture.

The skeptic’s error is to take propositions describing our world picture as though they were empirical propositions. In contrast, when he argues against the skeptic, Moore assumes that the skeptic’s doubt of these propositions make sense, and the only problem with the skeptic is that his position is wrong. But in arguing this way, Moore’s attack misfires (OC 37). “Moore’s mistake lies in this –countering the assertion that one cannot

know that [e.g. there is a tree in front of me], by saying ‘I know it’” (OC 521).

Wittgenstein’s remark in *the Blue and Brown Books* is also illuminating here. “There is no common sense answer to a philosophical problem. One can defend common sense against the attacks of philosophers only by solving their puzzles, i.e., by curing them of the temptation to attack common sense; not by restating the views of common sense” (BB pp. 58-59).

The proposition, “I have two hands”, is not the only example of a proposition that looks like empirical which are (in normal situations) not. Amongst examples of such propositions are the following: “I am a human being” (OC 4), “There are physical objects” (OC 35), “The earth existed long before my birth” (OC 84), “I have spent my whole life in close proximity to the earth” (OC 93), “My body has never disappeared and reappeared again after an interval” (OC 101), “All human beings have parents” (OC 240), etc. These propositions are obviously not tautologies. Nor are they clearly grammatical propositions. Grammatical propositions express rules, yet they are not rules.¹⁵ Still they do not function as empirical propositions any more than tautologies and grammatical propositions do. Here we see how Wittgenstein broadly extends the domain of non-empirical propositions.

The continuity of Wittgenstein’s philosophy I have been referring to can also be seen in Wittgenstein’s preoccupation with the question of the limits of the world.¹⁶ In the *Tractatus* the logical space determines the limits of the world; all the facts are in logical space (TLP 1.13). All possibilities are facts (TLP 2.0121) and the logical space is fixed and unchanging. In the *Investigations*, the concern is the same but now the limits of language are flexibly drawn for various reasons and purposes (PI 499). Similarly in *On*

Certainty, the limits of language are associated with our world-picture (OC 95, 162, 167). Within a particular world-picture, propositions belonging to the world-picture cannot be enumerated and laid down once for all, and some of them change with time (OC 256, see PI 23).¹⁷ For example, once “it is impossible to climb up the moon or fly there” was once taken as a proposition belong to a world-picture, but not since astronauts have set foot on the moon. (OC 106, 108, 661, 662, 667)

Also while Wittgenstein understands the limits of the world differently in the *Tractatus* and in his later writings, he holds constantly that we cannot run up against the limits of the world. To say that “I know that p (p is a tautology)” is to conflate what can be said (and known) with what can only be shown, and thus to run up against the limits of language. Since the limits of my language mean the limits of my world (TLP 5.6), it is also to run up against the limits of the world. In the *Investigations*, Wittgenstein says “The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language.” (PI 119) “I know I am in pain” is an example in question. When philosophers use this sentence to express some necessary knowledge, they misuse the word “know”. They cannot accomplish what they intend to establish by uttering this sentence. Similarly in *On Certainty* hinge propositions like “I am a human being” cannot be normally said to be known (OC 4). All these examples conflate what is necessary and what is contingent and run up against the limits of language; they lead to metaphysical illusions. According to Wittgenstein, we dissolve such metaphysical illusions by seeing that propositions that express necessary connections have different roles from propositions that express

contingent connections. This is a one of the most important continuities in Wittgenstein's philosophy.

Endnotes:

¹ Garth Hallett, *A Companion to Wittgenstein's "Philosophical Investigations"*, Cornell University Press, Ithaca and London, 1977, "General Introduction", p. 24. For general discussions of the continuity in Wittgenstein's philosophy, see Anthony Kenny, *Wittgenstein*, 1973, Harvard University Press, Cambridge, Massachusetts, pp. 219-32, M. O'C Drury, *The Danger of Words and Other essays on Wittgenstein*, 1996, ix). Aryeh Botwinick, "Wittgenstein and Scepticism: An Essay in the Unity of Wittgenstein's Thought", *Philosophy Research Archives*, vol. XII, 1986-1987, pp. 163-76. Peter Winch, "Introduction: The Unity of Wittgenstein's Philosophy", *Studies in the Philosophy of Wittgenstein*, Routledge & Kegan Paul, New York: Humanities Press, 1969. Robert J. Fogelin, *Wittgenstein*, second edition, Routledge & Kegan Paul, London and New York, 1987, pp. 226-234. Von Wright, "Wittgenstein and The Twentieth Century", in R. Egidi (ed.) *Wittgenstein: Mind and Language*, Kluwer Academic Publishers, 1995, pp. 1-19, especially p. 8. John Koethe, *The Continuity of Wittgenstein's Thought*, Cornell University Press, 1996. Philip R. Shields, *Logic and Sin in the Writings of Ludwig Wittgenstein*, The University of Chicago Press, Chicago and London, 1992, Chapter 2.

² K. T. Fann, *Wittgenstein's Conception of Philosophy*, University of California Press, Berkeley and Los Angeles, 1971, Preface, xiii.

³ This is not to deny obvious differences between the *Tractatus* and his later writings, only to insist that at least in this one crucial aspect Wittgenstein's philosophies in the two periods are continuous.

⁴ This idea already exists in *Notebooks*, where Wittgenstein says whatever can be described at all might also be otherwise (p. 80e).

⁵ The picture theory excludes sentences concerning internal relations from language, but I believe Wittgenstein should be understood as saying that they are not significant propositions, not as saying that they are useless even in his philosophical elucidations.

⁶ To be sure, sentences concerning internal relations are not straightforward tautologies. Sentences like "A spatial object must be situated in infinite space", "A speck in the visual field must have some colour", "Notes must have some pitch", and "Objects of sense of touch must have some degree of hardness" (TLP 2.0131) are different from sentences like "It is raining or it is not raining" (TLP 4.461). While Wittgenstein clearly says that tautologies are part of the symbolism, he does not say sentences of internal relations are. Rather, he thinks that internal relations can only be shown by corresponding genuine propositions (TLP 4.122, 4.124). Also, tautologies result from truth-functional operations (TLP 6.126), and sentences of internal relations do not. Wittgenstein appears to vacillate between saying tautologies are presenting something (the scaffolding of the world) (TLP 6.124) and saying they are just operations.

⁷ But Wittgenstein also holds that "The propositions of logic describe the scaffolding of the world, or rather they represent [*stellen* (literally, 'present') it]." Morris Lazerowitz has pointed out that "The implication of these words is not that tautologies have no subject matter but rather that their subject matter is not of a certain sort. They are 'about the world' in a particular respect, namely, about its basic structure, and this, not the specific contents of the world, is their subject matter." ("Necessity and Language", *Ludwig Wittgenstein: Philosophy and Language*, ed. Alice Ambrose and Morris Lazerowitz, London: George Allen and Unwin Ltd., p. 24; also see Dennis O'Brien, "The Unity of Wittgenstein's Thought", in K.T. Fann ed. *Ludwig Wittgenstein: The Man and His Philosophy*, 1967, p. 395). R. Fogelin has a similar interpretation concerning the remarks about the propositions of logic in the *Tractatus*. When Wittgenstein says that the propositions of logic, i.e. tautologies shows the formal (logical) properties of language and world (TLP 6.12, 6.22), according to Fogelin, he still adopted a form of referentialism. ("Wittgenstein's critique of philosophy", *The Companion to Wittgenstein*, Ed. Hans Sluga and David G. Stern. Cambridge University Press, p.46). There is another tension about the propositions of logic that I already noted. Wittgenstein says both that the propositions of logic describe the scaffolding of the world and that they are operations.

⁸ Many remarks in the *Tractatus* seem to express a priori and empirical truths. For example, “The only necessity that exists is *logical* necessity” (TLP 6.37), and “A necessity for one thing to happen because another has happened does not exist.” (TLP 6.37, C.K.Ogden’s translation). However, the proposition “The only necessity that exists is *logical* necessity” looks like the proposition “The only thing exists in that room is a wooden table”. But the latter is an empirical proposition whereas the former is not. G. Hallett calls this kind of mistake “description fallacy: an utterance which sounds like many a description or identification is mistakenly taken for one.” (G. Hallett, *A Companion to Wittgenstein’s “Philosophical Investigations”*, Cornell University Press, Ithaca and London, “General Introduction”, p. 28.)

⁹ The only exception is in Part II, p. 212e where he says “what I perceive in the dawning of an aspect is not a property of the object, but an internal relation between it and other objects”.

¹⁰ However, Wittgenstein admits that “our interest certainly includes the correspondence between concepts and the very general facts of nature.” (PI II, xii, p. 230e)

¹¹ Quine would treat what Wittgenstein takes to be grammatical propositions as very general empirical propositions. There is no confusion in this.

¹² The *Tractatus* says little about the psychological concepts that occupy Wittgenstein’s attention in the *Investigations*. In the *Tractatus* he confines himself to saying that logical constants such as ‘and’, ‘if’, and ‘not’, formal concepts such as ‘object’, ‘relation’, and ‘property’ are not representatives (TLP 4.0312, 4.1272). In the *Investigations*, psychological concepts used in first-person utterances in present tense have a status similar to that of logical constants and formal concepts. They are not representatives, and hence the utterances involving them are not descriptive.

¹³ There is, however, a difference between a cry as an expression and the proposition “I am in pain” as an expression. While the formal is natural and not learned, the latter is acquired. “[T]he verbal expression of pain replaces crying and does not describe it.” (PI 244)

¹⁴ I think this point sheds light on PI 112: “A simile that has been absorbed into the forms of our language produces a false appearance, and this disquiets us. ‘But *this* isn’t how it is!’—we say. ‘Yet *this* is how it has to be!’” On the one hand, “I know I am in pain” seems to denote something necessary. On the other hand, if the sentence is taken as a description, it should be possible to negate it. The problem is philosophers are charmed by the fact that “I know I am in pain” has the same structure as “I know he is in pain”.

¹⁵ Wittgenstein does not say that they are explicit rules, but like rules. “The propositions describing this world-picture might be part of a kind of mythology. And their role is like that of rules of a game; and the game can be learned purely practically, without learning any explicit rules.” (OC 95)

¹⁶ See von Wright, “Wittgenstein on Certainty”, *Problems in the Theory of Knowledge*, The Hague, 1972, p. 55.

¹⁷ I believe Michael Kober is right when he says: “A world-picture...changes only partially”, because “it is rarely a whole practice and certainly not a whole world-picture which gets changed suddenly and at once in all its components. Some parts stay hardened (OC 96) for some time and can be used as a common frame of reference, as a starting point of understanding one practice from the point of view of another.” (Michael Kober, “Certainty of a world-picture: The epistemological investigations of *On Certainty*”, *The Cambridge Companion to Wittgenstein*, ed. Hans Sluga and David G. Stern, Cambridge University Press, 1996, p. 435).

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